# HSU Trinity Children's Center and Child Development Lab Project

## Initial Study

*prepared by*

**California State University, Humboldt**
1 Harpst Street
Arcata, California 95521
Contact: Deirdre Clem, (707) 826-5894

*prepared with the assistance of*

**Rincon Consultants, Inc.**
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Sacramento, California 95819

**June 2021**

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Appendix HAZ Hazardous Materials Reports
Appendix NOI Noise Measurement and Analysis Files
Appendix TRA Focused Traffic Study

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# Initial Study

## 1. Project Title

HSU Trinity Children's Center and Child Development Lab Project

## 2. Lead Agency Name and Address

Trustees of the California State University
401 Golden Shore
Long Beach, California 90802

## 3. Contact Person and Phone Number

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## 4. Project Sponsor's Name and Address

Humboldt State University
1 Harpst Street
Arcata, California 95521

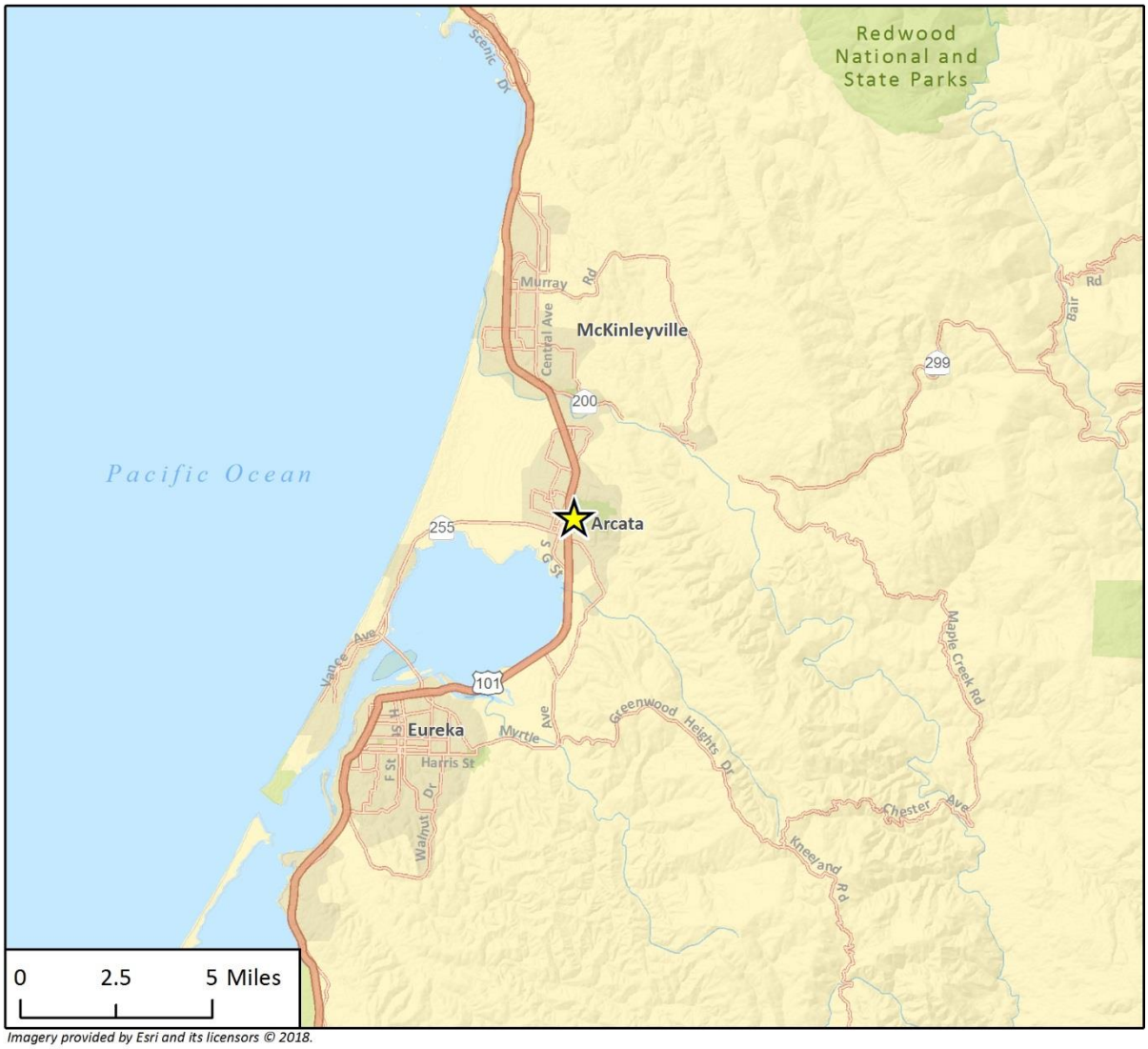
## 5. Project Location

The project site is located on the southernmost portion of the Humboldt State University (HSU) campus and comprises a 1.44-acre block located between B and C Streets and 13th and 14th Streets. The Assessor's Parcel Number is 021-061-001 and the site address is 1350 C Street, Arcata, California 95521. Figure 1 shows the regional location of the project site and Figure 2 shows the project location in its campus context.

## 6. Existing Setting

The project site currently contains a complex of interconnected buildings known as the Trinity Annex. It includes three surface parking areas, and associated landscaping. Figure 3 provides an aerial image of the project site and Figure 4 provides photographs of the project site and interior of the Trinity Annex.

## Figure 1 Regional Location




*Imagery provided by Esri and its licensors © 2018.*

Project Location

N

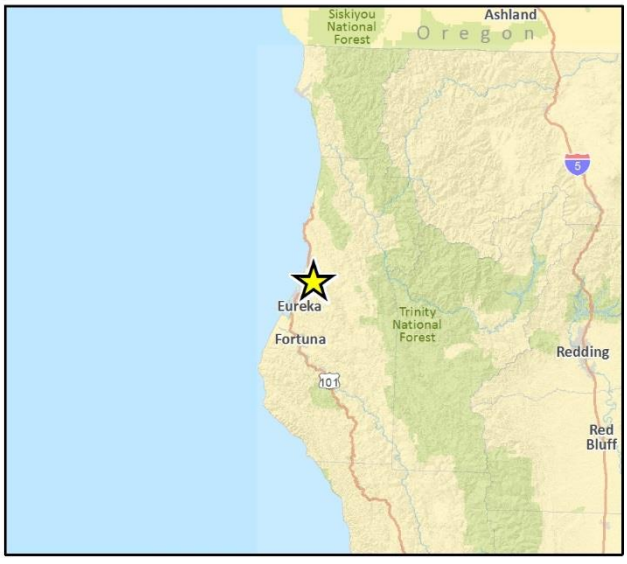



Fig X Project Vicinity

**Figure 2 Project Location**

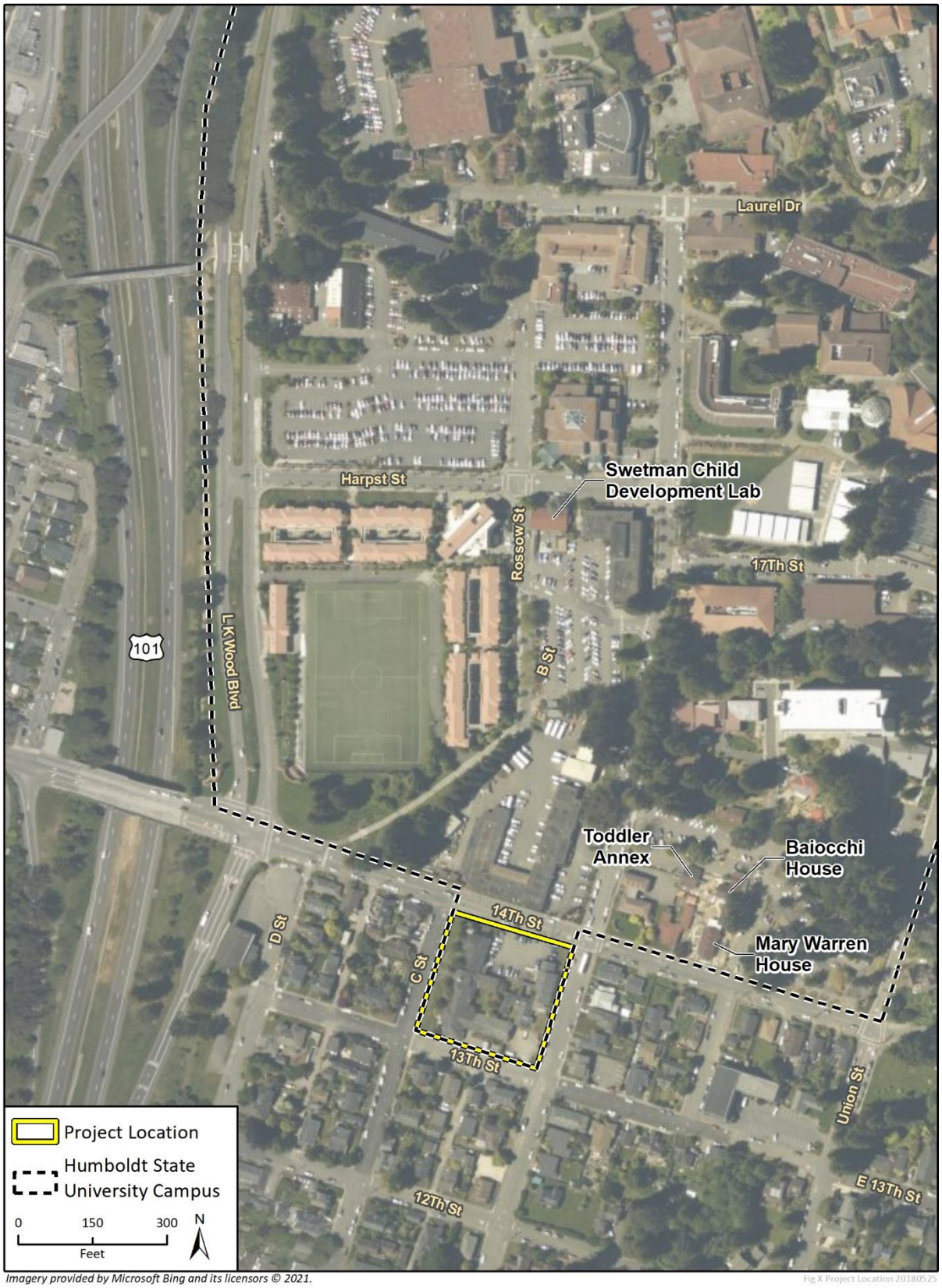


**Figure 3 Existing Site Conditions- Aerial Photograph**

## Figure 4 Site Photographs

**Photograph 1.** View of the southernmost portion of the site across 13th St, facing north

**Photograph 2.** View of the northern parking lot, facing west, illustrating the deteriorating condition of the building and flaking paint

**Photograph 3.** A room in the main block of the Trinity Annex with collapsed ceilings

**Photograph 4.** View of the main entrance of the Trinity Annex along C Street, facing east

The project site is situated at an elevation of about 80 to 90 feet above mean sea level (USGS Arcata South Quadrangle, 2015). The topography of the site is generally flat, although it slopes gradually to the west in the vicinity of the project site. Vegetation consists primarily of landscaped grass lawn and low shrubs. Several conifer trees are located adjacent to the main building of the Trinity Annex. These trees appear to have been originally planted as landscaping and are partially shown on Photo 4 of Figure 4.

The Trinity Annex complex was originally constructed between 1944 and 1956 for use as a hospital. Its buildings feature similar architectural design elements and construction materials. Built in three phases between 1944 and 1956, the complex features a main building at the west side of the property, a 1948 addition extending east from the south wing of the main building, and a 1956 expansion of the south wing of the main building. The parking lots on the project site provide approximately 36 spaces, some of which are paved and some of which are gravel.

The HSU Auxiliary purchased the site in 1969 and ownership of the site was transferred to HSU in April 2018. HSU has operated the Trinity Annex for a variety of functions since 1969, including office, storage, and laboratory space. The Trinity Annex is largely no longer in active use, and much of the complex is in poor condition with collapsing ceilings and deteriorating walls. Only the east wing is in use and serves as storage space. The Trinity Annex contains asbestos in exposed insulation and lead paint on the complex exterior. Although the Trinity Annex is secured and not available for public use, safety hazards associated with the building pose a public risk, and it remains an attractive nuisance to potential trespassers.

# 7. Surrounding Land Uses and Setting

The project site is located on the southernmost portion of the HSU campus directly adjacent to campus facilities and private residences. To the north, across 14th Street, is HSU's Facilities Management building complex and to the northwest is HSU's College Creek Field facility. To the west, south, and east are one to two-story single-family residences. An office and business institutional building is located on the corner of B Street and 13th Street. Figure 5 shows representative photos of the surrounding area.

# 8. Project Background

In September of 2017, HSU drafted plans involving the complete removal of the building on the property known as the Trinity Annex on the HSU campus (referred to as university Annex in the 2004 Master Plan). The proposed work included the abatement and demolition of the former Trinity Hospital building and all other adjacent structures, and the conversion of the site to a surface parking lot with approximately 13,000 square feet of passive recreational greenspace, bicycle facilities, and bus stops and berths. The project proposed an amendment to the Humboldt State University 2004 Master Plan (HSU 2004) to allow for redevelopment of the site with proposed surface parking.

## Figure 5 Photographs of Surrounding Area

**Photograph 1.** View north to the Facilities Management Building, across 14th Street

**Photograph 2.** Residences along C St. on the western side of the project site

**Photograph 3.** View looking northeast to adjacent campus facilities at the intersection of 14th and B St.

**Photograph 4.** Church located at the intersection of 13th and B Streets, facing east

Upon completion of a Cultural Resources Study, the Trinity Annex building was found to be eligible for local listing as a historical resource and, potentially, on the California Register of Historical Resources, and therefore the building's demolition would potentially result in a significant and unavoidable impact to an historical resource pursuant to CEQA. Accordingly, a focused Environmental Impact Report (EIR) was determined to be necessary to further evaluate the potential for significant impacts to historical resources and aesthetics. HSU distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on June 26, 2018 and ending on July 25, 2018.

Following publication and circulation of the Draft EIR for the Trinity Annex Project in January 2019, HSU officials developed a revised concept for the redevelopment of the project site and Trinity Annex building. Substantial revisions to the project site plan and program were prepared, and a new project description is described in detail below. In light of the revised project description, this Initial Study has been prepared in accordance with CEQA in order to analyze the current project proposal.

# 9. Project Description

The updated project would involve the partial demolition, rehabilitation, and expansion and modernization of the Trinity Annex to adaptively reuse the complex as a Childcare Center and Child Development Lab. The project would house programs currently provided on the main HSU campus. The Childcare Center and Child Development Lab program would be relocated from four existing buildings on campus, including the Mary Warren House, Baiocchi House, Toddler Annex, and Swetman Child Development Lab. Those four buildings, shown on Figure 2, would remain in place and become vacant.

The modernized Trinity building complex (i.e., Trinity Center) would measure approximately 13,600 square feet in size and up to 25 feet in height. Approximately 8,100 square feet would be demolished, with approximately 9,800 square feet of the existing building would remain, and an approximately 3,800-square foot addition would be built on the eastern side of the renovated Annex. The new building footprint and layout would provide the space required to accommodate the new Child Development Lab classroom and associated spaces.

The project proposes to demolish all annexes and additions built after the original hospital was constructed in 1944. These are shown in Figure 6. All utilities would be removed from these structures and capped as appropriate. All foundations would be removed and graded as required during the demolition process. Existing utility service locations either would be preserved or modified to best serve the new facility design.

The original Main Block of the hospital building would be renovated and reused as part of the new design. Key historic character-defining features (CDF) of the building would be retained, specifically those which are representative of its Colonial Revival design. Many of the notable building features such as its wood columns, pilasters, and window surrounds would be retained and repaired, or replaced in kind as needed. Other features such as the windows and original main door would be replaced with suitable-in-kind features and the openings would not be altered. Construction would also incorporate abatement of hazardous materials. The wood siding, currently covered with lead-based paint, would be stripped and repainted. The roof of the existing hospital building would be removed and replaced with similar shingle roofing material.

**Figure 6 Demolition Site Plan**

*Source: PBK Architects, Inc. 2021.*

The modernized Trinity Center would be used for children's classrooms, faculty and staff offices, an observation room, educational space, and support spaces, all housed on the first floor. The second floor and basement of the Annex would be used for storage and utilities equipment housing. Six new fenced play areas with play structures would be placed around the building to provide separation for each age group of the Childcare Center and for the Child Development Lab. The project would also include a small garden adjacent to the parking area at the northeastern portion of the project site. Covered walkways would be constructed along the new addition to the Annex and the western frontage of the Annex to provide shading for the proposed play areas that would surround the building.

The project would relocate the existing bus stop, shelter, and bench on 14th Street to B Street, and would provide an accessible path from the Trinity Annex to the public right-of-way and transit on B Street. The project would also provide two HSU General Permit parking lots with 47 standard parking spaces, 1 van accessible space, and 1 standard accessible space. Vehicle access to the project site would be provided via two driveways, one from 14th Street just west of B Street, and one across the parking lot on 13th Street. A trash enclosure would be located along 13th Street, just west of the parking area and accessible from 13th Street. Figure 7 provides a schematic drawing of the project concept.

The project would be developed in two phases: Phase 1 would entail the demolition and hazardous materials abatement of the east wing of the Trinity Annex, and Phase 2 would entail renovation of the portions of the building to remain and new construction. The project would not result in increased enrollment capacity of HSU, and no new programs are proposed as part of the project. Table 1 provides the anticipated timeline for project activities, which would occur over approximately 13 months.

**Table 1 Proposed Project Timeline**

| Project Activity | Start Date | End Date | Duration |
|---|---|---|---|
| Hazardous materials abatement | September 2021 | October 2021 | 2 months |
| Trinity Annex building demolition | October 2021 | November 2021 | 1 month |
| Renovation and construction of the Trinity Center | December 2021 | October 2022 | 11 months |
| Begin operational use of the site | November 2022 | – | – |

## Landscaping

On-site vegetation would be removed. The proposed landscaping plan is presented in Figure 8. As shown therein, 35 trees would be planted on site. Tree species to be planted include trident maple (*Acer buergerianum*), October glory maple (*Acer rubrum*), star magnolia (*Magnolia stellata*), Persian ironwood (*Parrotia persica*), and purple leaf plum (*Prunus cerasifera*). In addition to new trees, shrubs and groundcover would be planted, with synthetic turf, engineered wood fiber, clean play sand, and sod installed in the play areas. The majority of new trees would be planted in the perimeter of the site, partially screening views of on-site features, such as the parking lot, play areas, and remodeled building. Vegetated bioretention basins would be constructed along C Street and toward the center of the block along 14th Street.

**Figure 7 Proposed Site Plan**

*Source: PBK Architects, Inc. 2021.*

## Figure 8 Landscaping Plan

*Source: PBK Architects, Inc. 2021.*

## Utilities

The utility connection to water would be provided via a new pipeline and backflow preventer at the southern side of the building, connecting to an existing water line in 13th Street. The existing sanitary sewer lateral located at the northwest corner of the site would be replaced. The project would not use natural gas and would only use electric power. Existing natural gas lines would be capped in place, and no proposed equipment would be powered by gas.

## Green Building Design Features

While the project would not apply for certification, the building would be designed to meet the LEED Gold equivalent standard. Features proposed that would meet LEED checklist criteria include access to transit, provision of bicycle facilities (10 bicycle parking spaces are proposed), provision of open space, light pollution reduction, indoor water use reduction, water metering, optimizing energy performance, using renewable energy, building material life-cycle impact reduction, construction and demolition waste management, enhanced indoor air quality, use of low-emitting materials, implementation of a construction indoor air quality management plan, conducting an indoor air quality assessment, interior lighting, use of daylight, and provision of quality views. The parking areas will include infrastructure for the provision of future EV charging facilities in the parking area.

## HSU 2004 Master Plan and EIR

The *Humboldt State University 2004 Master Plan* (2004 Master Plan) provides a blueprint for the growth and development of HSU's physical campus (HSU 2004). It summarizes existing conditions at the time of its drafting in 2004, identifies constraints, projects growth, and future needs, establishes planning principles for the development of the campus, and outlines specific projects and changes to the campus to accommodate projected enrollment and future needs in a manner consistent with the planning principles of the University.

The 2004 Master Plan identifies the project site for acquisition and conversion into a playfield. Exhibit 2F of the 2004 Master Plan indicates that the building on the project site was planned for removal, Exhibit 4C shows the land use designation of the site as "Sports/Recreation", and Exhibit 4E labels the site as a "Playfield." The project includes a minor amendment of the 2004 Master Plan to allow for the proposed use of the project site as a childcare center.

A programmatic Environmental Impact Report (EIR) was prepared to evaluate the environmental impacts of the development of the HSU campus as envisioned by the 2004 Master Plan (HSU 2004b). The EIR includes in its project scope the demolition of the Trinity Annex and conversion of the site into a playing field. Whereas much of the analysis included in the 2004 Master Plan EIR is relevant to the project and is incorporated by reference, this IS-MND will serve to update the environmental documentation to reflect a Master Plan revision that changes the playfield into a child development center.

The 2004 Master Plan EIR identifies mitigative elements (i.e., project design features), which are standard practices that all projects developed in accordance with the Master Plan and analyzed in the EIR would implement. The proposed project would incorporate applicable mitigative elements, which are referenced as appropriate in each respective section and summarized below. The 2004 Master Plan EIR also provides mitigation measures to address identified environmental impacts resulting from implementation of the 2004 Master Plan. Applicable mitigation measures included in

the 2004 Master Plan EIR are incorporated as mitigation measures into each environmental topic evaluated in this Initial Study as appropriate, with more restrictive revisions as needed.

## Applicable Mitigative Elements

### *Aesthetics*

- New sources of light will be designed to protect nighttime views, including the night sky. This design goal will be satisfied using a variety of means as applicable, including fixture types, cut off angles, shields, lamp arm extensions, and pole heights. Specific design preferences include not directing light upward or to other properties, avoiding brightly illuminated vertical [fixtures] where feasible, such as walls and lamp poles, and not directing indoor lighting toward skylights. The most Recommended Practices (RPs) of the Illuminating Engineering Society of North America (IES) should be used for lighting levels and quality of light.

### *Cultural Resources*

- During earthwork activities in the areas of development, construction personnel shall be notified of, and required to monitor for, signs of potential undiscovered paleontological, archaeological, ethnic, or religious resources.
- In the event undiscovered paleontological, archaeological, ethnic, or religious resources are encountered during construction, ground-disturbing work will be halted in that area until a qualified cultural resources specialist evaluates the situation and recommends an appropriate course of action.
- If human remains are discovered, the County Coroner must be contacted.

### *Geology & Soils, Hydrology & Water Quality*

- Proper management of disturbed and exposed soils and implementation of effective BMPs for erosion and sedimentation control will be implemented to prevent significant erosion during rains. Erosion control requirements will be included in the construction plans and specifications. The construction contractor will be required to comply with these plans for protecting exposed soils from runoff-producing rain and for the proper disposal of excess soils. For construction projects covering an acre or more, these types of controls will be addressed in a SWPPP required by the Regional Water Quality Control Board. Erosion control requirements will be specific to each project and location, ensuring adequate protection for Jolly Giant Creek and other drainages.

### *Noise*

- Construction activities that generate intrusive sound offsite will be limited from 7 AM to 7 PM, Monday through Friday, and 9 AM to 7 PM on weekends.
- Construction equipment will be maintained in proper conditions to prevent excessive noise.
- Backup beepers will be used only when necessary and will be no louder than necessary.

### *Traffic*

- The construction contractor will be required to submit a traffic control plan to the University for approval. The approved plan must require that the contractor follow appropriate traffic safety

guidelines, such as the Caltrans "Manual of Traffic Safety Controls for Construction and Maintenance Work Zones," and that work be conducted such that:

- Effects on local circulation, parking, and hazards are minimized,
- Emergency vehicles can pass through the construction zone at all times, and
- Clearly marked and signed indicators of pedestrian, bicycle, and vehicle traffic areas to be closed or restricted during construction are provided and that affected traffic is directed to alternate routes where appropriate.

# 10. Other Public Agencies Whose Approval is Required

The Trustees of the California State University is the lead agency and has sole responsibility for approving the project.

# 11. Required Approvals

The following approvals are required for this project:

- **California State University**. Approval by the California State University is required for the proposed master plan revision and schematic design. A Campus Building Permit and approval from HSU Environmental Health and Safety would be required. The Board of Trustees would also approve the project's CEQA review.
- **City of Arcata**. Encroachment Permit approval by the City for construction in the City right-of-way.
- **North Coast Unified Air Quality Management District.** Abatement Permit for removal of asbestos-containing materials from the existing building.
- **Humboldt County Department of Environmental Health**. Permit for construction of the on-site kitchen.
- **State Fire Marshal**. Permit approving building evacuation plans and fire safety features.
- Other approvals, as necessary.

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# Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ■ Aesthetics | □ Agriculture and Forestry Resources | □ Air Quality |
| ■ Biological Resources | ■ Cultural Resources | □ Energy |
| ■ Geology and Soils | □ Greenhouse Gas Emissions | ■ Hazards and Hazardous Materials |
| □ Hydrology and Water Quality | □ Land Use and Planning | □ Mineral Resources |
| ■ Noise | □ Population and Housing | □ Public Services |
| □ Recreation | □ Transportation | ■ Tribal Cultural Resources |
| □ Utilities and Service Systems | □ Wildfire | ■ Mandatory Findings of Significance |

# Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is require

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

| | |
|---|---|
| Deirdre Clem | 6/16/2021 |
| Signature | Da |
| Deirdre Clem | Project & Space Analyst |
| Printed Name | Title |

# Environmental Checklist

## 1 Aesthetics

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ■ |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ■ |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ■ | ☐ |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | ☐ | ■ | ☐ | ☐ |

*a. Would the project have a substantial adverse effect on a scenic vista?*

The project site is located on the southernmost portion of the HSU campus and is approximately 4.2 miles east of the Pacific Ocean. The project site does not lie in the viewshed of a scenic vista as identified in the 2004 Master Plan (HSU 2004) or City of Arcata General Plan (City of Arcata 2008) and would not involve the construction of a structure that could obstruct a scenic vista. In fact, the project would result in a reduction in structural site coverage, as plans call for some demolition of existing structural components. Therefore, compared to current conditions, a revised site development may allow for an increase in views available through the site. In summary, there would be no impact to scenic vistas.

**NO IMPACT**

*b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The project site is located approximately 0.1 mile from U.S. Highway (US) 101 and approximately 0.5 mile north of State Route (SR) 255. These highways are not designated as state scenic highways in Humboldt County (California Department of Transportation [Caltrans] 2019). The stretch of US 101 extending from the southerly city boundary north to the Mad River crossing is locally designated as a coastal scenic highway in the City of Arcata General Plan (City of Arcata 2008), however. Nevertheless, the project site is not visible from this locally-designated portion of the highway as it is obscured by intervening trees and buildings.

The project site is currently developed and contains the Trinity Annex, trees, shrubs, lawns, and parking areas. The trees on the project site are associated with landscaping along the western perimeter of the Trinity Annex, and not located within a corridor of a scenic highway. Additionally, the site does not contain rock outcroppings or other natural features that would be considered scenic resources. However, the project would involve the partial demolition, rehabilitation, and modernization of the Trinity Annex, which was listed in the City of Arcata's "Noteworthy Structures" list and was found eligible for listing as a historical resource in part for its architecture as a unique vernacular expression of the Colonial Revival style. The Cultural Resources Technical Report prepared for the project (Appendix CRS) provides details about these findings. While the exterior of the building shows signs of deterioration, the Trinity Annex could still be considered a scenic resource and most of the CDFs of the Annex will be retained and restored, thereby enhancing the visual quality associated with the historic structures. Because the project site, including the Trinity Annex, is not within or visible from a state scenic highway, there would be no impact to scenic resources within a state scenic highway, and it can be noted that the visual character of the historic structures will remain or be enhanced as a result of the project.

**NO IMPACT**

*c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Pursuant to Public Resources Code (PRC) Section 21071, an "urbanized area" is an incorporated city that has a population of at least 100,000 people, or has a population of less than 100,000 people but the population of that city and not more than two contiguous cities combined equals at least 100,000 people. The project site is located within the City of Arcata, which had a total population of 17,963 as of May 2020 (California Department of Finance 2020). According to the PRC definition, the City of Arcata would not be considered an urbanized area, due to its small population size and adjacency to other cities with populations significantly less than 100,000.

The project site currently contains the Trinity Annex, three surface parking areas, and associated landscaping. The Trinity Annex is no longer in active use and much of the exterior shows sign of deterioration. The largest existing surface parking area on the site is located in the northern area of the project site, adjacent to 14th Street, as shown on Figure 3. The Trinity Annex blocks views of this parking area from 13th Street, and from B and C Streets south of 14th Street. Areas on the project site not developed with the Trinity Annex or surface parking area are generally landscaped with lawn, shrubs, and hedge rows. There are also several trees located adjacent to the exterior of the Trinity Annex, mostly along the side of the Trinity Annex facing C Street. The project site is

surrounded by one and two-story single-family residences to the east, west, and south, and campus facility buildings and associated parking lots to the north and northeast (see Figure 5).

The proposed project would involve partial demolition, rehabilitation, and modernization of the Trinity Annex for use of the Childcare Center and Child Development Lab programs, currently offered on the HSU campus. The project proposes to demolish all annexes and additions built after the original hospital was constructed in 1944, as shown in Figure 6. Removal of the ancillary additions to the original hospital building on the Trinity Annex property would alter the existing visual character and quality of the site. As discussed above under criterion (b), the Trinity Annex could be considered a scenic resource due to its historic architectural features.

As described in the Cultural Resources Technical Report prepared by Rincon Consultants in April 2021 for the proposed project, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (the Standards) recognize the need to alter or add to a historic building to meet continuing or new uses (Appendix CRS). A general recommendation for alterations is that they be in areas which are considered secondary, or less critical in defining a property's historical and/or architectural significance. Those which are primary are highly representative of the property's historical and architectural significance and directly embody all its important associations which meet National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) designation criteria. Those portions which have been classified as secondary represent one or two of the property's significant associations, while those portions which have been altered and were ancillary in function have been classified as tertiary.

According to the Cultural Resources Technical Report, only the original hospital building is considered to have primary CDFs, whereas the rest of the building additions are considered either secondary or tertiary CDFs that are less critical to the historic character of the property. As the original hospital building would remain intact, the visual character of the site as well as views of the site would be retained. Furthermore, the proposed project would include a minor amendment to the 2004 Master Plan, which would allow for the proposed use of the project site for the Childcare Center and Child Development Lab programs. Upon approval of this amendment to the Master Plan, the project would not conflict with the applicable Master Plan designation. Therefore, the proposed project would be consistent with the 2004 Master Plan and would be compatible with the visual character of the surrounding area. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The project site currently contains the Trinity Annex, three active parking areas, and landscaping. The site is also currently served by bus transit along 14th Street and B Street. Existing light and glare sources associated with the site include vehicle headlamps, reflective vehicle surfaces, and security lighting. The proposed project would retain the original hospital building with an approximately 3,800-square foot addition along the eastern side of the remaining Annex and include a parking lot which would have similar light and glare sources as existing conditions. The proposed landscape design for the site (see Figure 8) includes a buffer of trees along B and C Street, as well as increased landscaping throughout each of the play areas the that would reduce the amount of light from the building, light from vehicle headlights, and parked vehicle glare reaching nearby receptors. In addition, the project would incorporate mitigative elements prescribed in the 2004 Master Plan EIR

as Mitigation Measure AES-1 below, to ensure that parking lot lights, or other security lighting installed on the site would not significantly impact nighttime views.

During demolition, site preparation, grading, and paving activities the site would also generate light and, potentially, glare associated with construction activities, such as construction equipment and truck headlamps. However, as described further under Section 13, *Noise*, construction activities would be limited to daytime hours in accordance with mitigative elements included in the 2004 Master Plan EIR incorporated as Mitigation Measure N-1 and HSU general construction practices and would be temporary in nature. Therefore, with incorporation of mitigation measures, the project's impact to daytime or nighttime views due to lighting and glare would be reduced to a less than significant level.

## Mitigation Measure

### *AES-1 Nighttime Views*

The following mitigative element from the 2004 Master Plan EIR shall be incorporated into the project design:

> "New sources of light will be designed to protect nighttime views, including the night sky. This design goal will be satisfied using a variety of means as applicable, including fixture types, cut off angles, shields, lamp arm extensions, and pole heights. Specific design preferences include not directing light upward or to other properties, avoiding brightly illuminated vertical [fixtures] where feasible, such as walls and lamp poles, and not directing indoor lighting toward skylights. The most Recommended Practices (RPs) of the Illuminating Engineering Society of North America (IES) should be used for lighting levels and quality of light."

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 2 Agriculture and Forestry Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ■ |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ☐ | ■ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | ☐ | ☐ | ☐ | ■ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ■ |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ■ |

*a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

*b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

*c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

*d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

*e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The project site and its surroundings are designated as Other Land under the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program. There is no land designated as Important Farmland within the vicinity of the project site (DOC 2016). Neither the project site nor neighboring properties are covered by a Williamson Act contract. The nearest land under a Williamson Act contract is the Windy Acres Ranch approximately 2.5 miles west of the project site, located outside of City of Arcata boundary (County of Humboldt 2010). In addition, the City of Arcata General Plan does not identify any lands within the city or urban services boundary as forest or timber lands (City of Arcata 2008). As such, the project site is not located on or adjacent to designated farmland, agricultural zones or forest lands. Additionally, no agricultural or forest land resources are present on the project site, as it is part of a fully developed university campus. The project would have no impact upon agricultural or forest resources.

**NO IMPACT**

# 3 Air Quality

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☐ | ■ |
| b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ■ | ☐ |
| c. Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ■ | ☐ |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ■ | ☐ |

The project site is located within the North Coast Air Basin (the Basin) under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). The Basin encompasses approximately 7,767 square miles and includes Del Norte, Humboldt, Trinity, and Mendocino counties as well as the northern and western portions of Sonoma County.

As the local air quality management agency, the NCUAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Basin is classified as being in "attainment" or "nonattainment." The Basin is designated as non-attainment for the state 24-hour standard for particulate matter measuring 10 microns or less in diameter ($PM_{10}$) (NCUAQMD 2021a). The health effects associated with this non-attainment pollutant are described in Table 2.

**Table 2 Health Effects Associated with Non-Attainment Criteria Pollutants**

| Pollutant | Adverse Effects |
|---|---|
| Suspended particulate matter ($PM_{10}$) | (1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[a] |

[a] More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: EPA, Air Quality Criteria for Particulate Matter, October 2004.

Source: U.S. EPA, http://www.epa.gov/airquality/urbanair/

Humboldt County's climate, pollution-trapping mountains and valleys, and growing population all contribute to the non-attainment status for $PM_{10}$ (HCAOG 2014). The primary sources of particulate matter are exhaust and dust generated from on-road and off-road vehicles, open burning of vegetation, residential wood stoves, and stationary industrial sources (NCUAQMD 2021a). The NCUAQMD prepared an Attainment Plan in 1995 to assess the sources of air pollution, determine reduction targets, and identify control strategies to achieve attainment with state standards. Control strategies identified by the study include transportation control measures (public transit, ridesharing, vehicle buy-back program, traffic flow improvements, bicycle incentives, etc.), land use measures to reduce reliance on automobiles, and open burning measures (NCUAQMD 1995). This document was not a required component of District attainment efforts and was prepared solely to inform NCUAQMD.

In determining whether a project has significant air quality impacts on the environment, agencies often use the thresholds of significance recommended or adopted by the local air district. The NCUAQMD has not formally adopted significance thresholds to guide CEQA significance determinations for land development projects (NCUAQMD 2021a). Instead, the NCUAQMD recommends use of the Best Available Control Technology (BACT) emission rates for stationary sources as defined in NCUAQMD Rule 110, which are listed in Table 3, as significance thresholds (NCUAQMD 2015). Therefore, in accordance with this recommendation, the project's air pollutant emissions would have a significant individual and cumulative impact if they would exceed the NCUAQMD's significance thresholds for BACT adoption for the purpose of this analysis.

**Table 3 NCUAQMD Significance Thresholds for BACT Adoption**

| | Mass Daily Thresholds | |
|---|---|---|
| **Pollutant** | **Daily (pounds/day)** | **Annual (tons/year)** |
| CO | 500 | 100 |
| Nitrogen Oxides ($NO_x$) | 50 | 40 |
| $PM_{10}$ | 80 | 15 |
| $PM_{2.5}$ | 50 | 10 |
| Reactive Organic Compounds (ROC)[1] | 50 | 40 |
| Sulfur Oxides | 80 | 40 |

[1] Reactive organic compounds (ROC) are formed during combustion and evaporation of organic solvents. ROCs are also referred to as reactive organic gases (ROG) and volatile organic compounds (VOC).

Notes: tpy = tons per year; lbs/day = pounds per day; $NO_X$ = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less. The proposed project would not result in emissions of fluorides, hydrogen sulfide, lead, reduced sulfur compounds, sulfuric acid or total reduced sulfur compounds; therefore, they are not considered in the following analysis.

Source: Table 1.0 Significance Thresholds in NCUAQMD Rule 110 – New Source Review (NSR) and Prevention of Significant Deterioration (PSD), Section E.1 – BACT, July 9, 2015.

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

A potentially significant impact to air quality would occur if the project would conflict with or obstruct the implementation of the applicable air management or attainment quality plan. Although most projects would result in an incremental increase in air emissions in the Basin, the primary

concern is whether project-related impacts have been properly anticipated in the regional air quality planning process and reduced whenever feasible. Therefore, it is necessary to assess the project's consistency with the applicable air quality plan.

A project may be inconsistent with an applicable air quality plan if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the plan. The NCUAQMD prepared Particulate Matter ($PM_{10}$) Attainment Plan in 1995 to assess the sources of air pollution, determine reduction targets, and identify control strategies to achieve attainment with state standards (NCUAQMD 1995). This document was not a required component of District attainment efforts and was prepared solely to inform NCUAQMD. Therefore, there are no formally adopted air quality plans in the NCUAQMD jurisdiction with which the proposed project could comply. Nevertheless, the proposed project would not increase the population because it does not include residential uses, nor would it generate employment growth as it would not increase enrollment capacity or add academic or office space to the campus. Instead, it comprises a relocation of existing childcare services to a renovated site. Therefore, the proposed project would not interfere with the informal air quality planning efforts of the NCUAQMD. Therefore, no impact would occur.

**NO IMPACT**

*b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

A significant adverse air quality impact may occur when a project individually or cumulatively interferes with progress toward the attainment of air quality standards by generating emissions that equal or exceed the established long-term quantitative thresholds for pollutants or exceed a state or federal ambient air quality standard for any criteria pollutant. The project would result in temporary construction emissions and long-term operational emissions. Construction and operational emissions associated with the project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (see Appendix AQ for results). CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., day care center, parking lot, and city park), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

The air quality modeling includes demolition of 8,100 square feet of the existing annex building, construction of a 3,800-square-foot addition to the Trinity Center, and two parking lots with an collective area of 1.44 acres accommodating 49 spaces. The remainder of the project site was modeled as a 'City Park' in CalEEMod to account for the approximately 0.7 acres of play areas for the Childcare Center and Child Development Lab programs. Using the anticipated schedule for the project, demolition was modeled to occur over one month, beginning in July 2021. Site preparation, grading, building construction, paving, and architectural coating were modeled to occur over approximately 12 months, beginning in July 2021 and ending in July 2022. The number of days allotted to each phase was adjusted to account for the anticipated 12-month construction period, and the architectural coating phase, which was assumed to overlap with building construction and paving and end one week after the paving phase finished.

Default emissions values are provided by CalEEMod, although adjustments were made to provide a more accurate estimation of the project's emissions.

## Construction Emissions

The project would involve the demolition of portions of the existing building complex and construction of an addition to the Trinity Center, parking lots, and play areas to support the Childcare Center and Child Development Lab programs. Demolition and construction activities would temporarily generate air pollutants from operation of diesel-powered equipment, employee vehicle trips, truck haul trips, and earthwork, which would generate fugitive dust (i.e., $PM_{10}$) emissions.

Table 4 summarizes estimated construction emissions generated by the project along with NCUAQMD significance thresholds for applicable criteria pollutants. Emissions of fluorides, air-borne lead, and sulfuric acid mist are associated with industrial sources, while hydrogen sulfide emissions are associated with sewage and manure; air-borne lead emissions are also associated with aviation fuel. As the proposed project would not be a source of these air pollutants, they were not considered in the construction emissions analysis (U.S. Environmental Protection Agency [USEPA] 2014). As shown in Table 4, construction emissions for the project would be below NCUAQMD-recommended daily and annual significance thresholds for criteria pollutants.

**Table 4 Construction Emissions Compared to NCUAQMD Significance Thresholds**

| Pollutant | Maximum Daily Emissions (lbs/day)[1] | Daily Significance Threshold (lbs/day) | Maximum Annual Emissions (tpy) | Annual Significance Threshold (tpy) | Significant Impact? |
|---|---|---|---|---|---|
| ROG | 3 | 50 | <1 | 40 | No |
| $NO_x$ | 20 | 50 | 1 | 40 | No |
| CO | 16 | 500 | 1 | 100 | No |
| $SO_x$[2] | <1 | 80 | <1 | 40 | No |
| $PM_{10}$ | 7 | 80 | <1 | 15 | No |
| $PM_{2.5}$ | 4 | 50 | <1 | 10 | No |

[1] Emission values are taken from the season with the highest value.

[2] CalEEMod provides estimated emissions for $SO_2$, which is the predominant form of $SO_X$ emitted.

tpy = tons per year; lbs/day = pounds per day; $NO_X$ = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.

Sources: Appendix AQ; NCUAQMD Rule 110 (significance thresholds)

Furthermore, the project would be required to comply with applicable NCUAQMD rules and regulations, including requirements to prevent fugitive dust emissions as stated in Section D of Rule 104, Prohibitions. In accordance with Rule 104, the construction contractor for the project would be required to take reasonable precautions to prevent particulate matter from becoming airborne, including, but not limited to, the following applicable provisions:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
- The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- The paving of roadways and their maintenance in a clean condition.

- The prompt removal of earth or other track out material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

Compliance with the fugitive dust control of Section D of NCUAQMD Rule 104 would minimize fugitive dust emissions during construction such that project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Construction impacts would be less than significant.

## Operational Emissions

Operational emissions would be comprised of area source emissions and energy emissions. Area source emissions would be generated by landscape maintenance equipment, consumer products, and architectural coating. Emissions attributed to energy use would include electricity required to operate heating at the Trinity Center. Additionally, as described in the *Project Description*, the proposed project would relocate the existing Childcare Center and Child Development Lab programs from their current locations on the HSU campus to the modernized Trinity Center, while those buildings would be left vacant. Therefore, the operational emissions calculated below are not new because they are currently occurring at other buildings on campus and are simply being relocated into the renovated Trinity Center.

Table 5 summarizes estimated emissions associated with operation of the project. Operational emissions would not exceed NCUAQMD-recommended daily and annual thresholds for criteria pollutants; therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment, and impacts would be less than significant.

**Table 5 Operational Emissions Compared to NCUAQMD Significance Thresholds**

| Pollutant | Maximum Daily Emissions (lbs/day)[1] | Daily Significance Threshold (lbs/day) | Maximum Annual Emissions (tpy) | Annual Significance Threshold (tpy) | Significant Impact? |
|---|---|---|---|---|---|
| ROG | <1 | 50 | <1 | 40 | No |
| $NO_x$ | <1 | 50 | 0 | 40 | No |
| CO | <1 | 500 | <1 | 100 | No |
| $SO_x$[2] | 0 | 80 | 0 | 40 | No |
| $PM_{10}$ | <1 | 80 | 0 | 15 | No |
| $PM_{2.5}$ | <1 | 50 | 0 | 10 | No |

[1] Emission values are taken from the season with the highest value.

[2] CalEEMod provides estimated emissions for $SO_2$, which is the predominant form of $SO_x$ emitted.

tpy = tons per year; lbs/day = pounds per day; $NO_X$ = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.

Sources: Appendix AQ; NCUAQMD Rule 110 (significance thresholds)

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include health care facilities, retirement homes, school and playground facilities, and residential areas. The project site is adjacent to a residential neighborhood, where it is possible that children, the elderly, and/or people with health problems reside. Therefore, the adjacent residences are considered to be sensitive receptors. The project also includes the siting of new sensitive receptors. Localized air quality impacts to sensitive receptors typically result from CO hotspots and TACs, which are discussed below.

The NCUAQMD recommends use of the latest version of the California Air Pollution Control Officers Association (CAPCOA) "Health Risk Assessments for Proposed Land Use Projects" to assess project impacts related to toxic air contaminants. Because the proposed project is not a source of toxic air contaminants, as defined in CAPCOA's guidance document, a health risk assessment is not required. Therefore, the project would not expose sensitive receptors to substantial emissions of toxic air contaminants.

As discussed in greater detail in Section 9, *Hazards and Hazardous Materials*, the Trinity Annex contains asbestos and lead-based paint, and on-site soils may also be contaminated with lead. As a result, there is the potential for asbestos and lead to be emitted into the air during renovation and demolition activities. Lead-based materials and asbestos exposure are regulated by the California Occupational Safety and Health Administration (Cal OSHA). The California Code of Regulations (CCR), Section 1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed Cal OSHA standards. Under this rule, construction workers may not be exposed to lead at concentrations greater than 50 micrograms per cubic meter of air averaged over an 8-hour period, and exposure must be reduced to lower concentrations if the workday exceeds eight hours. Similarly, CCR Section 1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers. The NCUAQMD also enforces Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), which regulates the control of asbestos during the renovation and demolition of buildings under the Clean Air Act (NCUAQMD 2021b). The Clean Air Act requires a thorough inspection for asbestos where demolition will occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak-tight containers and disposing of the asbestos-containing waste material as expediently as practicable (USEPA 2019).

Because the proposed project would not result in emissions exceeding significance thresholds or be a source of toxic air contaminants; would comply with regulations limiting lead and asbestos emissions and exposure; and would incorporate mitigation to prevent dust-borne lead emissions, the project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and

temporary and would cease upon completion, and odors disperse with distance. Overall, project construction would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

Table 1-4 in the California Air Resources Control Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides a list of land uses that are the most common sources of odor complaints received by local air districts. The uses in the table include sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refiners, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants and livestock operations (CARB 2005). School facilities and day care centers are not included in this list. Parking lots are not considered a major odor source. Potential sources of odors during project operation would be vehicle exhaust from older vehicles. Because odors from construction would be temporary, short-term, and limited by CARB regulations and operation would not involving odor-generating land uses, no operational impact would occur.

**LESS THAN SIGNIFICANT IMPACT**

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# 4 Biological Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ■ | ☐ | ☐ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ■ |
| c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ■ |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ■ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ■ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ■ |

*a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The project site is currently developed, lies in an urban context, and is substantially covered by impervious surface pavement and structures. Vegetation on the site consists of maintained ornamental landscaping, including grasses, shrubs, and trees. The maintained landscaping on-site is not suitable habitat for special-status plant species. The project would have no impact on special-status plants.

The developed conditions and maintained landscaping on-site are also not suitable habitat for the majority of special-status wildlife known to occur in the area of the HSU campus, such as southern torrent salamander and osprey (HSU 2004b). However, migratory nesting birds, which are protected under the Migratory Bird Treaty Act, may utilize on-site landscaping trees and shrubs for nesting. The proposed partial demolition of the Trinity Annex, including removal of associated landscaping, may occur within the nesting bird season. Therefore, proposed renovation and demolition activities could impact nesting migratory bird species, which would be a potentially significant impact and mitigation is required.

Implementation of Mitigation Measure BIO-1 would require pre-construction nesting bird surveys and nesting bird avoidance during construction, which would reduce the impacts associated with disturbance or disruption of nesting migratory bird species. With implementation of this mitigation measure, impacts would be reduced to a less than significant level.

## Mitigation Measures

### *BIO-1 Pre-Construction Nesting Bird Survey and Avoidance*

To avoid disturbance of nesting migratory bird species and their nests, which are protected by the Migratory Bird Treaty Act and California Fish and Game Code, demolition and construction activities related to the project, including, but not limited to vegetation removal and ground disturbance, shall occur outside of the bird breeding season (February 1st through August 31st). If demolition must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than three days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the project boundary, focusing on the on-site vegetation and landscaping, particularly trees and shrubs. The nesting bird pre-construction survey shall be conducted on foot inside the project boundaries, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in Northern California communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

*c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

*d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

*f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project site does not contain riparian habitat or wetlands and lies in an urban setting where it would not interfere with wildlife movement or impede the use of native wildlife nursery sites. As the site and surrounding area are completely developed, no wildlife movement corridors or significant riparian or sensitive habitats are located within or surrounding the project site. The nearest Essential Connectivity Area, as mapped in the California Department of Fish and Wildlife's *Biogeographic Information and Observation System*, is located in the Trinity National Forest approximately 15 miles east of the project site (CDFW 2021). The project site is not within the area of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CDFW 2019, USFWS 2021). There would be no impact.

**NO IMPACT**

*e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

On-site vegetation, including trees, would be removed during the construction activities and demolition of portions of the Trinity Annex. As shown in Figure 8, 35 trees would be planted on site. Tree species to be planted include trident maple, October glory maple, garden madrone, star magnolia, Persian ironwood, and purple leaf plum. There are no applicable local policies or ordinances for the HSU campus protecting biological resources, including a tree preservation policy or ordinance. Therefore, the project would not conflict with an applicable local policy or ordinance protecting biological resources. In addition, the proposed project includes landscaping the project site with maintained lawns and trees, which would be comparable to existing conditions. There would be no impact.

**NO IMPACT**

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# 5 Cultural Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | ☐ | ☐ | ■ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ■ | ☐ | ☐ |
| c. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ■ | ☐ |

This section is based on the Cultural Resources Technical Report prepared by Rincon Consultants in May 2021 (included as Appendix CRS). As described therein, Rincon conducted a review of the California Historical Resources Information System (CHRIS) on October 20, 2017 at the Northwest Information Center (NWIC) to identify previously conducted cultural studies and previously recorded cultural resources within and a 0.5-mile radius around the project site. The CHRIS search included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list.

The NWIC identified three previous studies and six previously recorded cultural resources within a 0.5-mile radius of the project site. Additional background research revealed that the project site includes one built-environment property, the HSU Trinity Annex, which is included in the City of Arcata's Noteworthy Structures list. Property-specific archival research was completed in person and online between October and December 2017. Sources included, but were not limited to, historical maps, aerial photographs, plans and drawings, and written histories of the area. An intensive historic architectural resource field survey of the project site was conducted on November 6, 2017.

Rincon contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search of the project site. The purpose of the SLF search is to identify lands or resources important to Native Americans within or near the project site that could be impacted by project development. The NAHC responded on November 6, 2017, stating that the SLF search was returned with negative results. However, the NAHC additionally provided a list of Native American individuals and tribal organizations that may have knowledge of cultural resources in the area. Rincon sent letters to the five Native American individuals identified by the NAHC on November 8, 2017. Rachel Sundberg, Tribal Historic Preservation Officer (THPO) for the Cher-Ae Heights Indian Community of the Trinidad Rancheria, responded on December 8, 2017, and stated that the project site is outside of their area of geographic concern and thus they have no information to provide or interest in the project.

CEQA requires that a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (*CEQA Guidelines* Section 15064.5[a][1-3]).

A resource is considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

*a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

## Historic Resource Eligibility

The Cultural Resources Technical Report prepared in May 2021 evaluated the project's impacts to cultural resources (Appendix CRS). The report found the Trinity Annex eligible for individual listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) at the local level of significance under Criterion A/1 for its association with the broad pattern of events in local history as the first hospital constructed in Arcata to serve that purpose; and under Criterion C/3, as a distinctive, intact example of the Colonial Revival style, with Minimal Traditional influences, as applied to an institutional property. As such, the property is considered a historical resource under CEQA.

The project would involve the partial demolition and renovation of the Trinity Annex, with the main block (original construction) remaining in place. The project would also construct a new addition to the Trinity Annex to house the proposed childcare programs.

The primary character-defining components (i.e., buildings and additions over time) and features (i.e., architectural details and materials) of the Trinity Annex are described below. The 1948 Addition, 1956 Extension, and Chapel and Sisters' Quarters are considered secondary CDFs; the Boiler Room/Laundry and Garage are considered tertiary CDFs for the complex overall.

The Cultural Resources Technical Report also evaluated the Trinity Annex for eligibility as a California Historic Landmark (CHL). Because the Trinity Hospital was not the first or most significant hospital constructed in California or the Northern California region, and the building construction does not represent an outstanding or prototypical example of any period, style, or architectural movement, Trinity Hospital was determined to be ineligible for CHL designation.

## Historic Resource Evaluation

As discussed above, Trinity Annex appears eligible for listing in the NRHP and CRHR and therefore qualifies as a historical resource for the purposes of CEQA. The adaptive reuse of Trinity Annex will ensure that the historic building is well utilized and remains a viable part of the HSU campus in the future. The project would house programs currently provided in several different locations on the main HSU campus.

### *Trinity Annex Adaptive Reuse Plans*

Trinity Annex will provide the space for a Childcare Center and Child Development Lab. The new building footprint and layout would provide the space required to accommodate the Child Development Laboratory classroom. The objective of the adaptive reuse is modifying and expanding the hospital building to accommodate the proposed new use while also retaining the property's CDFs such that it will retain historic integrity.

To accommodate the proposed use, a portion of the complex's rear elevation, including the small 1948 Addition, would be demolished. The proposed building complex would measure 13,600 square feet and rise up to 25 feet in height above adjacent grade, with the addition located on the rear elevation, set back from and visually subordinate to the historic roof line. Approximately 8,100 square feet of the complex, including post-1944 annexes and additions, would be demolished, and approximately 9,800 square feet of the existing building comprising the Main Block would remain. An addition measuring approximately 3,800 square feet would be built on the eastern elevation of the adaptively reused Trinity Annex.

Figure 9 depicts the Trinity Annex site plan and the locations of the Main Block, 1948 Addition, and 1956 Expansion.

The Main Block is directly and most strongly representative of the property's significance under Criteria A/1 as the first purpose-built hospital in Arcata. It is also the only portion of the property designed in a Colonial Revival style by Ackerman and is therefore the focal point for eligibility under Criteria C/3. The most important features of the Main Block include the central pavilion and two wings, "T"-shaped footprint, 1- to 2-story height, recessed main entry, gable-and-hip roof with projecting eave, original main door, lights in entry porch, windows, decorative cupola, and wood siding.

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**Figure 9 Contributing Components of Trinity Annex**

The proposed project would retain, and/or replace in-kind where necessary due to deterioration, CDFs related to the façade of the 1944 Main Block, which is the key element conveying the property's significance under Criteria A/1 and Criteria C/3. The Main Block would be renovated and adaptively reused. The horizontal wood siding, currently coated with lead-based paint, would be stripped according to the *Secretary's Standards*, using the gentlest means possible, and repainted in a compatible color palette. The roof of Trinity Annex would be removed, repaired, and re-sheathed in a similar roofing material.

### *Secretary's Standards Project Review*

This section provides an analysis of the proposed components of the Trinity Annex project vis-à-vis the *Secretary's Standards*. The *Secretary's Standards* provide guidance on the preservation and protection of historic properties. As discussed in CEQA Guidelines Section 10564.5, a project that is complaint with the *Secretary's Standards* generally would not have a significant impact to historical resources. There are separate Standards for four distinct, but interrelated, approaches to the treatment of historic properties: preservation, rehabilitation, restoration, and reconstruction. As the most flexible of the three approaches, rehabilitation would be the appropriate treatment approach for the adaptive reuse of Trinity Annex. Table 6 describes the project's conformance with each rehabilitation standard.

**Table 6 Project Conformance with Secretary's Standards**

| Rehabilitation Standard | Project Conformance |
|---|---|
| 1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment. | **In Conformance**. The project would reuse Trinity Annex as a childcare center and child development laboratory, thereby relocating an important campus amenity to this underutilized building. Adaptive reuse plans involve relatively minimal changes to the building's primary contributors and CDFs and the retention of the distinctive characteristics of the building and its site. Most of the building's primary CDFs would be retained and/or replaced in-kind where necessary. In general, the project includes the retention of the following primary CDFs of the Main Block:<br>▪ Façade design composition of a central pavilion flanked with two lower wings<br>▪ T-shaped building footprint and setback from street<br>▪ Decorative cupola with oculus at roof ridgeline; would be cleaned and restored<br>▪ 1- to 2-story height and gable-and-hip roof shape/height/design, projecting eaves, and roof vents<br>▪ Recessed, elaborated entrance porch and main door location; main door will be replaced with an in-kind replacement that matches existing in materials, features, finishes, and overall appearance<br>▪ Fan-light and fixed sidelights in entry porch; fan light will be assessed for reuse and preserved if possible; fixed sidelights will be restored<br>▪ Two-story wood columns at entry porch<br>▪ Decorative pilasters<br>▪ Horizontal wood siding; lead-based paint will be mitigated and siding repainted; pattern and appearance of original siding will remain intact<br>▪ Wood-window surrounds; window trim would be removed to allow for window replacement; if original surrounds can be reused, they will be reinstalled. If not feasible, they will be replaced in kind<br>▪ Tile-clad primary entrance stairs with curved, wrought-metal railing; this feature will be preserved as best possible; if replacement is |

| Rehabilitation Standard | Project Conformance |
|---|---|
| | needed, new applications will match the existing features as closely as possible. Handrails will be replaced with compliant features matching existing as closely as possible. |
| 2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided. | **In Conformance**. The project would retain or replace in-kind most of the aspects that contribute to the historic significance of Trinity Annex, including a majority of the building's CDFs located along the Main Block façade. This will include features such as wood columns, pilasters, window surrounds, original windows, horizontal wood siding, and roof form, shape, and detailing.<br>Although the main entrance would shift to the rear elevation, the entrance portico with its architectural detailing and design configuration would remain intact. The original main door would be retained or replaced in-kind, and the original drop light fixture in the entrance pavilion ceiling would be rehabilitated and reused or replaced in-kind.<br>Three simple, post-and-beam sun canopies would be installed on the façade utilizing connection points that are reversible and minimally invasive to the character-defining wood sheathing of the building. A small shed-roof utility addition would be removed and replaced with a single door offering code-compliance egress. Several windows would be replaced with doors to allow for egress, access to restroom from play areas, and code/licensing requirements. These will be unobtrusive in design and occupy/modify the existing wall openings.<br>As the plans proceed and construction commences, input to the design team from a qualified historic architect or architectural historian is required to resolve any issues and to facilitate ongoing compliance with Standard 2 (refer to Continuing Best Practice CBP-1). |
| 3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken. | **In Conformance**. The project does not include conjectural features or architectural elements from other buildings or architectural styles. The new addition will be differentiated from the historic building. As the plans proceed and construction commences, input to the design team from a qualified historic architect or architectural historian is required to resolve any issues and to facilitate ongoing compliance with Standard 3 (refer to Continuing Best Practice CBP-1). |
| 4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved. | **Not In Conformance**. The project would remove changes to the building that have acquired significance in their own right; this includes the 1948 Addition, as well as the series of sheltered breezeways and support structures on the rear elevation. However, these highly specialized support structures do not fit the updated programming change planned for the adaptive reuse; these areas are also considered secondary and tertiary contributing elements to the Trinity Annex complex overall. Therefore, though the project does not conform with Standard No. 4, the removal of these secondary contributors would not be expected to result in a significant adverse impact and therefore material impairment to the significance of Trinity Annex, and Trinity Annex would remain a historical resource. |
| 5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved. | **In Conformance**. See response to Standards 1 and 2 above. |

| Rehabilitation Standard | Project Conformance |
|---|---|
| 6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence. | **In Conformance**. As noted in Standards 1 and 2 above, some CDFs may require in-kind replacement should repair be infeasible. Where replacement is needed, features will match existing in kind, in materials, appearance, finishes, and detailing. As the plans proceed and construction commences, input to the design team from a qualified historic architect or architectural historian is required to resolve any issues and to facilitate ongoing compliance with Standard 6 (refer to Continuing Best Practice CBP-1). |
| 7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible. | **In Conformance**. The proposed project would include repair, repainting, or replacement in-kind of existing wood windows, roof sheathing, and horizontal wood-siding, among other features. This would be undertaken using the gentlest means possible, with treatments that do not damage any historic materials or adjacent materials/surfaces. As the plans proceed and construction commences, input to the design team from a qualified historic architect or architectural historian is required to facilitate ongoing compliance with Standard 7 (refer to Continuing Best Practice CBP-1). |
| 8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken. | **In Conformance**. Archaeological testing, research and mitigation have been established for the project to ensure the project conforms with Standard 8. |
| 9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment. | **In Conformance**. The proposed project would complement but not copy the primary CDFs of the building. Differentiation in new construction is achieved through a number of characteristics—the siting, scale, and mass of the new construction, which are located on the rear elevation and designed to be visually subordinate to the historic property, in terms of its scale, roof height, and features. The addition on the rear elevation conforms with the original T-shaped building plan; the addition is capped with a side-gable roof attached to the historic building by way of a short, shed-roof hyphen. New construction will be identified through subtle differences in the patterns/size of wood siding and window treatments.<br>The additions are designed to be visually subordinate to the historic property while also utilizing the same palette of materials and overall design elements, such as rhythmic patterns of multi-light windows, horizontal wood siding, and extended roof eaves.<br>As the plans proceed and construction commences, input to the design team from a qualified historic architect or architectural historian is required to resolve any issues and to facilitate ongoing compliance with Standard 9 (refer to Continuing Best Practice CBP-1). |
| 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. | **In Conformance**. The primary CDFs of Trinity Annex are associated with the 1944 Main Block, which would remain intact if the addition planned for the rear elevation were removed in the future. As the plans proceed and construction commences, input to the design team from a qualified historic architect or architectural historian is required to resolve any issues and to facilitate ongoing compliance with Standard 10 (refer to Continuing Best Practice CBP-1). |

### *Evaluation of Impacts to the Integrity of Trinity Annex*

Integrity is the ability of a property to convey the reasons for its historic significance; it is defined by seven aspects or qualities: location, design, setting, materials, workmanship, feeling, and

association. To retain integrity, it is not necessary for a property to retain all of these aspects, but it is essential that it possess those physical features that enable it to convey its historic identity. Table 7 describes the project's effect on the integrity of the Trinity Annex.

**Table 7 Project Impact on the Integrity of Trinity Annex**

| Integrity Aspect | Current | Adaptive Reuse Project Plans |
|---|---|---|
| Location | The current building has not been moved retains integrity of location. | The building would be preserved in place. Therefore, it would retain integrity of location. |
| Design | The building retains integrity of design. | The primary CDFs of the Main Block and its Colonial Revival-style detailing would be retained and/or replaced in-kind to match existing in materials, detailing, finishes, and overall appearance. Therefore, Trinity Annex would retain integrity of design. |
| Setting | The current building retains integrity of setting. The physical environment of the surrounding area appears largely as it did throughout the operation of the structure. | The setting of Trinity Annex would be retained. The immediate setting, of a building with a deep setback and a T-shaped building footprint with amenities and parking areas in the rear elevation, would be retained. Therefore, Trinity Annex would retain integrity of setting. |
| Materials | The current building retains integrity of materials. | The primary contributors and CDFs of Trinity Annex, in particular the 1944 Main Block, would be preserved and rehabilitated. Secondary contributors and CDFs, including the 1948 Addition on the hospital's rear elevation, would be removed and replaced to meet the new programming use as a Childcare Center and Child Development Laboratory. Standards-compliant treatment of original features, including horizontal wood siding and detailing along the façade and at the entrance, would be carried out. Therefore, Trinity Annex would retain integrity of materials. |
| Workmanship | The current building retains integrity of workmanship. | The building would retain the physical aspects that convey its workmanship. |
| Feeling | The current building retains integrity of feeling. It continues to express the aesthetic and sense from its historic period. | The whole of the historic building would be preserved in place, though secondary contributors and CDFs on the rear elevation would be removed and replaced. The building's integrity of feeling would be changed but not materially impaired through the new project, which would retain/rehabilitate primary CDFs. Aspects of materials, workmanship, and design would be retained as discussed above and collectively would contribute to the retention of the building's integrity of feeling. |
| Association | The current building retains integrity of association. It possesses those physical features that convey its historic character. | The building's integrity of association would be changed in some ways through the shift in use and removal of the secondary contributors and CDFs that reflected its use as a hospital complex. However, the building would still retain most of the physical aspects that convey its historic character and the project would ensure a new viable, long-term use for the presently underutilized building. Therefore, integrity of association would remain intact. |

## Conclusion

As noted above, the proposed project appears to be in conformance with the *Secretary's Standards for Rehabilitation* and the National Park Service guidance for exterior additions. The project would not be expected to have a substantial adverse impact on Trinity Annex. The following Continuing

Best Practice (CBP) is recommended to ensure continued compliance with the *Secretary's Standards*.

### *CBP-1 Historic Preservation Input to Design Team*

As project plans evolve, the design team shall seek input from a qualified professional who meets the standards for architectural history or historic architecture as set forth by the Secretary of the Interior's Professional Qualification Standards (36 CFR, Part 61). The qualified professional shall review project plans and provide input to HSU and the design team on plans for rehabilitation or in-kind replacement of CDFs as well as construction activities that might affect adjacent CDFs.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The 1.44-acre project area has been previously developed, and the site contains buildings and infrastructure such as parking lots, pavement, and landscaping. It is likely that surface soils have been scattered across the surface of the site during initial construction, grading, and landscaping of the area. As discussed in Appendix CRS, no archaeological resources have been identified on the site, although two archaeological sites have been identified within 0.3 mile of the site. No archaeological resources have been recorded within the project site, though the project has not been surveyed for archaeological resources. Based on the presence of archaeological sites nearby and the lack of previous archaeological investigation at the project site, construction of the proposed project has potential to encounter previously unidentified subsurface archaeological resources. Mitigation Measures CR-1 and CR-2 would require worker awareness training and stopping work upon discovery of unanticipated cultural or tribal cultural resources, followed by proper treatment of the discovered resources. These measures would reduce potential impacts to less than significant.

## Mitigation Measure

### *CR-1 Worker Environmental Awareness Program (WEAP)*

A qualified archaeologist should be retained to conduct a WEAP training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

### *CR-2 Unanticipated Discovery of Cultural Resources*

If cultural resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) (hereafter qualified archaeologist) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to cultural resources.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The discovery of human remains is always a possibility during ground disturbing activities; if human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. With adherence to existing regulations, impacts to human remains would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 6 Energy

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ■ | ☐ |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ■ | ☐ |

## Electricity

In 2018, California used 277,704 gigawatt-hours (GWh) of electricity, of which approximately 32 percent was generated by renewable resources (California Energy Commission [CEC] 2020). Electricity service would be provided to the project by Pacific Gas and Electric (PG&E). Existing gas lines servicing the site will be properly capped and vacated. Table 8 shows the electricity consumption by sector and total for PG&E.

**Table 8 Electricity Consumption in the PG&E Service Area in 2019**

| Agriculture and Water Pump | Commercial Building | Commercial Other | Industry | Mining and Construction | Residential | Streetlight | Total Usage |
|---|---|---|---|---|---|---|---|
| 4,489.7 | 29,559.9 | 4,348.8 | 9,709.6 | 1,642.0 | 28,014.2 | 307.5 | 78,071.6 |

All usage expressed in GWh

Source: CEC 2019a

## Natural Gas

The project would be powered solely by electricity, and natural gas would not be used. Natural gas is not discussed further in this Initial Study.

## Petroleum

In 2016, approximately 40 percent of the state's energy consumption was associated with transportation activities (United States Energy Information Administration [EIA] 2019). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2020). Although California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 percent to 22 percent reduction. This decline is expected to result from both an increase of electric vehicle use and improving fuel economy for internal combustion engine vehicles (CEC 2019c).

## Methodology

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during project construction, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the project site. Operational energy demand accounts for the anticipated energy consumption during project operation, such as electricity consumed for building power needs, including, but not limited to lighting, water and wastewater conveyance, and air conditioning.

The CalEEMod outputs for the air quality and GHG modeling (Appendix AQ) completed for the proposed project were used to estimate energy consumption associated with the proposed project. The CalEEMod results provide the average travel distance, vehicle trip numbers, and vehicle fleet mix during construction of the proposed project. The CalEEMod results also provide the estimated gross electricity consumption by land use during operation of the proposed project.

*a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

## Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The proposed project would require demolition, site preparation and grading, pavement and asphalt installation, building construction, architectural coating, and landscaping and hardscaping.

As shown in Table 9 below, construction of the project would require approximately 2,486 gallons of gasoline and 28,844 gallons of diesel fuel. Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, the project would utilize construction contractors who demonstrate compliance with applicable CARB regulations that restrict the idling of heavy-duty diesel motor vehicles and govern the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Electrical power would be consumed to construct the project, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area. Overall, construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies or infrastructure. Construction activities would utilize fuel-efficient equipment consistent with state and federal regulations and would comply with state measures to reduce the inefficient, wasteful, or unnecessary consumption of energy. In addition, per applicable regulatory requirements, the project would comply with construction waste management practices to divert construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

**Table 9 Proposed Project Construction Energy Usage**

| Fuel Type | Gallons of Fuel | MMBtu[4] |
|---|---|---|
| Diesel Fuel (Construction Equipment) | 26,906 | 3,429 |
| Diesel Fuel (Hauling & Vendor Trips) | 1,938 | 247 |
| Other Petroleum Fuel (Worker Trips) | 2,486 | 273 |

Source: Energy Calculation Spreadsheets included as Appendix EN.

## Operational Energy Demand

Operation of the proposed project would require energy use in the form of electricity and gasoline consumption. Electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project. According to the traffic study prepared for the proposed project by W-Trans (2021; Appendix TRA), operation of the project would not generate any new daily trips as the project would move an existing use to the Trinity Center and leave the buildings where the Childcare Center and Child Development Lab programs operated vacant. Therefore, gasoline consumption from vehicle travel to and from the site would not increase with project operation over existing conditions. Project operation would require 0.04 GWh or 160 MMBtu of electricity (refer to Appendix EN and Appendix AQ for electricity usage calculations).

The project would comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. CALGreen (as codified in CCR Title 24, Part 11) requires implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to achieve energy efficient performance. The standards are updated every three years, and each iteration increases energy efficiency standards. For example, according to the CEC, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018c). Additionally, the proposed project would demolish portions of the existing building on the project site and retrofit the new building with more efficient appliances and building materials.

The project site would relocate the existing bus stop, shelter, and bench along 14th Street to B Street, which would continue to be served by Humboldt Transit Authority's Arcata and Mad River Orange and Red Lines, as well as the Redwood Transit System route. Pedestrian sidewalks are located along all streets bordering the project site. Furthermore, the campus itself features numerous pedestrian pathways between buildings. Since the project site can be accessed by bicyclists, pedestrians, and public transit users, increased active and transit transportation could reduce vehicle trips, thereby reducing fuel consumption below existing conditions. Furthermore, the project would continue to reduce its use of nonrenewable energy resources as the percentage of electricity generated by renewable resources provided by PG&E continues to increase to comply with state requirements through Senate Bill 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Project construction activity would be temporary and typical of similar projects, and would not result in the wasteful, inefficient, or unnecessary consumption of energy. Project operation would increase energy use on the site compared to existing conditions. However, energy use would be in

conformance with the latest version of CALGreen and the Building Energy Efficiency Standards. Additionally, the electricity use would not result in a significant increase in demand for utility provider PG&E. Finally, the project would not result in new vehicle trips due to project operation that would cause wasteful or unnecessary use of vehicle fuel. This is largely because the trips are occurring at other sites, and the transfer of the childcare development functions to this site would not produce new trips. Therefore, the project would not result in wasteful or unnecessary energy consumption, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

HSU's Climate Action Plan (CAP) contains emissions-reduction strategies designed to meet or exceed the reduction targets set forth in the CSU *Sustainability Policy*, several of which are energy-related in nature. The CAP is a voluntary planning study undertaken by HSU to quantify emissions through an inventory analysis and forecast and to propose possible measures HSU could implement in the future. The current CAP was developed by HSU in December of 2016 in accordance with the CSU *Sustainability Policy* and provides guidance for achieving energy efficiency goals for campus projects. Specific actions that apply to new construction and major renovations include:

- Implement building HVAC and water heating upgrades and controls.
- Implement high efficiency interior lighting guidelines for all renovation and new construction projects.
- Upgrade exterior lighting systems to LED with appropriate controls.

As discussed above under criterion a, the proposed project would be required to comply with CBC Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. Additionally, the proposed project would demolish portions of the existing building on the project site and retrofit the building with more efficient appliances and building materials. Conformance with CALGreen (CBC Title 24, Part 11) would require incorporation of energy efficient light fixtures and building materials into the design of new construction projects, including the proposed project. This would ensure consistency with the HSU CAP, and apply Title 24 Standards to all newly constructed buildings. By implementing these sustainable design practices in new construction, the proposed project would be consistent with the HSU CAP and this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 7 Geology and Soils

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| 1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | ☐ | ☐ | ■ | ☐ |
| 2. Strong seismic ground shaking? | ☐ | ☐ | ■ | ☐ |
| 3. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ■ | ☐ |
| 4. Landslides? | ☐ | ☐ | ☐ | ■ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ■ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☐ | ■ |
| d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ■ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ■ |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ■ | ☐ | ☐ |

*a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

Humboldt County lies in an area of high seismic risk (County of Humboldt 2017). Three crustal plates—the Pacific Plate, Gorda Plate, and North American Plate—intersect offshore to form the Mendocino Triple Junction. Consequently, the area is seismically active and offshore of Cape Mendocino has the highest concentration of earthquake events in the continental United States. There are several known active faults in the vicinity of the HSU campus. The closest is the Fickle Hill Fault, which is located one block to the southwest of the project site (City of Arcata 2008). However, the project site does not lie in a fault rupture zone, as delineated by the Alquist-Priolo Earthquake Fault Zoning Map (DOC 2016). Therefore, the project would not expose people to substantial adverse effects involving surface rupture of a fault and this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Humboldt County contains four major fault zones: San Andreas Fault, Falor-Korbel (Mad River) Fault, Trinidad and Big Lagoon Faults, and Cascadia Subduction Zone (County of Humboldt 2002). Activity along any of these fault systems could result in strong ground shaking. As stated in the 2004 Master Plan EIR, the campus lies in an area prone to potentially prolonged and strong seismic ground shaking (HSU 2004b). However, because of the proximity of active faults in the region and the potential for strong ground shaking, it would be necessary to design and construct the project in strict accordance with current standards for earthquake-resistant construction. According to Title 22, Division 12 of the California Child Care Center Licensing Requirements, prior to any construction or alterations to an existing building or new childcare facility, the Department of Social Services must be notified and the project is subject to a building inspection if the Department suspects a hazard to human health. In addition, all playground equipment shall be securely anchored to the ground unless portable by design (DSS 1998). The proposed project would be required to comply with these requirements. Therefore, it would not expose people or structures to significant adverse effects involving strong seismic ground shaking. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. As indicated in Figure PS-a (*Hazards Map*) of the Arcata General Plan, the project site is not located within an area subject to seismic-related ground failure or liquefaction (City of Arcata 2008). This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

In general, the topography in the vicinity of the project site slopes gradually uphill toward the west. Surrounding areas are also relatively flat or gently sloped, with steeper hillsides located more than 800 feet east of the project site and city. The site has not been mapped as an area at risk for seismically induced landslides (DOC 2021). As there is no risk of landslides on the site, no impact would occur.

**NO IMPACT**

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

The project site is located in a relatively flat, urbanized area not subject to erosion, and is currently developed with a building, parking lots, and some landscaping. The project would involve the partial demolition, rehabilitation, and modernization of the Trinity Annex for use as a part of the Childcare Center and Child Development Lab program currently offered on the HSU campus. The project would also involve construction of two parking lot areas with landscape and pedestrian and transportation amenities. During operation, the original hospital building would be retained, with some greenspace and several play areas, and minimal erosion or loss of topsoil would occur.

Project construction would involve ground disturbance. However, because the project site is greater than one acre in size, construction activities would be subject to the National Pollution Discharge Elimination System (NPDES) Construction General Permit, most recently adopted by the California State Water Resources Control Board (SWRCB) on September 2, 2009. All developments for which the Construction General Permit applies are required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPPs specify best management practices (BMP) to be implemented by the contractor during construction to minimize soil erosion, stormwater runoff, and downstream impacts to water quality. With adherence to the BMPs required by a SWPPP, erosion impacts would be less than significant.

Compliance with NPDES requirements and incorporation of the above mitigative element would reduce the potential for substantial soil erosion or the loss of topsoil to a less than significant level.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The project site is not located in an area vulnerable to landslide, lateral spreading, subsidence, liquefaction, or collapse (DOC 1984, USGS 2016). The project site is currently developed with a building and there is no record of damage from unstable geologic conditions. The project would not result in on- or off-site impacts related to geological instability, and there would be no impact.

**NO IMPACT**

*d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

This property has previously been developed and utilized for campus activities. Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wetted. Expansion and shrinkage of soils could damage the

proposed buildings, as well as associated utilities and parking surfaces. Project site soils have a low expansiveness potential (NRCS 2021). Therefore, the project would not be located on expansive soils and this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

HSU is served by an existing sewer system. The project area and the area adjacent to the project is operated and maintained by the City of Arcata. The project would not involve the use of septic tanks or any other alternative wastewater disposal systems. No impact would occur.

**NO IMPACT**

*f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Project activities would include excavation to remove foundations from the building additions proposed for demolition and to remove existing on-site vegetation. Given the small disturbance area, shallow depth of ground disturbance, and the previously disturbed condition of the site, it is highly unlikely that previously unknown paleontological resources would be encountered during construction activities. Additionally, due to Humboldt County's continuous tectonic activity through the ages, there is a low probability of finding unique paleontological resources. However, ground disturbing activities always involve the possibility of such a discovery. Therefore, this impact is potentially significant and mitigation is required.

Mitigation Measure GEO-1 would avoid impacts to paleontological resources in the case of unanticipated fossil discoveries. This measure would apply to all phases of project construction and would reduce the potential for impacts to unanticipated fossils present on site by providing for the recovery, identification, and curation of paleontological resources. Impacts would be less than significant with mitigation.

## Mitigation Measures

### *GEO-1 Unanticipated Discovery of Paleontological Resources*

In the event a previously unknown fossil is uncovered during project construction, all work shall cease until a qualified paleontologist can investigate the find and make appropriate recommendations. The qualified paleontologist shall determine the significance of the discovery and identify whether additional mitigation or treatment is warranted. Measures may include testing, data recovery, reburial, archival review and/or transfer to the appropriate museum or educational institution. All testing, data recovery, reburial, archival review or transfer to research institutions related to monitoring discoveries shall be determined by the qualified paleontologist and shall be reported to the Trustees of the California State University. Work in the area of the discovery will resume once the find is properly documented and authorization is given to resume construction work.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 8 Greenhouse Gas Emissions

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ■ | ☐ |
| b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ■ | ☐ |

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide ($CO_2$), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas ($CO_2$) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" ($CO_2e$), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than $CO_2$ on a molecule per molecule basis (IPCC 2014).[1]

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of $CO_2$, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (United States Environmental Protection Agency 2020). Emissions resulting from human activities are thereby contributing to an average increase in Earth's

[1] The IPCC's (2014b) *Fifth Assessment Report* determined that methane has a GWP of 28. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the IPCC's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

## Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalents ($CO_2e$) by 2030 and two MT of $CO_2e$ by 2050 (CARB 2017).

Other relevant state laws and regulations include:

- **SB 100**: Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.
- **California Building Standards Code (California Code of Regulations Title 24)**: The California Building Standards Code consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. Part 6 is the Building Energy Efficiency Standards, which establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. Part 12 is the California Green Building Standards Code (CALGreen), which includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures.
- **Humboldt State University (HSU) Climate Action Plan**: HSU's Climate Action Plan (CAP) sets goals for the campus to reduce GHG emissions to 1990 levels by the 2020 and to 80 percent below 1990 levels by 2040 and to become carbon neutral by 2050. HSU achieved the goal of reducing emissions to 1990 levels according to the 2019-2020 CAP Progress Report (HSU 2020). Following this, HSU must further reduce annual emissions by approximately 1,500 MT of $CO_2e$ every five years to reduce emissions to below 80 percent below 1990 levels. To reach carbon neutrality by 2050, HSU would need to incrementally reduce annual emissions by an estimated 2,100 MT of $CO_2e$ each year between 2040 and 2050 (HSU 2016).

## Methodology

GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2016.3.2, with the assumptions described under Section 3, *Air Quality*, in addition to the following:

- **Operational Year 2030.** Project GHG emissions are estimated for the year 2030 to be consistent with GHG emissions significance threshold, under SB 32 which requires the State to further reduce GHG emissions to 40 percent below 1990 levels by the year 2030.
- **Amortization of Construction Emissions.** Project construction and demolition activities would also generate GHG emissions associated with employee trips, truck hauling trips, and operation of diesel-powered construction equipment. GHG emissions from construction of the proposed project were amortized over a 30-year period (the assumed project lifetime) and added to annual operational emissions to determine the project's total annual GHG emissions.
- **Utility Energy Intensity Factors.** Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2017). The project would be served by PG&E. Therefore, PG&E's specific energy intensity factors (i.e., the amount of $CO_2$, $CH_4$, and $N_2O$ per kilowatt-hour) are used in the calculations of GHG emissions. The energy intensity factors included in CalEEMod are based on 2008 data by default at which time PG&E had only achieved a 12.4 percent procurement of renewable energy. Per SB 100, the statewide Renewable Portfolio Standard (RPS) Program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030. To account for the continuing effects of the RPS, the energy intensity factors included in CalEEMod were reduced based on the percentage of renewables reported by PG&E. PG&E energy intensity factors that include this reduction are shown in Table 10.

**Table 10 PG&E Energy Intensity Factors**

| | 2008 (lbs/MWh) | 2030 (lbs/MWh)[2] |
|---|---|---|
| Percent procurement | 12.4%[1] | 60% |
| Carbon dioxide ($CO_2$) | 641.35 | 292.85 |
| Methane ($CH_4$) | 0.029 | 0.013 |
| Nitrous oxide ($N_2O$) | 0.006 | 0.003 |

[1] Source: California Public Utilities Commission 2011

[2] Renewable Portfolio Standards goal established by Senate Bill 100

lbs = pounds; MWh = megawatt-hour

- **Energy Reductions.** Energy usage from non-residential energy usage was reduced by 30 percent to account for the requirements of 2019 Title 24 standards (California Energy Commission [CEC] 2019). The project would be all-electric and would not rely on natural gas as an energy source; therefore, natural gas consumption was set to zero in CalEEMod, and $CO_2e$ emissions from electricity replacing natural gas energy use were calculated separately.
- **Water Use Reductions.** CalEEMod does not incorporate water use reductions achieved by CALGreen (Part 11 of Title 24). New development would be subject to CALGreen, which requires a 20 percent increase in indoor water use efficiency and use of indoor water-efficient irrigation systems. Thus, in order to account for compliance with CALGreen, a 20 percent reduction in indoor water use and the use of water-efficient irrigation systems was included in the water consumption calculations for new development.

## Significance Thresholds

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to CEQA Guidelines Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. Neither the NCUAQMD nor HSU has adopted a qualified GHG reduction plan that could be used for tiering the evaluation of the project's under CEQA Guidelines Section 15183.5(b).

In the absence of specific NCUAQMD and HSU thresholds, the significance of the project's GHG emissions are assessed in comparison to thresholds adopted by other air quality management districts. Therefore, the air quality management district used for this comparison analysis was the Bay Area AQMD (BAAQMD).

The BAAQMD (2017) *CEQA Air Quality Guidelines* outlines an approach to determine the significance of project-related GHG emissions. The BAAQMD recommends that lead agencies determine appropriate thresholds of significance for GHG emissions based on substantial evidence in the record. The following significance thresholds established in the BAAQMD (2017) *CEQA Air Quality Guidelines* for operational GHG emissions from land use development projects are the most appropriate thresholds for use in determining the significance of project impacts (BAAQMD 2017):

- Compliance with a qualified GHG reduction strategy
- Annual emissions less than 1,100 metric tons (MT) per year (MT/yr) of carbon dioxide equivalent ($CO_2e$); or
- Service person threshold of 4.6 MT $CO_2e$/service person/year (residents + employees)

As described above, HSU's CAP is not considered a qualified GHG Reduction Strategy; therefore, the BAAQMD quantitative thresholds are utilized in this analysis. It should be noted that the BAAQMD's thresholds were established based on achieving the 2020 GHG emission reduction targets set forth in the AB 32 Scoping Plan. Therefore, because the proposed project would have a post-2020 buildout year, the bright-line (i.e., mass emissions) threshold of significance (1,100 MT $CO_2e$ per year) was adjusted based on the SB 32 target of a 40 percent reduction in GHG emissions below 1990 levels (Association of Environmental Professionals 2016). Since the 2020 GHG targets set forth in the AB 32 Scoping Plan are designed to reduce GHG emissions to 1990 levels, it follows that the BAAQMD threshold of 1,100 MT $CO_2e$ per year must decrease by 40 percent by 2030 to meet the statewide 2030 GHG emission reduction targets. Therefore, for the purposes of this analysis, the proposed project's year 2030 GHG emissions would be significant if they would exceed 660 MT of $CO_2e$ per year.

*a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of $CO_2$, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects. Construction of the proposed project would generate temporary GHG emissions primarily as a result of operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials. As shown in Table 11, construction of the proposed project would generate an estimated total of 293 MT of $CO_2e$. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate an estimated 10 MT of $CO_2e$ per year.

### Table 11 Estimated Construction GHG Emissions

| Year of Construction | Project Emissions (MT of $CO_2e$ per year) |
|---|---|
| 2021 | 139 |
| 2022 | 154 |
| **Total** | 293 |
| **Amortized over 30 Years** | 10 |

MT = metric tons; $CO_2e$ = carbon dioxide equivalents
Emissions modeling was completed using CalEEMod. See Appendix AQ for modeling results.

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, and wastewater and solid waste generation. As shown in Table 12, annual operational emissions generated by the proposed project combined with amortized construction emissions would total approximately 20 MT of $CO_2e$ per year, which would be significantly lower than the 660 MT of $CO_2e$ per year adjusted emissions threshold. Therefore, impacts would be less than significant.

### Table 12 Combined Annual Emissions of Greenhouse Gases

| Emission Source[1] | Annual Emissions (MT of $CO_2e$) |
|---|---|
| **Construction** | 10 |
| **Operational** | |
| Area | <1 |
| Energy (CalEEMod) | 4 |
| Energy (Electricity Replacing Natural Gas)[2] | 2 |
| Solid Waste | 3 |
| Water | 1 |
| **Total** | **20** |

[1] Operational emissions would not include mobile source emissions as the project would not generate any net new trips.
[2] The project would not use natural gas; however, the energy that would have been supplied by natural gas would be supplied by electricity. Calculations related to this energy source conversion are provided in Appendix AQ.
See Appendix AQ for CalEEMod worksheets.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Several plans and policies have been adopted to reduce GHG emissions in the Humboldt County region, including the State's 2017 Scoping Plan and local policies contained in the HSU CAP. The proposed project's consistency with these plans is discussed in the following subsections. As discussed therein, the proposed project would not conflict with plans and policies aimed at reducing GHG emissions. Therefore, impacts would be less than significant.

### *2017 Scoping Plan*

The principal state plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and VMT; maximizing recycling and diversion from landfills; and increasing water conservation. The project would be consistent with these goals through project design, which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards and installing energy-efficient LED lighting, water-efficient faucets and toilets, water efficient landscaping and irrigation, and infrastructure supportive of future EV charging stations. The proposed project would demolish portions of the existing structure on the project site and retrofit the building with more efficient appliances and building materials. Additionally, the project would be served by PG&E, which is required to increase its renewable energy procurement in accordance with SB 100 targets.

Additionally, according to the traffic study prepared for the proposed project (Appendix TRA), operation of the project would not generate any new daily trips as the project would relocate existing programs currently house elsewhere on the main campus to the Trinity Center complex. The project site is located in an area that is already well-served by transit and within walking and biking distance of other campus and City of Arcata activity nodes, which would reduce existing employee's VMT and associated fossil fuel usage. The project site is located adjacent to a bus stop, to be relocated from 14$^{th}$ Street to B Street, which is served by Humboldt Transit Authority's Arcata and Mad River Orange and Red Lines, as well as the Redwood Transit System route. The project would also include the addition of 10 bicycle parking spaces on site. Pedestrian sidewalks are located along all streets bordering the project site. Furthermore, the campus itself features numerous pedestrian pathways between buildings. Since the project site can be accessed by bicyclists, pedestrians, and public transit users, increased alternative transportation could reduce vehicle trips, thereby reducing mobile-related GHG emissions and contributing to the achievement of SB 32 goals.

Furthermore, the project would be required to comply with AB 1826 requiring businesses to recycle their organic waste and AB 341 for mandatory commercial recycling, which would maximize the project's recycling and solid waste diversion. Therefore, the project would be consistent with the 2017 Scoping Plan.

### *HSU CAP*

As described under Section 6, *Energy*, the HSU CAP includes measures that reduce energy use from buildings and equipment, decrease parking requirements, and encourage alternative modes of transportation. The current CAP was developed by HSU in December of 2016 in accordance with the

CSU Sustainability Policy and provides guidance for achieving GHG emission reduction goals for campus projects. Specific actions that apply to new construction and major renovations include:

- Implement building HVAC and water heating upgrades and controls.
- Implement high efficiency interior lighting guidelines for all renovation and new construction projects.
- Upgrade exterior lighting systems to LED with appropriate controls.
- Establish dedicated parking/charging for electric vehicles.
- Require and enforce increased construction and demolition debris recycling from contractors

The project would be consistent with these goals through project design through compliance with CBC Title 24, which includes installing energy-efficient LED lighting, water-efficient faucets and toilets, water efficient landscaping and irrigation, the addition of new bicycle parking on site, and infrastructure for future EV charging stations which would greatly reduce GHG emissions during operation. Conformance with CALGreen (CBC Title 24, Part 11) would require incorporation of energy efficient light fixtures and building materials into the design of new construction and major renovation projects, including the proposed project. This would ensure consistency with the HSU CAP, and apply Title 24 Standards to all newly constructed buildings.

By implementing these sustainable design practices in new construction, the proposed project would be consistent with the HSU CAP and this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 9 Hazards and Hazardous Materials

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ■ | ☐ |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ■ | ☐ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school? | ☐ | ■ | ☐ | ☐ |
| d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ■ |
| e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ■ |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ■ |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☐ | ☐ | ■ |

*a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

## Construction

Project demolition and construction activities would potentially involve the use, transport, and disposal of hazardous materials, such as vehicle fuels, lubricating fluids, cleaners, or solvents. Project construction would require heavy construction equipment, the operation of which could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. The transport of any hazardous materials would be subject to federal and state regulations, which would minimize risk associated with the transport hazardous materials. The Department of Toxic Substances Control (DTSC) establishes regulation and guidelines for the proper handling and recordkeeping of hazardous waste transported by highway and designates DTSC-registered transporters permitted to move hazardous waste to an appropriate receiving facility. The U.S. Department of Transportation's (U.S. DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for regulating and ensuring the safe and secure movement of hazardous materials to industry and consumers by all modes of transportation. The U.S. DOT is responsible for implementation of the Federal Hazardous Materials Transportation Law (Federal hazmat law), 49 U.S.C. Section 5101 et seq. Additionally, construction activities that involve hazardous materials would be required to transport such materials along roadways designated for that purpose in the County, thereby limiting risk of upset during transportation. Compliance with existing regulations regarding the handling of hazardous materials would ensure the proposed project would have a less than significant impact related to the routine transport, use, or disposal of hazardous materials.

## Operation

Operational use of the project site for children's classrooms, offices, educational, and storage spaces could involve the use of hazardous materials in the form of routine cleaning products. These materials would not be substantially different from commercial and industrial chemicals already in general and wide use throughout the region and project area. As with any institutional activities that involve the storage and use of hazardous materials, on-site activity involving hazardous substances (such as the cleaning products as described above), and the transport, storage, handling of these substances, must adhere to applicable local, state, and federal safety standards, ordinances, or regulations. The California Occupational Safety and Health Administration (Cal/OSHA) is responsible for developing and enforcing workplace safety regulations. Both federal and state laws include special provisions/training in safe methods for handling any type of hazardous substance. These regulations ensure that potential hazards associated with operational activities do not create a significant hazard to the public. Future uses would be required to store hazardous materials in designated areas designed to prevent accidental release into the environment. Potentially hazardous waste produced during operation would also be collected, stored, and disposed of in accordance with applicable laws and regulations.

Compliance with existing laws and regulations governing the transport, use, storage, and disposal of hazardous materials would reduce impacts related to exposure of the public or environment to hazardous materials to less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

*c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

As discussed above, operation of the project site a Childcare Center and Child Development Lab would not involve the transport, use, or disposal of hazardous materials. The project would involve the partial demolition, rehabilitation, and modernization of the Trinity Annex. Demolition of the original Trinity Annex building and project construction would require the use of heavy machinery and construction equipment, such as dozers, backhoes, and front-end loaders. The operation of this equipment and machinery could result in a spill or accidental release of hazardous materials used for equipment, including fuel, engine oil, engine coolant, and lubricants. As described in Section 8, *Geology and Soils*, construction of the proposed project would require coverage under the NPDES Construction General Permit. Compliance with these requirements would include preparation of a construction SWPPP, which would specify BMPs to quickly contain and clean up any accidental spills or leaks. Mandatory implementation a construction SWPPP and associated BMPs would prevent an accidental release of hazardous materials associated with construction equipment. As described above, DTSC and U.S. DOT regulate and approve appropriate handling and transportation of hazardous materials. The use of potentially hazardous materials utilized during construction of the proposed project would comply with all state and federal regulations regarding the handling of potentially hazardous materials.

The Trinity Annex was surveyed in 2016 for the presence of asbestos and lead-based materials that identified hazardous levels of lead and asbestos in the building. A report was prepared by Masek Consulting Services that summarizes the findings of the survey and provides recommendations for implementation of federal and state requirements to safeguard against lead and asbestos exposure (HSU 2016); a copy of the report is provided in Appendix HAZ. Lead exposure is regulated at the state level under CCR Section 1532.1 by Cal OSHA, and asbestos exposure is regulated at the federal, state, and local level under Code of Federal Regulations (CFR) Title 40, Part 61, Subpart M, CCR Section 1529, and NCUAQMD Rule 401, respectively. The project would be required to comply with all applicable regulations, which reduce potential hazards from the accidental release of lead and asbestos during demolition activities to a less than significant level.

A Phase I Environmental Site Assessment (ESA) of the project site was conducted by Rincon Consultants in February 2018 (Appendix HAZ). The Phase I ESA identified the potential for elevated concentrations of lead in site soils due to peeling lead-based paint, as well as the presence of solvents and hydrocarbons in the soils and groundwater due to historic on-site laundry operations. Depth to groundwater in the area was recorded at approximately 2.5 to 3.2 feet below ground surface (Appendix HAZ). Project construction activities that disturb the soils on-site would potentially result in the release of hazardous materials into the environment, and solvents, if present on-site, may contribute to groundwater contamination and emission of hazardous soil vapors. The project site is located approximately 1,200 feet (0.2 mile) southeast of the Arcata Christian School. Thus, soil disturbance associated with project activities and existing groundwater contamination, if present, would have the potential to release hazardous materials within 0.25 mile of a school. Impacts related to the accidental release of hazardous materials and emission of hazardous materials in proximity to a school would be potentially significant and mitigation is required.

Implementation of Mitigation Measure HAZ-1 would require additional site assessments and potential remediation to reduce the impacts associated with potentially hazardous soils on the project site to a less than significant level. Implementation of mitigation measure HAZ-2 would reduce the potential hazards associated with release of hazardous materials off-site by ensuring that they are properly transported and disposed, in accordance with state and federal regulations. With implementation of both of these mitigation measures, impacts would be reduced to a less than significant level.

## Mitigation Measures

### *HAZ-1 Phase II Environmental Site Assessment*

A Phase II ESA, conforming to the recommended guidelines established by the American Society for Testing and Materials in Standard E1903-11, shall be conducted prior to the start of project demolition and construction activities. The Phase II ESA shall include the collection of soil samples from areas of exposed soil along the perimeter of the Trinity Annex and analysis of samples for total lead levels. The Phase II shall also include a subsurface investigation within or in the proximity of the northeast wing of the Trinity Annex to evaluate the potential for soil and groundwater contamination associated with the on-site laundry facilities. Given the reported shallow depth of groundwater at the site, in-situ groundwater samples shall be collected concurrently with subsurface soil sampling. The Phase II ESA shall provide recommendations to address any identified hazards and indicate when to apply those recommended actions in relation to proposed project activities (i.e., Trinity Annex partial demolition, rehabilitation, and modernization). Example recommendations that could be provided in the Phase II ESA include developing a Remedial Action Agreement that would potentially involve:

- Soil vapor and/or indoor air survey
- Additional delineation of impacts
- Remediation of impacted groundwater and/or soil
- Removal and disposal of contaminated soils
- Mitigate potential for contaminant exposure and leave-in-place
- Engagement with regulatory agencies

The Trustees of the California State University shall require the construction contractor to implement remedial actions as identified in the Phase II ESA.

### *HAZ-2 Disposal of Hazardous Waste*

Waste considered hazardous shall be disposed of at an appropriate hazardous waste landfill and shall be hauled under a proper manifest by a licensed hazardous waste transporter in accordance with all applicable DTSC and U.S. DOT regulations.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

A database search of known hazardous materials sites compiled pursuant to Government Code Section 65962.5 was completed in April 2021 for the project site. The State Water Resources Control

Board (SWRCB) Geotracker site was searched for leaking underground storage tanks and other cleanup sites, and the DTSC's EnviroStor database was searched for hazardous waste facilities and other known contamination sites (SWRCB 2021, DTSC 2021). The site was not listed on any of the databases; however, the search identified two listed sites nearby.

HSU Plant Operations, adjacent to the northern boundary of the project site, is the site of a leaking underground storage tank case involving a release of gasoline and fuel oxygenates. The case was listed as open for site assessment in 2015. A request for closure report has been submitted and based on the result of recent groundwater monitoring and the recorded groundwater westerly flow direction, this listed site is not expected to have impacted the project site.

Located approximately 550 feet northeast of the project site, HSU is listed for a 2012 release of approximately 50 gallons of raw sewage to a storm drain, a 2012 release of 0.5 gallons of paint to a storm drain, and a 2008 release of mineral spirits to a storm drain (SWRCB 2021). Because of the minimal quantity of substances released during these events, distance from the project site, and because the substances entered storm drains and discharged away from the area, this listed site is not expected to have impacted the project site. The university is also listed for having an NPDES permit and as an emitter of GHGs; no violations are associated with these listings.

As the project site itself is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and neither of the listed sites located in the vicinity of the project site have affected the project site, the proposed project would not create a significant hazard to the public or the environment and no impact would occur.

**NO IMPACT**

*e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The project site is located approximately five miles northwest of Murray Field Airport, approximately seven miles southeast of the California Redwood Coast-Humboldt County Airport, and approximately nine miles northwest of the Samoa Field Airport. No other public or public use airports are located in the project vicinity. The proposed project would not be located within the airspace of a Military Training Route or Military Operating Area (County of Humboldt 2014) or an Airport Land Use Compatibility Zone (County of Humboldt 2007) and would not conflict with adopted or planned airport land use plans. Consequently, it would not result in a safety hazard associated with airports. Therefore, no impact would occur.

**NO IMPACT**

*f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not directly impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, or involve the development of structures or changes in roadway configurations or accessibility that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation. The Humboldt County Operational Area Hazardous Mitigation Plan 2019 organizes several long-term and short-term policies, programs, projects, and other activities to alleviate the death injury, and property damage that may result from a disaster in the county (County of Humboldt 2020). The City of Arcata Tsunami Hazard Map indicates that an emergency evacuation

route is best used travelling north along U.S. 101 out of the city (City of Arcata 2020). The City of Arcata also uses CodeRED to send emergency notifications to residents regarding evacuation notices, utility outages, water main breaks, fires, floods, chemical spills and other emergencies. The proposed project would not alter procedures or communications to be utilized or implemented during an emergency or generate additional population or substantial traffic that could slow emergency response. The relocated bus stop would not impede access to the site. Therefore, no impact would occur.

**NO IMPACT**

*g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project is located in an urbanized area within the corporate boundary of Arcata, surrounded primarily by paved surfaces and structures. The project site is not intermixed with or adjacent to wildlands. Additionally, the project site is not located in a Fire Hazard Severity Zone (CAL FIRE 2007), indicating that the area is at low risk from fire.

The City of Arcata is a Local Responsibility Area (CAL FIRE 2007) with fire protection services provided by the Arcata Volunteer Fire Department (HSU 2002). The closest fire station is the Arcata Station, located at 631 9$^{th}$ Street, approximately 0.3 mile southeast of the project site. As the project site lies in an area at low risk for fire and in proximity to local fire protection resources, and as no habitable buildings are proposed, there would be no impact.

**NO IMPACT**

# 10 Hydrology and Water Quality

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ■ | ☐ |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ■ | ☐ |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| (i) Result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ■ | ☐ |
| (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | ☐ | ☐ | ■ | ☐ |
| (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ■ | ☐ |
| (iv) Impede or redirect flood flows? | ☐ | ☐ | ■ | ☐ |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ■ | ☐ |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ■ | ☐ |

*a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project site is generally flat and located in an urban, developed environment served by a municipal storm sewer system. Municipal storm sewer systems consist of roads with drainage systems, catch basins, curbs, gutter, ditches, and man-made channels that convey stormwater to surface water bodies. The project would potentially generate pollutants during operation and construction activities that could be washed by stormwater into the municipal storm sewer system and consequently lead to water quality impacts.

As discussed in Section 9, *Hazards and Hazardous Materials*, on-site laundry operations associated with prior use of the site as a hospital may have released solvents into the soil and groundwater, which could contribute to degradation water quality. Mitigation Measure HAZ-1 would require that groundwater contamination be remediated prior to the start of project construction and demolition activities.

Operation of construction equipment and other construction activities could generate silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality, or release debris, particulate, and petroleum hydrocarbons as a result of improper storage of construction materials and spilled petroleum products. As discussed in Section 7, *Geology and Soils*, the project would be required to incorporate BMPs for erosion and sedimentation control in accordance with NPDES General Construction Permit requirements, which include the preparation of a SWPPP. SWPPPs may include the following BMPs to reduce construction impacts on water quality:

- Schedule excavation and grading work for dry weather
- Avoid excavation and grading activities during wet weather
- Avoid runoff while applying water for dust control
- Avoid hosing down dirty pavement or impermeable surfaces where fluids have spilled
- Construct diversion dikes to channel runoff around the site, and line channels with grass or roughened pavement to reduce velocity of runoff
- Cover stockpiles and excavated soil with tarps or plastic sheeting
- Utilize re-vegetation for erosion control after clearing, grading, or excavating, where practicable
- Remove existing vegetation and only when absolutely necessary
- Consider planting temporary vegetation for erosion control on slopes or where construction is not immediately planned
- Plant permanent vegetation as soon as possible

The on-site parking areas could also generate pollutants, such as leaked fluids from vehicles that would enter surface water bodies via stormwater. Stormwater pollution is regulated under the NPDES Municipal Storm Water Permitting Program; HSU has been issued a Phase II Small MS4 General Permit (Order No. 2013-0001-DWQ). HSU's MS4 permit requires the University to implement Low Impact Development (LID) features for projects that create or replace greater than or equal to 2,500 square feet of impervious surfaces (Sustainability Tracking, Assessment & Rating System [STARS] 2017). The final project design would be required to capture and treat runoff in compliance with MS4 permit requirements. This is typically accomplished with LID techniques, such as pervious pavers, and bioretention systems, such as bioswales and rain gardens. The project includes a flow through planter at the corner of 14th and C Streets, as well as bioretention basins along 14th Street and near the proposed play areas along C Street. These basins are sized and designed to handle all stormwater runoff from the project site. Therefore, project operation would not create or contribute runoff that would exceed the capacity of existing stormwater drainage

systems, result in a violation of water quality standards, or otherwise degrade water quality. Compliance with NPDES permit requirements would reduce project construction and operation impacts to a less than significant level.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The potential concerns with respect to groundwater are: (1) creating or increasing overdraft due to groundwater consumption; (2) reduction of groundwater recharge due to increased impervious surfaces; and (3) direct intrusion into the groundwater table for projects requiring major excavation.

Domestic water would be provided to the project site by the City of Arcata. The majority of the City's water supply is purchased from the Humboldt Bay Municipal Water District (HBMWD) with a secondary source from the City-owned Heindon Well. The City of Arcata has an Urban Water Management Plan (as required by the California Water Code) that defines the current and future capacity of the system. The City currently has 1.37 billion gallons of water available annually, while the City projects that water use will increase to 0.88 billion gallons per year by 2040 (City of Arcata 2015). As such, the City of Arcata, with its present mix of water sources, possesses a significant surplus of capacity.

The project would not substantially alter existing hydrological conditions on the project site. The project site is currently mostly covered in impervious surface and would continue to be mostly covered in impervious surfaces under project conditions. In addition, the project would include landscaping and provide LID and stormwater management systems that encourage on-site retention and infiltration of precipitation and runoff, per the requirements of the Phase II Small MS4 General Permit. Therefore, groundwater recharge would not be significantly affected. Impacts to groundwater resources would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

*(i) Result in substantial erosion or siltation on- or off-site?*

*(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

*(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

*(iv) Impede or redirect flood flows?*

The project site is relatively flat, located in a largely paved, urban environment, and is drained via a municipal storm drain system. The project site is currently mostly paved or covered by buildings, with some landscaping, and would remain in a similar condition after construction of the proposed project. The project would also install vegetated bioretention basins along C Street and toward the center of the block along 14th Street. These basins would capture and treat stormwater runoff at the site. There are no streams or rivers on or adjacent to the project site, and the project would not

alter the course of any streams or rivers. Construction activities would temporarily result in greater exposure of on-site soils, but as discussed above under criterion (a), the project would be required to comply with NPDES permit requirements during construction activities that would minimize erosion and runoff. In addition, the project would be required to comply with MS4 permit requirements during operation that would minimize runoff. Therefore, impacts related to on- or off-site erosion, siltation, polluted runoff, or flooding due to runoff would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is located approximately 0.75 miles northeast from the nearest Special Flood Hazard Area (SFHA). According to the Federal Emergency Management Agency (FEMA), the site is located in Flood Zone X, an area of minimal flood hazard (FEMA 2017). The nearest body of water is the Arcata Bay which is approximately 1.4 miles away and is fed by the North Bay Channel and Pacific Ocean. Two small lakes also sit to the west of Redwood Highway: Klopp Lake and the South Oxidation Pond. These are approximately 1.3 and 1.5 miles southwest of the site, respectively. The project is within a 2-mile radius of the nearest body of water but is not at risk of pollution due to inundation as it has been classified by FEMA as Flood Zone X. Additionally, the site would not be inundated during a 100-year storm event. If inundation were to occur, bioretention basins along C Street and 14$^{th}$ Street would assist in preventing site pollution from entering flood waters. Therefore, project features would control the release of potential pollutants from project site inundation. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project site is located within the North Coast Regional Water Quality Control Board, which implements the North Coast Basin Plan (Basin Plan) for the region. In the vicinity of the project site, the Basin Plan lists bacterial quality concerns due to shellfish farms and agricultural farming runoff as top priorities. There are no rivers, streams, or other bodies of water on or adjacent to the project site that might be at risk of pollution from project operations or that might otherwise interfere with the implementation of the Basin Plan. Currently, there is no groundwater management plan for Humboldt County or the Arcata region. The project site sits in the Mad River Valley – Lowland which is a Very Low priority basin and not subject to the Sustainable Groundwater Management Act (SMGA 2021). The nearest groundwater basin is the Eel River Valley Groundwater Basin, located approximately 18 miles southwest, which is considered a medium priority basin and in the process of creating a groundwater sustainability plan by the year 2022 (County of Humboldt 2021). Therefore, the project would not interfere with implementation of a local sustainable groundwater management plan.

Furthermore, HSU's MS4 permit requires the University to implement LID features for projects that create or replace greater than or equal to 2,500 square feet of impervious surface (STARS 2017). The final project design would be required to capture and treat runoff in compliance with MS4 permit requirements. Impacts to implementation of the water quality control plan would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 11 Land Use and Planning

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ■ |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ■ | ☐ |

*a. Would the project physically divide an established community?*

The project site is located within one city block on the HSU campus and involves a reconstruction and partial demolition of an existing building. The proposed building would measure approximately 13,600 square feet, including an approximately 3,800 square foot addition along the eastern side of the remaining Annex. The surrounding land uses include single family homes to the west, south, and east; an office and institutional business to the southeast; and the HSU campus to the north. The project would not involve the construction of major infrastructure that could divide the surrounding residential community, such as a new roadway or barrier, or alter the use of the site in a manner that would divide the surrounding community. There would be no impact.

**NO IMPACT**

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The project site is located on the HSU campus. The CSU has land use jurisdiction over campus development. As a state agency, HSU is not regulated by the City of Arcata's General Plan, zoning ordinance, or other local land use controls. The 2004 Master Plan guides the development of the HSU campus and includes planning principles adopted for the purpose of avoiding or mitigating environmental effects. The 2004 Master Plan designates the Trinity Annex site (referred to as University Annex in the 2004 Master Plan) for acquisition, demolition, and development as a playing field to address a shortage of outdoor field space for Physical Education classes, recreation and club activities, and community open space. The proposed project would include an amendment of the 2004 Master Plan to alter the proposed designation of the project site for consistency with the proposed use as a childcare facility. The amendment would facilitate consistency with the project and the amended Master Plan. Impacts would be less than significant.

Table 13 evaluates the project's consistency with applicable policies included in the 2004 Master Plan.

The 2004 Master Plan designates the Trinity Annex site (referred to as University Annex in the 2004 Master Plan) for acquisition, demolition, and development as a playing field to address a shortage of outdoor field space for Physical Education classes, recreation and club activities, and community open space. The proposed project would include an amendment of the 2004 Master Plan to alter the proposed designation of the project site for consistency with the proposed use as a childcare facility. The amendment would facilitate consistency with the project and the amended Master Plan. Impacts would be less than significant.

### Table 13 Project Consistency with Applicable 2004 Master Plan Environmental Policies

| Policies | Project Consistency |
|---|---|
| ▪ Landscaping shall be used to soften the public edges of the campus through the preservation, where possible, of mature trees and the use of appropriate plantings to support both screening and view<br>▪ Landscaping will be used at campus edges to create screening and modulate scale | **Consistent.** The project would include landscaping surrounding the modified building to the south, west, and north, with additional greenspace surrounding the parking area on the eastern portion of the site. Landscaping would include trees, shrubs, groundcover, and synthetic turf. Additionally, an on-site garden is proposed in the northeastern corner of the project site, adjacent to one of the proposed play areas. |
| ▪ The impact of campus vehicle traffic on surrounding streets shall be mitigated to the extent possible with efficient campus parking and vehicular circulation systems | **Consistent.** The project would provide two HSU General Permit parking lots with 47 standard parking spaces, 1 van accessible space, and one standard accessible space. These two on-site parking areas would provide sufficient parking for the proposed childcare use of the project site. |
| ▪ Routine vehicle traffic shall be kept out of the campus core, to minimize pedestrian and vehicle conflicts | **Consistent.** The project would provide additional parking at the main southern gateway to campus, which would serve the proposed use of the site. Because on-site childcare facilities will be relocated to the site, the project would reduce the number of vehicles that currently enter the campus core in search of parking related to campus childcare facilities. |
| ▪ Service/emergency access shall be maintained throughout the campus; care shall be taken when these routes must coexist with pedestrian paths | **Consistent.** As discussed in Section 17, *Transportation*, the project would incorporate adequate fire access that would ensure emergency vehicles can pass through the proposed parking area. The project would not interfere with emergency access as it would not block roadways or further contribute to congestion. |
| ▪ Parking capacity shall expand in proportion to campus population growth and this increased capacity shall be accommodated in parking structures | **Consistent.** The project would provide parking spaces required for the on-site childcare services, expanding the total amount of on-campus parking available. |
| ▪ To moderate the expansion of parking demand, programs to encourage the campus community to use public transportation rather than personal vehicles shall be maintained and expanded | **Consistent.** The project would involve the relocation of transportation amenities, moving the bus stop, shelter, and bench that is currently located on 14th Street to B Street. This facility, in addition to the proposed bicycle parking to be provided on site, would support the use of non-vehicle transportation modes. |

| | |
|---|---|
| ▪ Bicycle storage facilities shall be improved | **Consistent.** The project would include construction of 10 new bicycle parking spaces on the project site. |

Source: HSU 2004

**LESS THAN SIGNIFICANT IMPACT**

# 12 Mineral Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ■ |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ■ |

*a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

*b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site is developed and is located on a university campus. The site does not involve any identified mineral resources nor does it support mineral resource extraction activities, nor is it planned for mineral extraction activities (California Geological Survey [CGS] 2021). Therefore, the project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. There would be no impact.

**NO IMPACT**

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# 13 Noise

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project result in: | | | | |
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ■ | ☐ | ☐ |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ■ | ☐ |
| c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ■ |

## Overview of Noise and Vibration

*Noise*

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being audibly detected by humans and animals. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA,

increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level ($L_{eq}$); it considers both duration and sound power level. The $L_{eq}$ is defined as the single steady A-weighted sound level equivalent to the same amount of sound energy as that contained in the actual fluctuating sound levels over time. Typically, the $L_{eq}$ is summed over a one-hour period. The $L_{max}$ is the highest root mean squared (RMS) sound pressure level within the sampling period, and the $L_{min}$ is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Normal conversational levels are in the 60 to 65-dBA $L_{eq}$ range; ambient noise levels greater than 65 dBA $L_{eq}$ can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level ($L_{DN}$), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by $L_{DN}$ and CNEL usually differ by about 1 dBA. The relationship between the peak-hour $L_{eq}$ value and the $L_{DN}$/CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

### *Vibration*

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas sound is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, ground-borne

vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 14.

**Table 14 Vibration Annoyance Potential Criteria**

| | Vibration Level (in/sec PPV) | |
|---|---|---|
| **Human Response** | **Transient Sources** | **Continuous/Frequent Intermittent Sources** |
| Severe | 2.0 | 0.4 |
| Strongly perceptible | 0.9 | 0.10 |
| Distinctly perceptible | 0.25 | 0.04 |
| Barely perceptible | 0.04 | 0.01 |

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

## Existing Noise Environment

The project site is surrounded by residences to the east, west, and south, and campus buildings and associated parking lots to the north and northeast. The most prevalent source of noise in the project site vicinity is primarily traffic noise from local roadways, although freeway traffic from US 101 can also be heard in the background. To characterize ambient sound levels at and near the project site, two 15-minute sound level measurements were conducted on May 3, 2018 during the AM peak hour traffic between 7:35 a.m. and 8:10 a.m. A Soft dB Piccolo Integrating Sound Meter and Data Logger, Model SLM-P3, meeting the requirements of the IEC 651/804 Type 2 and ANSI S1.4 Type 2, was used to conduct the measurements. Figure 10 shows the noise measurement locations, and Table 15 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix NOI.

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Arcata General Plan Noise Element identifies noise-sensitive land uses as residences, transient lodging, hospitals, nursing homes, auditoriums, theaters, libraries, schools, and places of worship (City of Arcata 2008). The nearest sensitive receivers to the project site are residences located on three sides across C Street, 13th Street, and B Street. The distance from the project site boundary to the property line of the nearest adjacent residence is approximately 50 feet.

## Figure 10 Noise Measurement Locations

**Table 15 Project Site Vicinity Sound Level Monitoring Results- Short-Term**

| Measurement Number | Measurement Location | Sample Time | Primary Noise Source | $L_{eq}$ (dBA) | $L_{min}$ (dBA) | $L_{max}$ (dBA) |
|---|---|---|---|---|---|---|
| 1 | Southwest corner of C and 14th Streets | 7:35 – 7:50 a.m. | Local traffic, including several construction trucks | 58.3 | 28.6 | 72.7 |
| 2 | Northeast corner of B and 13th Streets | 7:55 – 8:10 a.m. | Local traffic, including two southbound buses | 57.4 | 39.0 | 75.4 |

$L_{eq}$ = average noise level equivalent; dBA = A-weighted decibel; $L_{min}$ = minimum instantaneous noise level; $L_{max}$ = maximum instantaneous noise level

Source: Noise measurements conducted by SHN on May 3, 2018 using a Soft dB Piccolo Integrating Sound Meter and Data Logger, Model SLM-P3, meeting the requirements of the IEC 651/804 Type 2 and ANSI S1.4 Type 2.

Detailed sound level measurement data are included in Appendix NOI.

## Significance Thresholds

HSU has not established quantitative noise standards for evaluating campus projects. The roadways surrounding the project site fall under the jurisdiction of the City of Arcata, as do the residences to the east, west, and south of the project site. While the CSU as a state agency is not generally subject to local land use regulations, for the purpose of this analysis, the City of Arcata's quantitative noise standards are used to determine the significance of project impacts to surrounding uses (many of which are within the City's jurisdiction). The City's noise standards are outlined in the Noise Element of the Arcata General Plan: 2020 and codified in Section 9.30.050 of the Arcata Land Use Code (ALUC).

### *City of Arcata Noise Standards*

The City of Arcata has established exterior and interior noise standards for new projects, exterior and interior noise standards for receiving land uses, and exterior and interior noise standards for transportation noise exposure for sensitive uses. The first set of standards (i.e., standards for new projects) is intended to evaluate impacts of the environment on the project, which is not an issue under CEQA. Therefore, these standards are not appropriate to use for a project level CEQA analysis.

Table 16 summarizes the City's standards for allowable noise levels by receiving land uses. These standards apply to stationary and transportation noise sources as measured at the property line of a noise-sensitive land use.

Table 17 summarizes the City's standards for allowable transportation noise exposure by receiving land uses.

## Table 16 Maximum Allowable Noise Level by Receiving Land Use

| | Maximum Exterior Noise Level | | | Maximum Interior Noise Level | | |
|---|---|---|---|---|---|---|
| **Noise Level Descriptor** | **7 a.m. - 7 p.m.** | **7 p.m. – 10 p.m.** | **10 p.m. - 7 a.m.** | **7 a.m. - 7 p.m.** | **7 p.m. - 10 p.m.** | **10 p.m. - 7 a.m.** |
| **Dwellings, Transient Lodging, Hospitals, Extended Care, and Similar Uses** | | | | | | |
| Hourly Leq (dB) | 55 | 50 | 45 | 45 | 40 | 35 |
| Maximum (dB) | 75 | 75 | 70 | 65 | 65 | 60 |
| **Meeting Facilities, Auditoriums, Theaters, Libraries, Schools, and Similar Uses** | | | | | | |
| Hourly Leq (dB) | 55 | 55 | n/a | 40 | 40 | n/a |
| Maximum (dB) | 75 | 75 | n/a | 60 | 60 | n/a |

These standards will be applied at the outdoor activity areas of the receiving land use, and at the building facade for upper floor receivers which do not have an outdoor activity area facing the noise source. Where no outdoor activity area is identified, the City has the option to apply only the interior noise level performance standards.

In cases where existing ambient noise levels exceed standard noise levels, the ambient noise level replaces the standard noise level (ALUC Section 9.30.050.D.1a).

These standards are similar to those in the General Plan. Because the Municipal Code implements the General Plan, these standards are the ones relied upon for this analysis.

Source: ALUC Section 9.30.050.D, Table 3-2

## Table 17 Maximum Allowable Transportation Noise Exposure

| | Outdoor Activity Areas[1] | Interior Spaces | |
|---|---|---|---|
| **Noise Sensitive Land Use** | **dBA Ldn** | **dBA Ldn** | **dBA Leq (worst-case hour)** |
| Residential | 60[2] | 45 | N/A |
| Transient lodging | 60[2] | 45 | N/A |
| Hospitals, extended care | 60[2] | 45 | N/A |
| Theater, auditorium | N/A | N/A | 35 |
| Meeting facility, public or private | 60[2] | N/A | 40 |
| Offices | N/A | N/A | 45 |
| School, library, museum | N/A | N/A | 45 |
| Playground, park | 70 | N/A | N/A |

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2] Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: ALUC Section 9.30.050.D, Table 3-3

*HSU Noise Policies*

The 2004 Master Plan does not include specific policies related to noise. However, the 2004 Master Plan EIR includes the following mitigative elements, which would be incorporated into this project:

1. Construction activities that generate intrusive sound off-site will be limited from 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 7:00 p.m. on weekends.
2. Construction equipment will be maintained in proper conditions to prevent excessive noise.
3. Backup beepers will be used only when necessary and will be no louder than necessary.

In addition, as a standard general condition for all construction activities, HSU requires that construction contractor work hours be limited from 7:30 a.m. to 5:00 p.m. and not exceed eight hours per day. Therefore, in practice, construction activities would be restricted to 7:30 a.m. to 5:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on weekends.

*a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

## Construction Noise

Construction activity would generate temporary noise in the project area, exposing surrounding sensitive receivers to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading work) and would be lower during the later construction phases (i.e., building construction, paving). Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM; 2006). For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile construction equipment are assessed from the center of the equipment activity area (e.g., construction site). For assessment purposes, and to be conservative, the maximum hourly noise level that would occur during all phases of project construction activities has been used for assessment. Noise levels were modeled using the distance from the center of the project site to nearby receivers (approximately 160 feet from the center of the site to the nearest receiving property line) and a construction equipment list generated for the project in CalEEMod based on project details, as described in Section 3, *Air Quality*. Table 18 summarizes the construction noise modeling results. Appendix NOI provides the RCNM output files.

As indicated in Table 18, project demolition and construction activities would generate noise levels as high has approximately 83 dBA $L_{eq}$ at nearby residences. In accordance with HSU standard practices and mitigative elements in the 2004 Master Plan EIR, construction activities would be limited to 7:30 a.m. to 5:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on weekends, construction equipment would be maintained in proper conditions, and backup beepers would be used only when necessary and would be no louder than necessary.

For the purposes of analyzing impacts from this project, the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) criteria were used. The FTA provides reasonable criteria for

assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA $L_{eq}$ for an 8-hour period (FTA 2018).

**Table 18 Construction Noise Levels by Phase**

| Construction Phase | Equipment | Estimated Noise Level at 160 feet (dBA $L_{eq}$) |
|---|---|---|
| Demolition | Concrete/industrial saw, bulldozer, tractor, loader, backhoe | 75 |
| Site Preparation | Grader, bulldozer, tractor | 73 |
| Grading | Grader, bulldozer, tractor | 73 |
| Building Construction | Generator set, crane, forklift, backhoe, welders | 71 |
| Paving | Paver, concrete mixer, roller, tractor | 70 |
| Architectural Coating | Air Compressor | 64 |

Source: See Appendix NOI for RCNM outputs.

The closest sensitive receivers to the project construction would be the residences approximately 50 feet east, south, and west of the project site. However, as described above, noise impacts were assessed from the center of the equipment activity area for the various phases of construction. As shown in Table 18, noise levels would be the loudest during the demolition phase and would be approximately 75 dBA $L_{eq}$ at the nearest sensitive receivers. This would not exceed the daytime construction noise threshold of 80 dBA $L_{eq}$. Construction noise levels at other nearby sensitive receivers would be less than the noise levels at the nearest sensitive receiver due to distance attenuation. In addition, project construction and demolition activities would be temporary and short-term, occurring over a period of approximately 12 months from July 2021 to July 2022. Therefore, construction noise impacts would be less than significant.

## Operational Noise

The proposed project would generate operational noise that would be typical of office and school facilities, including heating, ventilation, and air conditioning equipment, parking lot activities, and solid waste collection and recycling operations. Noises produced by the project would be similar in character to the existing noise environment associated with the surrounding residential and HSU campus uses. Additionally, the project does not propose to increase capacity of the programs that would use the Trinity Center; instead, the existing programs would move from their current locations on the HSU campus to the project site. The proposed project would cause a decrease in noise at the existing program locations on the HSU campus, thereby reducing noise levels at sensitive receivers in the vicinity. However, operational noise levels would increase at sensitive receivers near the project site. The following subsections discuss project impacts related to on-site operational noise and off-site roadway noise.

### *On-Site Operational Noise*

The proposed project would include two parking areas, one along B Street that would provide the majority of the parking, and one small parking area along 13th Street next to the 13th Street entrance to the site. Noise associated with parking lot use would include vehicle circulation, engines, car alarms, door slams, and human voices. The proposed parking lot would accommodate approximately 49 vehicles, which is not a substantial increase from what is currently available at the

project site. As such, a substantial increase in vehicle trips on roadways adjacent to the project site would not be expected because the site would provide HSU permit parking and, thus, would exclusively serve vehicles traveling to or within campus, and the site is located along one of the main entrances to the HSU campus, where vehicles accessing parking areas on campus already travel. Noises associated with the parking lots are infrequent, short in duration, and would be below existing maximum noise levels, as shown in Table 15. For example, slamming doors and engine start-up generate a maximum sound level of approximately 60 to 70 dB at 50 feet and car pass-bys in parking lots generate a maximum sound level of approximately 55 to 70 dB at 50 feet (Monterey County 2004).

The proposed project would include installation of a VRV Multi-Split Type Air Conditioner system with two VRV heat pump units located on the exterior of the renovated building. The VRV heat pumps would be located along the northern wall of the Trinity Center facing 14th Street. The heat pumps would be located as close as 120 feet from the property line of the nearest sensitive receiver, which are the residences located across C Street to the west of the project site. The VRV heat pumps are a continuous noise source, and noise levels from the two units would reach up to 61 dBA $L_{eq}$ and 65 dBA $L_{eq}$ at a distance of 15 feet from the source, respectively (Daikin Industries 2020). This would produce a combined noise level of 67 dBA $L_{eq}$. At a distance of 120 feet, the two VRV heat pump units would generate a combined noise level of approximately 48 dBA $L_{eq}$ at the nearest sensitive receiver, which would not exceed the daytime hourly standard of 55 dBA $L_{eq}$ or evening hourly standard of 50 dBA $L_{eq}$, but would exceed the City of Arcata's nighttime hourly exterior noise level standard of 45 dBA $L_{eq}$. Therefore, noise generated from the two heat pump units would be in excess of the City's noise standards and further mitigation for equipment shielding or sound buffering, as described below is required to reduce this impact to a less than significant level.

The proposed project would also include recreational playgrounds as a part of the Childcare Center and Child Development Lab programs. Noise generated in these areas would include children playing. Average noise levels from children playing are approximately 60 dBA $L_{eq}$ at 50 feet for approximately 20 children playing (County of Sacramento 2011). For the purposes of this analysis, it is assumed that peak operations for the Trinity Center would involve a maximum of 20 children utilizing the two play areas along C Street. These two play areas were used as a proxy for noise level estimations, as they are the closest to the residences across C Street, at a distance of approximately 50 feet from the property lines. At these receivers, peak operations would generate a noise level of 60 dBA $L_{eq}$ which would be greater than the maximum exterior noise level standard of 75 dBA $L_{eq}$ set by the City of Arcata. Noise levels at sensitive receivers closest to the other outdoor play areas dispersed throughout the project site would be less than noise levels generated by the project's play areas along C Street, due to the smaller size/capacity of these outdoor use areas, greater distance to the nearest sensitive receivers, and, in some instances, attenuation due to shielding by proposed buildings that would block the line of sight between outdoor use areas and sensitive receivers. Therefore, impacts from operational recreational activity noise would be less than significant.

### *Off-site Roadway Noise*

The proposed project would redistribute vehicle trips to the project site from the current location of the Childcare Center and Child Development Lab programs on the HSU campus. As noted in Section 17, *Transportation*, the project would redistribute approximately 524 average daily trips (ADT) from the on-campus street network to roadways adjacent to the project site. Vehicle access would be provided to the project site via two driveways, one from 14th Street just west of B Street, and one across the parking lot on 13th Street. Existing traffic along 14th Street in the AM peak hour is

approximately 359 trips, and existing traffic along B Street in the AM peak hour is approximately 98 trips (Appendix TRA). Although neither of the proposed driveways is located along B Street, the traffic study estimated that all outbound trips would use this route, passing the residences along B Street; therefore, traffic was counted along this street. The AM peak hour count was used as a conservative estimate of existing traffic because the traffic counts were lower in the AM peak hour along each roadway segment, and therefore generate a lower baseline noise level to compare with future traffic noise. Using the industry standard assumption that hourly traffic is equivalent to 10 percent of daily traffic, the current daily traffic volumes along 14th Street and B Street are estimated at approximately 3,590 and 980 vehicles, respectively (Precision Traffic and Safety Systems 2021).

The proposed project's contribution to roadway noise was evaluated by comparing existing traffic noise levels to traffic noise levels with operation of the project. As discussed under *Overview of Noise and Vibration*, the average healthy ear can barely perceive an increase of up to 3 dBA in noise levels, and a change of 5 dBA is readily perceptible. To conservatively estimate project-generated traffic noise, all trips were attributed to each roadway segment. This would increase traffic volumes along 14th Street by 14.6 percent and along B Street by 53.5 percent and contribute noise level increases of 0.6 dBA and 1.9 dBA, respectively. Therefore, even if all trips were to use either route, such increases would be imperceptible and would not result in a substantial permanent increase in ambient noise levels. Operational impacts related to increases in roadway noise levels in the project area would be less than significant.

## Mitigation Measures

The following mitigation measures are required to reduce operational noise impacts to a less than significant level.

### *N-1 Air Conditioning Unit Noise Control Measure*

The project design team shall implement screening, shielding and/or sound buffering for the proposed VRV heat pump equipment on the exterior of the building. Use of a noise barrier can achieve a minimum of 5-dB reduction when it breaks the line-of-sight between the noise source and the receiver.

## Significance After Mitigation

Use of a noise barrier on air conditioning equipment can achieve a minimum 5-dB reduction when it breaks the line-of-sight between the noise source and the receiver (FHWA 2011). Accordingly, heat pump screening would reduce noise levels by at least 5 dBA to a combined level of approximately 43 dBA $L_{eq}$ for both units. This would reduce noise levels to below the City of Arcata's nighttime hourly exterior noise level standard of 45 dBA $L_{eq}$. Therefore, with mitigation incorporated project operation would not result in a substantial increase in noise levels, and impacts would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

## Construction

Certain types of construction equipment can generate high levels of groundborne vibration. The equipment utilized during project construction that would generate the highest levels of vibration would include rollers, loaded trucks, and bulldozers. Construction vibration impacts are assessed for individual pieces of construction equipment in accordance with FTA guidance (FTA 2018). Due to site constraints and worker safety limitations, individual pieces of vibratory construction equipment typically do not operate in close proximity to each other such that any single off-site structure would experience substantial levels of vibration from multiple pieces of construction equipment. Therefore, the additive impacts of multiple pieces of vibratory construction equipment operating simultaneously are not evaluated.

HSU has not adopted standards to assess vibration impacts during construction and operation. However, Caltrans has developed limits for the assessment of vibrations from transportation and construction sources. The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources. The Caltrans (2020) *Transportation and Construction Vibration Guidance Manual* identifies three sets of impact criteria for buildings and humans. The thresholds of significance used in this analysis to evaluate vibration impacts are based on these impact criteria, as summarized in Table 19.

**Table 19 Vibration Thresholds**

| Type of Impact | Thresholds for Construction Activities (in/sec PPV)[1] | Thresholds for Operational Activities (in/sec PPV)[1] |
|---|---|---|
| Human Annoyance[1] | 0.24 | 0.04 |
| Damage to Older Residential Structures | 0.5 | 0.3 |
| Damage to Newer Residential Structures | 1.0 | 0.5 |

[1] Thresholds are based on the points at which transient and steady state vibrations are distinctly perceptible from other vibrations.
in/sec = inches per second; PPV – peak particle velocity
Source: Caltrans 2020

Project construction and demolition activities would involve operation of construction equipment that could generate perceptible levels of groundborne vibration at nearby sensitive receivers. As shown in Table 20, vibration levels from individual pieces of construction equipment would not exceed 0.5 in/sec PPV, the threshold at which damage can occur to older residential structures 50 feet, which is the approximate distance from the project boundary to the nearest residences. The table includes only equipment that generate a high level of groundborne vibration and would be used during project construction and demolition activities. The project's equipment list was generated using CalEEMod based on project details, as described in Section 3, *Air Quality*.

**Table 20 Vibration Levels at Sensitive Receivers**

| Equipment | Estimated PPV at Nearest Building (in/sec) 50 feet |
|---|---|
| Vibratory Roller | 0.074 |
| Large Bulldozer | 0.031 |
| Loaded Truck | 0.027 |
| **Threshold (Human annoyance)** | 0.24 |
| Threshold Exceeded? | No |

See Appendix NOI for vibration analysis worksheets.

As indicated in Table 20, vibration levels would reach as high as 0.074 in/sec PPV at nearby residences, which is substantially lower than the threshold for human annoyance as shown above in Table 19. Construction vibration levels at all other buildings in the immediate vicinity, including residences to the east, would be less than the levels shown in Table 20 because vibration levels would attenuate with distance. Furthermore, operation of construction equipment would be limited to daytime hours in accordance with mitigative elements in the 2004 HSU Master Plan EIR and in keeping with HSU standard conditions for construction contractors. Therefore, vibration from operation of construction equipment on the project site would not interfere with sleep and this impact would be less than significant.

## Operation

As a facility for educational and childcare programs on the HSU campus, the proposed project would not include significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operational vibration impact would occur.

**LESS THAN SIGNIFICANT IMPACT**

*c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The project site lies approximately 5 miles from the nearest airport, the Humboldt County Murray Field Airport, and seven miles from the California Redwood Coast – Humboldt County Airport. There are no private air strips in the project vicinity. Therefore, there would be no impact related to exposure of residents or workers to excessive aircraft noise.

**NO IMPACT**

# 14 Population and Housing

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ■ |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ■ |

*a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The project would involve the partial demolition of the Trinity Annex and reconstruction of the site as a childhood education center with office space and transportation facilities. The project does not include the construction of new housing and does include the construction of new employment space. However, the proposed programming would be relocated from existing on-campus childcare facilities to the project site, and the on-campus facilities, including the Mary Warren House, Baiocchi House, Toddler Annex, and Sweetman Child Development Lab, all of which would remain in place and become vacant following this project. Therefore, the project would not result in a net increase in employees or campus programs. The project site lies in a developed, urban setting and does not involve extending roads or other infrastructure to an undeveloped area such that expanded growth and development would occur. Therefore, the project would not induce substantial population growth and there would be no impact.

**NO IMPACT**

*b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project would involve the partial demolition and re-use of the Trinity Annex. Except for the east wing of the building, which is used for storage, the building is not in active use. No residential dwelling units or residents would be displaced by its demolition, and the construction of replacement housing would not be required. There would be no impact.

**NO IMPACT**

*This page intentionally left blank.*

# 15 Public Services

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| a. | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| | 1 Fire protection? | ☐ | ☐ | ☐ | ■ |
| | 2 Police protection? | ☐ | ☐ | ☐ | ■ |
| | 3 Schools? | ☐ | ☐ | ☐ | ■ |
| | 4 Parks? | ☐ | ☐ | ☐ | ■ |
| | 5 Other public facilities? | ☐ | ☐ | ☐ | ■ |

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The project would involve the partial demolition of the Trinity Annex and redevelopment of the project site to be used for children's classrooms, offices, educational and storage spaces. The project does not include the construction of new housing and does include the construction of new employment space. However, the proposed programming would be relocated from existing on-campus childcare facilities to the project site, and the on-campus facilities, including the Mary Warren House, Baiocchi House, Toddler Annex, and Sweetman Child Development Lab, all of which would remain in place and become vacant following this project. The site also includes two HSU General Permit parking lots and transportation amenities. The updates include an approximately 3,800 square foot addition to accommodate a Child Development Lab classroom. The existing Trinity Annex building would be partially demolished and modernized, but there would be no increase in the number of structures on campus requiring fire protection services or fire suppression. The parking lot and pedestrian and transportation amenities would service the existing HSU campus population and would not increase HSU's capacity or enrollment. Therefore, the project would not

affect the demand for fire protection services or fire service ratios, response times, or other performance objectives for fire protection facilities. There would be no impact.

**NO IMPACT**

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

As described above, the project would service the existing HSU campus population and would not increase HSU's capacity or enrollment. Because the project would not increase enrollment or campus population, there would be no impact on police service ratios. Furthermore, there would be no impact on police response time because the project would occur on campus, within the current jurisdiction and service area of the HSU Police Department. Therefore, there would be no impact.

**NO IMPACT**

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The project would not increase HSU's enrollment capacity or induce population growth but would instead relocate existing services and childcare functions from the current on-campus locations to the project site. Because the project would not increase campus population or enrollment, it would not increase the demand for schools, recreation facilities, or other public and government facilities. There would be no impact.

**NO IMPACT**

# 16 Recreation

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ■ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ■ | ☐ |

*a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

The project would involve the partial demolition of the Trinity Annex building and redevelopment of the project site to be used for children's classrooms, faculty and staff offices, an observation booth, educational space, and support spaces, all housed on the first floor. The second floor and basement of the Annex would be used for storage and utilities equipment housing. As described in Section 14, *Population and Housing*, the project would not increase HSU's capacity or induce population growth. Therefore, the project would not increase the use of existing recreational facilities such that physical deterioration of existing facilities would be accelerated. There would be no impact.

**NO IMPACT**

*b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The project would involve the construction of a new parking lot with landscaping and some pedestrian and transportation amenities (e.g., relocated bus stop, shelter, bench, and bicycle parking) that could be used for recreational purposes. Six new fenced play areas with play structures would be placed around the building to provide separate play areas for each age group of the new Childcare Center and Child Development Lab facilities. The construction of these on-site recreational facilities is analyzed throughout this document with regard to its associated potential effects on the environment. As described previously, the project would not result in an increase in student enrollment or employment and would thus not result in an increased demand for recreational areas. Therefore, the modernization of existing facilities to provide private play areas would not have an adverse physical effect on the environment and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 17 Transportation

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ■ | ☐ |
| b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ■ | ☐ |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? | ☐ | ☐ | ■ | ☐ |
| d. Result in inadequate emergency access? | ☐ | ☐ | ■ | ☐ |

The analysis provided in this section incorporates the findings of the *Focused Traffic Study and CEQA Initial Study Checklist* prepared by W-Trans in March 2021 (included as Appendix TRA).

*a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The HSU *2004 Master Plan* includes the following planning objectives related to parking and vehicle circulation facilities:

- Routine vehicle traffic shall be kept out of the campus core, to minimize pedestrian and vehicle conflicts;
- Service/emergency access shall be maintained throughout the campus; care shall be taken when these routes must coexist with pedestrian paths;
- Parking capacity shall expand in proportion to campus population growth and this increased capacity shall be accommodated in parking structures;
- New campus housing development shall include adjacent parking facilities;
- To moderate the expansion of parking demand, programs to encourage the campus community to use public transportation rather than personal vehicles shall be maintained and expanded; and
- Bicycle storage facilities shall be improved.

The *Arcata General Plan: 2020, Transportation Element* (2008), includes numerous objectives, policies and programs supporting the need for all modes of travel to be accommodated by the transportation system. It should be noted that local City policies do not directly apply to HSU and

are provided for informational purposes. This is demonstrated through General Plan Policy T-1, which states:

- Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes.

Additionally, the *Arcata Pedestrian and Bicycle Master Plan*, City of Arcata, April 2010, includes the following objectives related to pedestrian and bicycle connectivity:

- Objective B: Complete a network of bikeways that are feasible, fundable, and that serve bicyclists' needs, especially for travel to employment centers, schools, commercial districts, transit stops, and institutions.
- Objective C: Complete a network of walkways that serves pedestrian needs, especially for short trips to employment centers, schools, commercial districts, transit stops, and institutions.

In addition to these objectives, the *Arcata Pedestrian and Bicycle Master Plan* identifies both 14th Street and B Street as proposed bikeways.

## Roadway Facilities

The proposed project is not anticipated to generate any new trips, and therefore not result in an adverse impact to roadway facilities. Additionally, the project would move childcare pick-up/drop-off activity away from the campus core to the project site, aligning with the first planning objective listed above from the HSU *2004 Master Plan*. Therefore, potential impacts to roadway facilities would be less than significant, and no mitigation measures are required.

## Pedestrian Facilities

The proposed project includes interior walkways to provide pedestrian circulation between the parking area, Childcare Center and Child Development Lab building, and the surrounding street network. Therefore, no mitigation measures are required as pedestrian impacts would be less than significant.

## Bicycle Facilities

The project as proposed includes 49 vehicle parking spaces and bicycle parking that has capacity for 10 bicycles. While the HSU *2004 Master Plan* acknowledges that "storage facilities for bicycles are inadequate" and that "bicycle storage facilities shall be improved," a rate for the provision of bicycle parking is not specified. A survey of existing bicycle parking conducted by HSU in May 2021 determined that there are an existing 6 bicycle parking spaces at the project site, in addition to 310 bicycle parking spaces in the southern portion of the HSU campus, within approximately 600 to 1,000 feet of the project site.[2] The total bicycle parking provided by HSU in this area increased by 190 spaces from 2009 (a 151 percent increase), when there were 126 bicycle parking spaces in the same area (HSU 2021).

The HSU's *Master Plan* does not specify a standard for the provision of bicycle parking. However, HSU has determined the LEED Gold certification standards bicycle parking requirement is

[2] The survey area included the project site, as well as areas of the campus north of 14th Street, east of L K Wood Boulevard, south of Harpst Street and 17th Street, and west of Union Street.

appropriate. Accordingly, campus officials have established This standard prescribes a short-term bicycle parking rate of 2.5 percent of peak visitors and a long-term bicycle parking rate of 5 percent of regular building occupants, with a minimum of four spaces required for each type. Approximately 164 peak visitors and 36 regular building occupants would use the proposed building; therefore, LEED Gold standards would require 4.1 short-term bicycle parking spaces and 1.8 long-term bicycle parking spaces, rounded up to 4 long-term bicycle parking spaces. A total of 8.1 bicycle parking spaces would be required to achieve the LEED Gold certification equivalent. The 10 spaces proposed would therefore exceeds this requirement and bicycle parking impacts would be less than significant.

## Transit

Humboldt Transit Authority operates the Redwood Transit System (RTS) and Arcata and Mad River Transit System (A&MRTS). There is an existing bus stop on 14th Street adjacent to the project site on the eastbound approach to the 14th Street/B Street intersection. Service to this stop is provided by RTS and the A&MRTS Gold and Orange routes. The project would relocate this existing bus stop, shelter, and bench to B Street, with no change in bus service, per ongoing conversations between HSU, the City of Arcata, and Humboldt Transit Authority. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) indicates that land use projects would have a significant impact if the project resulted in VMT exceeding an applicable threshold of significance. The *California State University Transportation Impact Study Manual*, Fehr & Peers, March 2019, includes two screening criteria for VMT analysis that apply to this project:

- "Projects generating less than 110 vehicle trips per day."
- "Childcare centers that serve students, faculty, and staff families."

The project would not generate any new vehicle trips and would relocate existing childcare services to the project site (Appendix TRA). Therefore, these screening criteria apply to the project and exempt the project from further VMT analysis. The impacts to VMT are considered less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

There are no geometric design features included as part of this project related to traffic, other than constructing a driveway on 14th Street and one on 13th Street, and a parking lot with a straight aisle between the two. As these driveways and parking aisle follow standard design practices, they would not create a hazardous condition.

The proposed land use would consist of a support building for HSU and a parking area. As the existing site includes a parking area and as the remainder of the HSU campus is across 14th Street, these land uses would not be considered incompatible. Therefore, there would be a less than significant impact caused by the project related to an increase in hazards due to design features or incompatible uses.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in inadequate emergency access?*

The project site is proposed to include a 20-foot wide (minimum) drive aisle through the parking lot between 14th Street and 13th Street. The project plans include a fire access lane diagram that demonstrates that all building exteriors are within a 150-foot reach of a vehicle area accessible to fire engines. The project would not impact emergency access on nearby streets. The project site would therefore have adequate emergency access and would result in a less than significant impact related to emergency access.

**LESS THAN SIGNIFICANT IMPACT**

# 18 Tribal Cultural Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or | ☐ | ■ | ☐ | ☐ |
| b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ■ | ☐ | ☐ |

California Assembly Bill 52 of 2014 (AB 52) establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB

52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

In accordance with AB 52, project notification letters were sent to the Wiyot tribe on April 7, 2021. No request for tribal consultation regarding the proposed project has been received from the Wiyot tribe. As discussed in Section 5, *Cultural Resources*, the project site lies in proximity to two identified archaeological sites but has been previously developed. The proposed project would involve the partial demolition, rehabilitation, and modernization of the Trinity Annex for use as a part of the C Childcare Center and Child Development Lab program currently offered on the HSU campus. The project would also involve construction of two parking lot areas with landscape and pedestrian and transportation amenities.

While no tribal resources have been identified on the site, and soil disturbance due to the project would be minimal, it is possible that unanticipated tribal resources would be uncovered during earth moving activities. The project would be required to mitigate the unanticipated discovery of cultural resources and human remains, including tribal resources and human remains, as outlined in the 2004 Master Plan EIR, and restated in Section 5, *Cultural Resources*. In addition, incorporation of Mitigation Measure TCR-1 would reduce potential impacts to unanticipated tribal cultural resources found on the project site to a less than significant level.

## Mitigation Measure

### *TCR-1 Unanticipated Discovery of Tribal Cultural Resources*

In the event that cultural resources of Native American origin that may be considered tribal cultural resources are identified during construction, all earth disturbing work within 50 feet of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and in consultation with the on-site Native American monitor. If the archaeologist and Native American monitor determine that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the appropriate Native American tribal representative(s).

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 19 Utilities and Service Systems

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ■ | ☐ |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ■ | ☐ |
| c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ■ | ☐ |
| d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ■ | ☐ |
| e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ■ | ☐ |

*a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

*c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

As described under Section 10, *Hydrology and Water Quality*, the proposed project would not require new or expanded water supply entitlements or facilities, and existing drainage patterns would be maintained to the maximum extent feasible, such that no adverse impacts related to

water supply requirements and stormwater drainage would occur. Additionally, the project would relocate the Childcare Center and Child Development Lab uses from existing campus buildings to the Trinity Anne building and would therefore not result in a net increase in water consumption. Existing water facilities would be able to serve the proposed project.

The North Coast Regional Water Quality Control Board regulates wastewater treatment for the City of Arcata, including HSU. Wastewater generated at the HSU campus is discharged into City sewer lines and delivered to the Arcata Wastewater Treatment Facility. The Arcata Wastewater Treatment Facility was designed to process an average dry weather flow of 2.3 million gallons per day (mgd) and a maximum hydraulic capacity through the primary system of 5.0 mgd (City of Arcata 2021). Wastewater treatment is accomplished through solids removal, primary and secondary treatment (oxidation ponds/treatment marshes/enhancement marshes). As of December 2020, the City of Arcata adopted an IS/MND evaluating the impacts of the proposed Arcata Wastewater Treatment Plant Upgrade Project, which would increase the plant's capacity in accordance with the 2019 NPDES permit (City of Arcata Environmental Services Department 2020). This update would create a parallel secondary treatment system and treat flows between 2.3 mgd and 3.6 mgd, as well as a new UV disinfection system capable of treating flows up to 9.8 mgd.

The proposed project would include restrooms and drinking fountains, two laundry rooms and a kitchen to support the Childcare Center and Child Development Lab programs. However, the project would relocate the Childcare Center and Child Development Lab uses from existing campus buildings to the Trinity Anne building and would not result in a net increase on-campus wastewater generation. Therefore, wastewater generated by the proposed project would not exceed the treatment requirements of the Regional Water Quality Control Board, result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, or exceed the capacity of any existing wastewater treatment provider.

As discussed under Section 6, *Energy*, the proposed project would be served by existing electric power facilities and would not require new or substantially revised electrical power facilities. The project would eliminate natural gas as a power source. In addition, neither project construction nor operation would require new or revised telecommunications facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The proposed project would utilize the existing water distribution system in place at the HSU Campus, which is provided by the City of Arcata. The project does not propose to increase capacity of the Childcare Center and Child Development Lab programs that would use the Trinity Center, instead the existing programs would move from their current locations on the HSU campus to the project site. Therefore, the anticipated amount of water necessary to serve the proposed project would not result in a net increase of the existing water demands of the HSU campus.

The 2014 *CSU Sustainability Policy*, which guides water efficiency efforts on the HSU campus, calls for new and renovated facilities to incorporate sustainable design criteria including water efficiency. Specifically, it called for campuses to pursue water conservation efforts to reduce water consumption 20 percent by 2020. Additionally, the renovated Trinity Center would be required to comply with the 2016 CalGreen Nonresidential water efficiency standards including water conserving plumbing and fittings and low flow faucets and toilets. With adherence to CSU

*Sustainability Policy* and CalGreen standards, there would be sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

*e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Solid waste in the City of Arcata, including HSU, is transported to the Humboldt Waste Management Authority (HWMA) Solid Waste Transfer Station in Eureka. Large recyclable materials, such as scrap metal, wood, and concrete, and hazardous materials, such as washers, dryers, and tires are pulled from the waste stream at the Eureka facility. The remaining solid waste is shipped to the Dry Creek Landfill in Medford, Oregon, and the Anderson Landfill in Anderson, California. The Dry Creek Landfill has a total capacity of 35,700,000 cubic yards and is projected to close in 2074 (Rogue Disposal & Recycling 2021). The Anderson Landfill is currently permitted to receive 1,850 tons per day and has a maximum permitted capacity of 16,353,000 cubic yards. As of 2015, the remaining capacity at the Anderson Landfill was approximately 10,409,132 cubic yards (CalRecycle 2021a). The Anderson Landfill accepts friable asbestos materials. However, Class I-designated contaminated soils would need to be shipped to a Class I facility, such as Kettleman Hills, which had a remaining capacity of 15,4600,000 cubic yards as of February 2020, with a maximum daily throughput of 9,000 tons per day (CalRecycle 2021b).

As described above, the proposed project would involve partial demolition, rehabilitation, and modernization of the Trinity Annex for use of the Childcare Center and Child Development Lab programs, currently offered on the HSU campus. The project does not propose to increase capacity of the programs that would use the Trinity Center, instead the existing programs would move from their current locations on the HSU campus to the project site. Therefore, operation of the Trinity Center would not generate new or additional sources of solid waste.

The proposed project would also involve partial demolition and construction activities, which would be a temporary source of solid waste. The aforementioned waste management facilities serving Arcata would have ample capacity for one-time demolition and construction waste. Additionally, consistent with applicable state regulations, including requirements in the 2016 California Building Code, at least 65 percent of non-hazardous construction and demolition waste would be diverted from landfills.

Therefore, the proposed project would be served by a landfill with sufficient capacity to accommodate its solid waste needs and would comply with applicable regulations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 20 Wildfire

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ■ |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ■ | ☐ |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☐ | ■ |
| d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ■ |

The project site is not located within a state responsibility area (SRA) or a very high fire hazard severity zone (VHFHSZ). The closest SRA is located approximately 0.6 mile to the southeast, and the closest VHFHSZ is located approximately 10 miles to the east. Therefore, the project site is considered to be near (within 2 miles of) an SRA.

*a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site is accessible by vehicle from 13th Street, 14th Street, B Street, and C Street. Existing roadways provide sufficient ingress/egress to the project site and surrounding areas. No roads would be permanently closed as a result of the proposed project, and no structures would be developed that could potentially impair the implementation of or physically interfere with an

adopted emergency response plan or emergency evacuation plan. Therefore, no impact would occur.

**NO IMPACT**

*b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The project site is relatively flat, with an elevation of about 80 to 90 feet above mean sea level. In general, the topography in the vicinity of the project site slopes gradually uphill toward the west. Surrounding areas are also relatively flat or gently sloped, with steeper hillsides located east of the project site and city. Arcata Community Forest runs along the east of the campus and city, about 0.5 mile west of the project site. In the project vicinity, prevailing winds blow to the southeast (National Oceanic and Atmospheric Administration 2020). Due to the presence of nearby slopes and wind direction, a wildfire could potentially be carried up slopes and away from the site. However, building code fire safety requirements and Campus Master Plan policies require the provision of fire suppression water, promote early warning fire alarm systems, require building maintenance to protect against fire risk, and require smoke detector and fire extinguisher installation. Compliance with these policies would reduce this impact to a less than significant level.

**LESS THAN SIGNIFICANT IMPACT**

*c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The project would result in the relocation of the University's existing Childcare Center and Child Development Lab, with office and educational spaces, along with six outdoor play areas to the project site. The project would be required to comply with building code and fire safety requirements, as well as Campus Master Plan policies. The project would not involve the construction of new roads or the extension of utilities that could exacerbate wildfire risk or result in temporary or ongoing impacts to the environment. No impact would occur.

**NO IMPACT**

*d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project would introduce people to the project site, which is currently vacant. The site is relatively flat, not located directly adjacent to steep slopes, and buffered by urban development on all sides. The nearest undeveloped and sloped area to the project site is located 0.5 mile east. Therefore, the risk of downslope flooding or landslides at the site is minimal. No impact would occur.

**NO IMPACT**

# 21 Mandatory Findings of Significance

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Does the project: | | | | |
| a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ■ | ☐ | ☐ |
| b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ■ | ☐ | ☐ |
| c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ■ | ☐ | ☐ |

*a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As noted in Section 4, *Biological Resources*, the project site is on a fully developed site in an urban setting that does not support habitat for special-status plants or natural plant communities. Habitat for special-status wildlife is also generally not present on the project site, with the exception of potential migratory bird nesting habitat in landscaping trees and shrubs. Mitigation Measure BIO-1 would require pre-disturbance surveys to identify and avoid active nesting sites, as applicable. Implementation of this mitigation measure in combination with the lack of suitable habitat onsite

would prevent the potential for substantial reduction of fish or wildlife species or population, or plant or animal community.

The project would retain the historic CDFs of the Trinity Annex, as described in Section 5, *Cultural Resources*. Therefore, the project would not eliminate an important example of California history.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

The 2004 Master Plan EIR evaluates environmental impacts resulting from development of the HSU campus as envisioned in the HSU 2004 Master Plan. The EIR considers both project-specific impacts as well as cumulative impacts of implementing the 2004 Master Plan. The Master Plan identifies impacts to biological resources, air quality, and water bodies to be potentially significant cumulative impacts, but indicates that impacts to biological resources and air quality would be mitigated to a less than significant level with mitigation. As discussed in Section 10, *Hydrology and Water Quality*, the proposed project would have a less than significant impact to water quality and thus would not substantially contribute to cumulative impacts to water quality. In addition, the proposed project would have a less than significant impact to air quality and biological resources and would not contribute to cumulative impacts to those resources.

The 2004 Master Plan EIR envisioned use of the project site as a playfield, as opposed to a center for educational programming. However, as the proposed use would not increase HSU enrollment, otherwise induce growth, or involve an operational use that would increase long-term demand for utilities or public services relative to existing conditions, the project would not contribute to cumulative impacts to land use and planning, population and housing, public services, recreation, operational traffic, or utilities and service systems.

On-campus construction activities related to the renovation of the Jenkins Hall building would potentially occur at the same time as project construction and partial demolition activities. However, the project site is located approximately 0.27 mile from the Jenkins Hall building, so localized noise, air quality (e.g. exposure to diesel particulate matter from diesel-powered construction equipment), and hazard impacts (e.g., exposure to lead and asbestos) would not be cumulatively significant.

The proposed project would have localized, project-specific impacts not considered under the scope of the 2004 Master Plan EIR, such as impacts to aesthetics, air quality, cultural resources, tribal cultural resources, geology and soils, hazards, noise, and transportation. With incorporation of mitigation measures provided in Section 1, *Aesthetics*, Section 3, *Air Quality*, Section 4, *Biological Resources*, Section 5, *Cultural Resources*, Section 7, *Geology and Soils*, Section 9, *Hazards and Hazardous Materials,* Section 13, *Noise*, Section 17, *Transportation*, and Section 18, *Tribal Cultural Resources*, cumulative impacts on aesthetics, air quality, biological resources, cultural resources, tribal cultural resources, geology and soils, hazards, noise, and transportation would be reduced to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, geology, water quality, and noise impacts. As detailed in the preceding responses, the proposed project would not result, either directly or indirectly, in substantial adverse hazards related to air quality, hazardous materials, geology, water quality, or noise with mitigation incorporated. Therefore, this impact would be less than significant with mitigation.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to Humboldt State University. Persons involved in data gathering analysis, project management, and quality control are listed below.

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# Appendix AQ

CalEEMod Output Files

# HSU Trinity Center Childcare Project_AQ Run

**North Coast Unified APCD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Day-Care Center | 3.80 | 1000sqft | 0.09 | 3,800.00 | 0 |
| Parking Lot | 49.00 | Space | 0.44 | 19,600.00 | 0 |
| City Park | 0.69 | Acre | 0.69 | 30,056.40 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 101 |
| **Climate Zone** | 1 | | | **Operational Year** | 2022 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The total square footage of the site is 1.44, this model does not include the approximately 9,800 square feet of retained structure existing onsite, as it will remain in place as a part of the project.

Construction Phase - Based on client provided information, with construction finishing in July of 2022.

Demolition - Per client provided demo plans

Vehicle Trips - According to W-Trans (2021) focused traffic study, no new net trips generated by the project.

Energy Use - Per 2019 Title 24 Standards (CEC 2019) to reduce non-residential energy usage by 30 percent. No natural gas

Water Mitigation - Per CaLGreen (Part 11 of Title 24)

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 10.00 | 105.00 |
| tblConstructionPhase | NumDays | 200.00 | 210.00 |
| tblConstructionPhase | NumDays | 20.00 | 22.00 |
| tblConstructionPhase | NumDays | 4.00 | 15.00 |
| tblConstructionPhase | NumDays | 2.00 | 5.00 |
| tblEnergyUse | NT24NG | 0.86 | 0.00 |
| tblEnergyUse | T24E | 1.62 | 1.13 |
| tblEnergyUse | T24NG | 13.50 | 0.00 |
| tblVehicleTrips | ST_TR | 22.75 | 0.00 |
| tblVehicleTrips | ST_TR | 6.21 | 0.00 |
| tblVehicleTrips | SU_TR | 16.74 | 0.00 |
| tblVehicleTrips | SU_TR | 5.83 | 0.00 |
| tblVehicleTrips | WD_TR | 1.89 | 0.00 |
| tblVehicleTrips | WD_TR | 74.06 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1291 | 1.0444 | 0.8919 | 1.6300e-003 | 0.0676 | 0.0493 | 0.1169 | 0.0303 | 0.0469 | 0.0772 | 0.0000 | 138.8025 | 138.8025 | 0.0259 | 0.0000 | 139.4501 |
| 2022 | 0.1794 | 0.9303 | 1.0035 | 1.8200e-003 | 0.0158 | 0.0417 | 0.0575 | 4.2900e-003 | 0.0404 | 0.0447 | 0.0000 | 153.5878 | 153.5878 | 0.0231 | 0.0000 | 154.1651 |
| **Maximum** | **0.1794** | **1.0444** | **1.0035** | **1.8200e-003** | **0.0676** | **0.0493** | **0.1169** | **0.0303** | **0.0469** | **0.0772** | **0.0000** | **153.5878** | **153.5878** | **0.0259** | **0.0000** | **154.1651** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1291 | 1.0444 | 0.8919 | 1.6300e-003 | 0.0676 | 0.0493 | 0.1169 | 0.0303 | 0.0469 | 0.0772 | 0.0000 | 138.8024 | 138.8024 | 0.0259 | 0.0000 | 139.4500 |
| 2022 | 0.1794 | 0.9303 | 1.0035 | 1.8200e-003 | 0.0158 | 0.0417 | 0.0575 | 4.2900e-003 | 0.0404 | 0.0447 | 0.0000 | 153.5877 | 153.5877 | 0.0231 | 0.0000 | 154.1649 |
| **Maximum** | **0.1794** | **1.0444** | **1.0035** | **1.8200e-003** | **0.0676** | **0.0493** | **0.1169** | **0.0303** | **0.0469** | **0.0772** | **0.0000** | **153.5877** | **153.5877** | **0.0259** | **0.0000** | **154.1649** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 7-1-2021 | 9-30-2021 | 0.5736 | 0.5736 |
| 2 | 10-1-2021 | 12-31-2021 | 0.5574 | 0.5574 |
| 3 | 1-1-2022 | 3-31-2022 | 0.5433 | 0.5433 |
| 4 | 4-1-2022 | 6-30-2022 | 0.5482 | 0.5482 |
| 5 | 7-1-2022 | 9-30-2022 | 0.0131 | 0.0131 |
| | | Highest | 0.5736 | 0.5736 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 8.9601 | 8.9601 | 4.1000e-004 | 8.0000e-005 | 8.9952 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.0150 | 0.0000 | 1.0150 | 0.0600 | 0.0000 | 2.5145 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0517 | 1.5203 | 1.5721 | 5.3800e-003 | 1.4000e-004 | 1.7481 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **1.0667** | **10.4814** | **11.5480** | **0.0658** | **2.2000e-004** | **13.2589** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 8.9601 | 8.9601 | 4.1000e-004 | 8.0000e-005 | 8.9952 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.0150 | 0.0000 | 1.0150 | 0.0600 | 0.0000 | 2.5145 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0414 | 1.4690 | 1.5104 | 4.3100e-003 | 1.1000e-004 | 1.6523 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **1.0563** | **10.4301** | **11.4864** | **0.0647** | **1.9000e-004** | **13.1630** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.97** | **0.49** | **0.53** | **1.63** | **13.64** | **0.72** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 7/1/2021 | 7/30/2021 | 5 | 22 | |
| 2 | Site Preparation | Site Preparation | 8/2/2021 | 8/6/2021 | 5 | 5 | |
| 3 | Grading | Grading | 8/9/2021 | 8/27/2021 | 5 | 15 | |
| 4 | Building Construction | Building Construction | 8/30/2021 | 6/17/2022 | 5 | 210 | |
| 5 | Architectural Coating | Architectural Coating | 2/15/2022 | 7/11/2022 | 5 | 105 | |
| 6 | Paving | Paving | 6/20/2022 | 7/1/2022 | 5 | 10 | |

**Acres of Grading (Site Preparation Phase): 2.5**

**Acres of Grading (Grading Phase): 5.63**

**Acres of Paving: 0.44**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,700; Non-Residential Outdoor: 1,900; Striped Parking Area: 1,176 (Architectural Coating – sqft)**

**OffRoad Equipment**

HSU Trinity Center Childcare Project_AQ Run - North Coast Unified APCD Air District, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 5 | 13.00 | 0.00 | 37.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 22.00 | 9.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 4.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 3.9800e-003 | 0.0000 | 3.9800e-003 | 6.0000e-004 | 0.0000 | 6.0000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0219 | 0.2167 | 0.1594 | 2.7000e-004 | | 0.0115 | 0.0115 | | 0.0107 | 0.0107 | 0.0000 | 23.1785 | 23.1785 | 5.9300e-003 | 0.0000 | 23.3266 |
| **Total** | **0.0219** | **0.2167** | **0.1594** | **2.7000e-004** | **3.9800e-003** | **0.0115** | **0.0154** | **6.0000e-004** | **0.0107** | **0.0113** | **0.0000** | **23.1785** | **23.1785** | **5.9300e-003** | **0.0000** | **23.3266** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.6000e-004 | 5.4200e-003 | 9.5000e-004 | 1.0000e-005 | 3.1000e-004 | 2.0000e-005 | 3.3000e-004 | 8.0000e-005 | 2.0000e-005 | 1.1000e-004 | 0.0000 | 1.3901 | 1.3901 | 4.0000e-005 | 0.0000 | 1.3911 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1700e-003 | 1.0000e-003 | 8.3300e-003 | 1.0000e-005 | 1.1000e-003 | 1.0000e-005 | 1.1200e-003 | 2.9000e-004 | 1.0000e-005 | 3.1000e-004 | 0.0000 | 1.0317 | 1.0317 | 7.0000e-005 | 0.0000 | 1.0335 |
| **Total** | **1.3300e-003** | **6.4200e-003** | **9.2800e-003** | **2.0000e-005** | **1.4100e-003** | **3.0000e-005** | **1.4500e-003** | **3.7000e-004** | **3.0000e-005** | **4.2000e-004** | **0.0000** | **2.4218** | **2.4218** | **1.1000e-004** | **0.0000** | **2.4247** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 3.9800e-003 | 0.0000 | 3.9800e-003 | 6.0000e-004 | 0.0000 | 6.0000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0219 | 0.2167 | 0.1594 | 2.7000e-004 | | 0.0115 | 0.0115 | | 0.0107 | 0.0107 | 0.0000 | 23.1784 | 23.1784 | 5.9300e-003 | 0.0000 | 23.3266 |
| **Total** | **0.0219** | **0.2167** | **0.1594** | **2.7000e-004** | **3.9800e-003** | **0.0115** | **0.0154** | **6.0000e-004** | **0.0107** | **0.0113** | **0.0000** | **23.1784** | **23.1784** | **5.9300e-003** | **0.0000** | **23.3266** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.6000e-004 | 5.4200e-003 | 9.5000e-004 | 1.0000e-005 | 3.1000e-004 | 2.0000e-005 | 3.3000e-004 | 8.0000e-005 | 2.0000e-005 | 1.1000e-004 | 0.0000 | 1.3901 | 1.3901 | 4.0000e-005 | 0.0000 | 1.3911 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1700e-003 | 1.0000e-003 | 8.3300e-003 | 1.0000e-005 | 1.1000e-003 | 1.0000e-005 | 1.1200e-003 | 2.9000e-004 | 1.0000e-005 | 3.1000e-004 | 0.0000 | 1.0317 | 1.0317 | 7.0000e-005 | 0.0000 | 1.0335 |
| **Total** | **1.3300e-003** | **6.4200e-003** | **9.2800e-003** | **2.0000e-005** | **1.4100e-003** | **3.0000e-005** | **1.4500e-003** | **3.7000e-004** | **3.0000e-005** | **4.2000e-004** | **0.0000** | **2.4218** | **2.4218** | **1.1000e-004** | **0.0000** | **2.4247** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0145 | 0.0000 | 0.0145 | 7.3800e-003 | 0.0000 | 7.3800e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.8900e-003 | 0.0436 | 0.0189 | 4.0000e-005 | | 1.9100e-003 | 1.9100e-003 | | 1.7600e-003 | 1.7600e-003 | 0.0000 | 3.7796 | 3.7796 | 1.2200e-003 | 0.0000 | 3.8102 |
| **Total** | **3.8900e-003** | **0.0436** | **0.0189** | **4.0000e-005** | **0.0145** | **1.9100e-003** | **0.0164** | **7.3800e-003** | **1.7600e-003** | **9.1400e-003** | **0.0000** | **3.7796** | **3.7796** | **1.2200e-003** | **0.0000** | **3.8102** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 1.4000e-004 | 1.1600e-003 | 0.0000 | 1.5000e-004 | 0.0000 | 1.6000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1443 | 0.1443 | 1.0000e-005 | 0.0000 | 0.1446 |
| **Total** | **1.6000e-004** | **1.4000e-004** | **1.1600e-003** | **0.0000** | **1.5000e-004** | **0.0000** | **1.6000e-004** | **4.0000e-005** | **0.0000** | **4.0000e-005** | **0.0000** | **0.1443** | **0.1443** | **1.0000e-005** | **0.0000** | **0.1446** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0145 | 0.0000 | 0.0145 | 7.3800e-003 | 0.0000 | 7.3800e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.8900e-003 | 0.0436 | 0.0189 | 4.0000e-005 | | 1.9100e-003 | 1.9100e-003 | | 1.7600e-003 | 1.7600e-003 | 0.0000 | 3.7796 | 3.7796 | 1.2200e-003 | 0.0000 | 3.8102 |
| **Total** | **3.8900e-003** | **0.0436** | **0.0189** | **4.0000e-005** | **0.0145** | **1.9100e-003** | **0.0164** | **7.3800e-003** | **1.7600e-003** | **9.1400e-003** | **0.0000** | **3.7796** | **3.7796** | **1.2200e-003** | **0.0000** | **3.8102** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 1.4000e-004 | 1.1600e-003 | 0.0000 | 1.5000e-004 | 0.0000 | 1.6000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1443 | 0.1443 | 1.0000e-005 | 0.0000 | 0.1446 |
| **Total** | **1.6000e-004** | **1.4000e-004** | **1.1600e-003** | **0.0000** | **1.5000e-004** | **0.0000** | **1.6000e-004** | **4.0000e-005** | **0.0000** | **4.0000e-005** | **0.0000** | **0.1443** | **0.1443** | **1.0000e-005** | **0.0000** | **0.1446** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0369 | 0.0000 | 0.0369 | 0.0189 | 0.0000 | 0.0189 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.6600e-003 | 0.1075 | 0.0475 | 1.1000e-004 | | 4.7800e-003 | 4.7800e-003 | | 4.4000e-003 | 4.4000e-003 | 0.0000 | 9.2877 | 9.2877 | 3.0000e-003 | 0.0000 | 9.3628 |
| **Total** | **9.6600e-003** | **0.1075** | **0.0475** | **1.1000e-004** | **0.0369** | **4.7800e-003** | **0.0416** | **0.0189** | **4.4000e-003** | **0.0233** | **0.0000** | **9.2877** | **9.2877** | **3.0000e-003** | **0.0000** | **9.3628** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.9000e-004 | 4.2000e-004 | 3.4900e-003 | 0.0000 | 4.6000e-004 | 0.0000 | 4.7000e-004 | 1.2000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 0.4329 | 0.4329 | 3.0000e-005 | 0.0000 | 0.4337 |
| **Total** | **4.9000e-004** | **4.2000e-004** | **3.4900e-003** | **0.0000** | **4.6000e-004** | **0.0000** | **4.7000e-004** | **1.2000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **0.4329** | **0.4329** | **3.0000e-005** | **0.0000** | **0.4337** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0369 | 0.0000 | 0.0369 | 0.0189 | 0.0000 | 0.0189 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.6600e-003 | 0.1075 | 0.0475 | 1.1000e-004 | | 4.7800e-003 | 4.7800e-003 | | 4.4000e-003 | 4.4000e-003 | 0.0000 | 9.2877 | 9.2877 | 3.0000e-003 | 0.0000 | 9.3628 |
| **Total** | **9.6600e-003** | **0.1075** | **0.0475** | **1.1000e-004** | **0.0369** | **4.7800e-003** | **0.0416** | **0.0189** | **4.4000e-003** | **0.0233** | **0.0000** | **9.2877** | **9.2877** | **3.0000e-003** | **0.0000** | **9.3628** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.9000e-004 | 4.2000e-004 | 3.4900e-003 | 0.0000 | 4.6000e-004 | 0.0000 | 4.7000e-004 | 1.2000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 0.4329 | 0.4329 | 3.0000e-005 | 0.0000 | 0.4337 |
| **Total** | **4.9000e-004** | **4.2000e-004** | **3.4900e-003** | **0.0000** | **4.6000e-004** | **0.0000** | **4.7000e-004** | **1.2000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **0.4329** | **0.4329** | **3.0000e-005** | **0.0000** | **0.4337** |

## 3.5 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0816 | 0.6136 | 0.5805 | 9.9000e-004 | | 0.0308 | 0.0308 | | 0.0297 | 0.0297 | 0.0000 | 81.6964 | 81.6964 | 0.0146 | 0.0000 | 82.0611 |
| **Total** | **0.0816** | **0.6136** | **0.5805** | **9.9000e-004** | | **0.0308** | **0.0308** | | **0.0297** | **0.0297** | **0.0000** | **81.6964** | **81.6964** | **0.0146** | **0.0000** | **82.0611** |

## 3.5 Building Construction - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.0100e-003 | 0.0491 | 0.0140 | 1.1000e-004 | 2.6000e-003 | 2.1000e-004 | 2.8200e-003 | 7.5000e-004 | 2.0000e-004 | 9.6000e-004 | 0.0000 | 10.7191 | 10.7191 | 4.9000e-004 | 0.0000 | 10.7314 |
| Worker | 8.0700e-003 | 6.9600e-003 | 0.0577 | 8.0000e-005 | 7.6400e-003 | 8.0000e-005 | 7.7300e-003 | 2.0400e-003 | 8.0000e-005 | 2.1100e-003 | 0.0000 | 7.1423 | 7.1423 | 5.2000e-004 | 0.0000 | 7.1552 |
| **Total** | **0.0101** | **0.0561** | **0.0717** | **1.9000e-004** | **0.0102** | **2.9000e-004** | **0.0106** | **2.7900e-003** | **2.8000e-004** | **3.0700e-003** | **0.0000** | **17.8613** | **17.8613** | **1.0100e-003** | **0.0000** | **17.8866** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0816 | 0.6136 | 0.5805 | 9.9000e-004 | | 0.0308 | 0.0308 | | 0.0297 | 0.0297 | 0.0000 | 81.6963 | 81.6963 | 0.0146 | 0.0000 | 82.0610 |
| **Total** | **0.0816** | **0.6136** | **0.5805** | **9.9000e-004** | | **0.0308** | **0.0308** | | **0.0297** | **0.0297** | **0.0000** | **81.6963** | **81.6963** | **0.0146** | **0.0000** | **82.0610** |

## 3.5 Building Construction - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.0100e-003 | 0.0491 | 0.0140 | 1.1000e-004 | 2.6000e-003 | 2.1000e-004 | 2.8200e-003 | 7.5000e-004 | 2.0000e-004 | 9.6000e-004 | 0.0000 | 10.7191 | 10.7191 | 4.9000e-004 | 0.0000 | 10.7314 |
| Worker | 8.0700e-003 | 6.9600e-003 | 0.0577 | 8.0000e-005 | 7.6400e-003 | 8.0000e-005 | 7.7300e-003 | 2.0400e-003 | 8.0000e-005 | 2.1100e-003 | 0.0000 | 7.1423 | 7.1423 | 5.2000e-004 | 0.0000 | 7.1552 |
| **Total** | **0.0101** | **0.0561** | **0.0717** | **1.9000e-004** | **0.0102** | **2.9000e-004** | **0.0106** | **2.7900e-003** | **2.8000e-004** | **3.0700e-003** | **0.0000** | **17.8613** | **17.8613** | **1.0100e-003** | **0.0000** | **17.8866** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0989 | 0.7502 | 0.7636 | 1.3200e-003 | | 0.0353 | 0.0353 | | 0.0341 | 0.0341 | 0.0000 | 108.9462 | 108.9462 | 0.0190 | 0.0000 | 109.4205 |
| **Total** | **0.0989** | **0.7502** | **0.7636** | **1.3200e-003** | | **0.0353** | **0.0353** | | **0.0341** | **0.0341** | **0.0000** | **108.9462** | **108.9462** | **0.0190** | **0.0000** | **109.4205** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.4800e-003 | 0.0621 | 0.0170 | 1.5000e-004 | 3.4700e-003 | 2.5000e-004 | 3.7200e-003 | 1.0100e-003 | 2.4000e-004 | 1.2500e-003 | 0.0000 | 14.1894 | 14.1894 | 6.3000e-004 | 0.0000 | 14.2052 |
| Worker | 0.0102 | 8.4200e-003 | 0.0692 | 1.0000e-004 | 0.0102 | 1.0000e-004 | 0.0103 | 2.7200e-003 | 1.0000e-004 | 2.8100e-003 | 0.0000 | 9.2382 | 9.2382 | 6.2000e-004 | 0.0000 | 9.2537 |
| **Total** | **0.0127** | **0.0705** | **0.0862** | **2.5000e-004** | **0.0137** | **3.5000e-004** | **0.0140** | **3.7300e-003** | **3.4000e-004** | **4.0600e-003** | **0.0000** | **23.4276** | **23.4276** | **1.2500e-003** | **0.0000** | **23.4588** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0989 | 0.7502 | 0.7636 | 1.3200e-003 | | 0.0353 | 0.0353 | | 0.0341 | 0.0341 | 0.0000 | 108.9460 | 108.9460 | 0.0190 | 0.0000 | 109.4204 |
| **Total** | **0.0989** | **0.7502** | **0.7636** | **1.3200e-003** | | **0.0353** | **0.0353** | | **0.0341** | **0.0341** | **0.0000** | **108.9460** | **108.9460** | **0.0190** | **0.0000** | **109.4204** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.4800e-003 | 0.0621 | 0.0170 | 1.5000e-004 | 3.4700e-003 | 2.5000e-004 | 3.7200e-003 | 1.0100e-003 | 2.4000e-004 | 1.2500e-003 | 0.0000 | 14.1894 | 14.1894 | 6.3000e-004 | 0.0000 | 14.2052 |
| Worker | 0.0102 | 8.4200e-003 | 0.0692 | 1.0000e-004 | 0.0102 | 1.0000e-004 | 0.0103 | 2.7200e-003 | 1.0000e-004 | 2.8100e-003 | 0.0000 | 9.2382 | 9.2382 | 6.2000e-004 | 0.0000 | 9.2537 |
| **Total** | **0.0127** | **0.0705** | **0.0862** | **2.5000e-004** | **0.0137** | **3.5000e-004** | **0.0140** | **3.7300e-003** | **3.4000e-004** | **4.0600e-003** | **0.0000** | **23.4276** | **23.4276** | **1.2500e-003** | **0.0000** | **23.4588** |

## 3.6 Architectural Coating - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0509 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0107 | 0.0740 | 0.0952 | 1.6000e-004 | | 4.2900e-003 | 4.2900e-003 | | 4.2900e-003 | 4.2900e-003 | 0.0000 | 13.4046 | 13.4046 | 8.7000e-004 | 0.0000 | 13.4264 |
| **Total** | **0.0616** | **0.0740** | **0.0952** | **1.6000e-004** | | **4.2900e-003** | **4.2900e-003** | | **4.2900e-003** | **4.2900e-003** | **0.0000** | **13.4046** | **13.4046** | **8.7000e-004** | **0.0000** | **13.4264** |

## 3.6 Architectural Coating - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6300e-003 | 1.3400e-003 | 0.0110 | 2.0000e-005 | 1.6200e-003 | 2.0000e-005 | 1.6400e-003 | 4.3000e-004 | 2.0000e-005 | 4.5000e-004 | 0.0000 | 1.4697 | 1.4697 | 1.0000e-004 | 0.0000 | 1.4722 |
| **Total** | **1.6300e-003** | **1.3400e-003** | **0.0110** | **2.0000e-005** | **1.6200e-003** | **2.0000e-005** | **1.6400e-003** | **4.3000e-004** | **2.0000e-005** | **4.5000e-004** | **0.0000** | **1.4697** | **1.4697** | **1.0000e-004** | **0.0000** | **1.4722** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0509 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0107 | 0.0740 | 0.0952 | 1.6000e-004 | | 4.2900e-003 | 4.2900e-003 | | 4.2900e-003 | 4.2900e-003 | 0.0000 | 13.4046 | 13.4046 | 8.7000e-004 | 0.0000 | 13.4264 |
| **Total** | **0.0616** | **0.0740** | **0.0952** | **1.6000e-004** | | **4.2900e-003** | **4.2900e-003** | | **4.2900e-003** | **4.2900e-003** | **0.0000** | **13.4046** | **13.4046** | **8.7000e-004** | **0.0000** | **13.4264** |

## 3.6 Architectural Coating - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6300e-003 | 1.3400e-003 | 0.0110 | 2.0000e-005 | 1.6200e-003 | 2.0000e-005 | 1.6400e-003 | 4.3000e-004 | 2.0000e-005 | 4.5000e-004 | 0.0000 | 1.4697 | 1.4697 | 1.0000e-004 | 0.0000 | 1.4722 |
| **Total** | **1.6300e-003** | **1.3400e-003** | **0.0110** | **2.0000e-005** | **1.6200e-003** | **2.0000e-005** | **1.6400e-003** | **4.3000e-004** | **2.0000e-005** | **4.5000e-004** | **0.0000** | **1.4697** | **1.4697** | **1.0000e-004** | **0.0000** | **1.4722** |

## 3.7 Paving - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 3.4400e-003 | 0.0339 | 0.0440 | 7.0000e-005 | | 1.7400e-003 | 1.7400e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 5.8848 | 5.8848 | 1.8700e-003 | 0.0000 | 5.9315 |
| Paving | 5.8000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **4.0200e-003** | **0.0339** | **0.0440** | **7.0000e-005** | | **1.7400e-003** | **1.7400e-003** | | **1.6000e-003** | **1.6000e-003** | **0.0000** | **5.8848** | **5.8848** | **1.8700e-003** | **0.0000** | **5.9315** |

## 3.7 Paving - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.0000e-004 | 4.1000e-004 | 3.4100e-003 | 1.0000e-005 | 5.0000e-004 | 1.0000e-005 | 5.1000e-004 | 1.3000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4549 | 0.4549 | 3.0000e-005 | 0.0000 | 0.4557 |
| **Total** | **5.0000e-004** | **4.1000e-004** | **3.4100e-003** | **1.0000e-005** | **5.0000e-004** | **1.0000e-005** | **5.1000e-004** | **1.3000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4549** | **0.4549** | **3.0000e-005** | **0.0000** | **0.4557** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 3.4400e-003 | 0.0339 | 0.0440 | 7.0000e-005 | | 1.7400e-003 | 1.7400e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 5.8848 | 5.8848 | 1.8700e-003 | 0.0000 | 5.9314 |
| Paving | 5.8000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **4.0200e-003** | **0.0339** | **0.0440** | **7.0000e-005** | | **1.7400e-003** | **1.7400e-003** | | **1.6000e-003** | **1.6000e-003** | **0.0000** | **5.8848** | **5.8848** | **1.8700e-003** | **0.0000** | **5.9314** |

### 3.7 Paving - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.0000e-004 | 4.1000e-004 | 3.4100e-003 | 1.0000e-005 | 5.0000e-004 | 1.0000e-005 | 5.1000e-004 | 1.3000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4549 | 0.4549 | 3.0000e-005 | 0.0000 | 0.4557 |
| **Total** | **5.0000e-004** | **4.1000e-004** | **3.4100e-003** | **1.0000e-005** | **5.0000e-004** | **1.0000e-005** | **5.1000e-004** | **1.3000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4549** | **0.4549** | **3.0000e-005** | **0.0000** | **0.4557** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 0.00 | 0.00 | 0.00 | | |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 9.50 | 7.30 | 7.30 | 12.70 | 82.30 | 5.00 | 28 | 58 | 14 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |
| Day-Care Center | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |
| Parking Lot | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 8.9601 | 8.9601 | 4.1000e-004 | 8.0000e-005 | 8.9952 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 8.9601 | 8.9601 | 4.1000e-004 | 8.0000e-005 | 8.9952 |
| NaturalGas Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 23940 | 6.9644 | 3.1000e-004 | 7.0000e-005 | 6.9917 |
| Parking Lot | 6860 | 1.9957 | 9.0000e-005 | 2.0000e-005 | 2.0035 |
| **Total** | | **8.9601** | **4.0000e-004** | **9.0000e-005** | **8.9952** |

### Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 23940 | 6.9644 | 3.1000e-004 | 7.0000e-005 | 6.9917 |
| Parking Lot | 6860 | 1.9957 | 9.0000e-005 | 2.0000e-005 | 2.0035 |
| **Total** | | **8.9601** | **4.0000e-004** | **9.0000e-005** | **8.9952** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| Unmitigated | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 5.0800e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0164 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 5.0000e-005 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **9.6000e-004** | **9.6000e-004** | **0.0000** | **0.0000** | **1.0200e-003** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 5.0800e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0164 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 5.0000e-005 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **9.6000e-004** | **9.6000e-004** | **0.0000** | **0.0000** | **1.0200e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 1.5104 | 4.3100e-003 | 1.1000e-004 | 1.6523 |
| Unmitigated | 1.5721 | 5.3800e-003 | 1.4000e-004 | 1.7481 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| City Park | 0 / 0.822122 | 0.8371 | 4.0000e-005 | 1.0000e-005 | 0.8404 |
| Day-Care Center | 0.16298 / 0.419092 | 0.7350 | 5.3400e-003 | 1.3000e-004 | 0.9078 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.5721** | **5.3800e-003** | **1.4000e-004** | **1.7482** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| City Park | 0 / 0.822122 | 0.8371 | 4.0000e-005 | 1.0000e-005 | 0.8404 |
| Day-Care Center | 0.130384 / 0.419092 | 0.6733 | 4.2800e-003 | 1.1000e-004 | 0.8119 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.5104** | **4.3200e-003** | **1.2000e-004** | **1.6523** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 1.0150 | 0.0600 | 0.0000 | 2.5145 |
| Unmitigated | 1.0150 | 0.0600 | 0.0000 | 2.5145 |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| City Park | 0.06 | 0.0122 | 7.2000e-004 | 0.0000 | 0.0302 |
| Day-Care Center | 4.94 | 1.0028 | 0.0593 | 0.0000 | 2.4843 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.0150** | **0.0600** | **0.0000** | **2.5145** |

### Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| City Park | 0.06 | 0.0122 | 7.2000e-004 | 0.0000 | 0.0302 |
| Day-Care Center | 4.94 | 1.0028 | 0.0593 | 0.0000 | 2.4843 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.0150** | **0.0600** | **0.0000** | **2.5145** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# HSU Trinity Center Childcare Project_AQ Run

**North Coast Unified APCD Air District, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Day-Care Center | 3.80 | 1000sqft | 0.09 | 3,800.00 | 0 |
| Parking Lot | 49.00 | Space | 0.44 | 19,600.00 | 0 |
| City Park | 0.69 | Acre | 0.69 | 30,056.40 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 101 |
| **Climate Zone** | 1 | | | **Operational Year** | 2022 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The total square footage of the site is 1.44, this model does not include the approximately 9,800 square feet of retained structure existing onsite, as it will remain in place as a part of the project.

Construction Phase - Based on client provided information, with construction finishing in July of 2022.

Demolition - Per client provided demo plans

Vehicle Trips - According to W-Trans (2021) focused traffic study, no new net trips generated by the project.

Energy Use - Per 2019 Title 24 Standards (CEC 2019) to reduce non-residential energy usage by 30 percent. No natural gas

Water Mitigation - Per CaLGreen (Part 11 of Title 24)

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 10.00 | 105.00 |
| tblConstructionPhase | NumDays | 200.00 | 210.00 |
| tblConstructionPhase | NumDays | 20.00 | 22.00 |
| tblConstructionPhase | NumDays | 4.00 | 15.00 |
| tblConstructionPhase | NumDays | 2.00 | 5.00 |
| tblEnergyUse | NT24NG | 0.86 | 0.00 |
| tblEnergyUse | T24E | 1.62 | 1.13 |
| tblEnergyUse | T24NG | 13.50 | 0.00 |
| tblVehicleTrips | ST_TR | 22.75 | 0.00 |
| tblVehicleTrips | ST_TR | 6.21 | 0.00 |
| tblVehicleTrips | SU_TR | 16.74 | 0.00 |
| tblVehicleTrips | SU_TR | 5.83 | 0.00 |
| tblVehicleTrips | WD_TR | 1.89 | 0.00 |
| tblVehicleTrips | WD_TR | 74.06 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 2.1259 | 20.2971 | 15.3741 | 0.0265 | 5.8653 | 1.0443 | 6.6313 | 2.9711 | 0.9747 | 3.6759 | 0.0000 | 2,563.2163 | 2,563.2163 | 0.6058 | 0.0000 | 2,578.3612 |
| 2022 | 3.0891 | 15.1369 | 16.2654 | 0.0295 | 0.2744 | 0.6770 | 0.9514 | 0.0742 | 0.6566 | 0.7308 | 0.0000 | 2,738.7114 | 2,738.7114 | 0.4385 | 0.0000 | 2,748.5301 |
| **Maximum** | **3.0891** | **20.2971** | **16.2654** | **0.0295** | **5.8653** | **1.0443** | **6.6313** | **2.9711** | **0.9747** | **3.6759** | **0.0000** | **2,738.7114** | **2,738.7114** | **0.6058** | **0.0000** | **2,748.5301** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 2.1259 | 20.2971 | 15.3741 | 0.0265 | 5.8653 | 1.0443 | 6.6313 | 2.9711 | 0.9747 | 3.6759 | 0.0000 | 2,563.2163 | 2,563.2163 | 0.6058 | 0.0000 | 2,578.3612 |
| 2022 | 3.0891 | 15.1369 | 16.2654 | 0.0295 | 0.2744 | 0.6770 | 0.9514 | 0.0742 | 0.6566 | 0.7308 | 0.0000 | 2,738.7114 | 2,738.7114 | 0.4385 | 0.0000 | 2,748.5301 |
| **Maximum** | **3.0891** | **20.2971** | **16.2654** | **0.0295** | **5.8653** | **1.0443** | **6.6313** | **2.9711** | **0.9747** | **3.6759** | **0.0000** | **2,738.7114** | **2,738.7114** | **0.6058** | **0.0000** | **2,748.5301** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | **0.0000** | **2.0000e-005** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | **0.0000** | **0.0125** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | **0.0000** | **2.0000e-005** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | **0.0000** | **0.0125** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 7/1/2021 | 7/30/2021 | 5 | 22 | |
| 2 | Site Preparation | Site Preparation | 8/2/2021 | 8/6/2021 | 5 | 5 | |
| 3 | Grading | Grading | 8/9/2021 | 8/27/2021 | 5 | 15 | |
| 4 | Building Construction | Building Construction | 8/30/2021 | 6/17/2022 | 5 | 210 | |
| 5 | Architectural Coating | Architectural Coating | 2/15/2022 | 7/11/2022 | 5 | 105 | |
| 6 | Paving | Paving | 6/20/2022 | 7/1/2022 | 5 | 10 | |

**Acres of Grading (Site Preparation Phase): 2.5**

**Acres of Grading (Grading Phase): 5.63**

**Acres of Paving: 0.44**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,700; Non-Residential Outdoor: 1,900; Striped Parking Area: 1,176 (Architectural Coating – sqft)**

### OffRoad Equipment

HSU Trinity Center Childcare Project_AQ Run - North Coast Unified APCD Air District, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 5 | 13.00 | 0.00 | 37.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 22.00 | 9.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 4.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.3620 | 0.0000 | 0.3620 | 0.0548 | 0.0000 | 0.0548 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.9930 | 19.6966 | 14.4925 | 0.0241 | | 1.0409 | 1.0409 | | 0.9715 | 0.9715 | | 2,322.7171 | 2,322.7171 | 0.5940 | | 2,337.5658 |
| **Total** | **1.9930** | **19.6966** | **14.4925** | **0.0241** | **0.3620** | **1.0409** | **1.4029** | **0.0548** | **0.9715** | **1.0263** | | **2,322.7171** | **2,322.7171** | **0.5940** | | **2,337.5658** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0151 | 0.4982 | 0.0919 | 1.3100e-003 | 0.0293 | 2.3000e-003 | 0.0316 | 8.0200e-003 | 2.2000e-003 | 0.0102 | | 137.7276 | 137.7276 | 4.2600e-003 | | 137.8340 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1178 | 0.1023 | 0.7896 | 1.0400e-003 | 0.1068 | 1.0800e-003 | 0.1079 | 0.0283 | 1.0000e-003 | 0.0293 | | 102.7717 | 102.7717 | 7.5900e-003 | | 102.9615 |
| **Total** | **0.1329** | **0.6005** | **0.8815** | **2.3500e-003** | **0.1361** | **3.3800e-003** | **0.1395** | **0.0364** | **3.2000e-003** | **0.0395** | | **240.4993** | **240.4993** | **0.0119** | | **240.7955** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.3620 | 0.0000 | 0.3620 | 0.0548 | 0.0000 | 0.0548 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.9930 | 19.6966 | 14.4925 | 0.0241 | | 1.0409 | 1.0409 | | 0.9715 | 0.9715 | 0.0000 | 2,322.7171 | 2,322.7171 | 0.5940 | | 2,337.5658 |
| **Total** | **1.9930** | **19.6966** | **14.4925** | **0.0241** | **0.3620** | **1.0409** | **1.4029** | **0.0548** | **0.9715** | **1.0263** | **0.0000** | **2,322.7171** | **2,322.7171** | **0.5940** | | **2,337.5658** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0151 | 0.4982 | 0.0919 | 1.3100e-003 | 0.0293 | 2.3000e-003 | 0.0316 | 8.0200e-003 | 2.2000e-003 | 0.0102 | | 137.7276 | 137.7276 | 4.2600e-003 | | 137.8340 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1178 | 0.1023 | 0.7896 | 1.0400e-003 | 0.1068 | 1.0800e-003 | 0.1079 | 0.0283 | 1.0000e-003 | 0.0293 | | 102.7717 | 102.7717 | 7.5900e-003 | | 102.9615 |
| **Total** | **0.1329** | **0.6005** | **0.8815** | **2.3500e-003** | **0.1361** | **3.3800e-003** | **0.1395** | **0.0364** | **3.2000e-003** | **0.0395** | | **240.4993** | **240.4993** | **0.0119** | | **240.7955** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7996 | 0.0000 | 5.7996 | 2.9537 | 0.0000 | 2.9537 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5558 | 17.4203 | 7.5605 | 0.0172 | | 0.7654 | 0.7654 | | 0.7041 | 0.7041 | | 1,666.5174 | 1,666.5174 | 0.5390 | | 1,679.9920 |
| **Total** | **1.5558** | **17.4203** | **7.5605** | **0.0172** | **5.7996** | **0.7654** | **6.5650** | **2.9537** | **0.7041** | **3.6578** | | **1,666.5174** | **1,666.5174** | **0.5390** | | **1,679.9920** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0725 | 0.0629 | 0.4859 | 6.4000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.2441 | 63.2441 | 4.6700e-003 | | 63.3609 |
| **Total** | **0.0725** | **0.0629** | **0.4859** | **6.4000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.2441** | **63.2441** | **4.6700e-003** | | **63.3609** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7996 | 0.0000 | 5.7996 | 2.9537 | 0.0000 | 2.9537 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5558 | 17.4203 | 7.5605 | 0.0172 | | 0.7654 | 0.7654 | | 0.7041 | 0.7041 | 0.0000 | 1,666.5174 | 1,666.5174 | 0.5390 | | 1,679.9920 |
| **Total** | **1.5558** | **17.4203** | **7.5605** | **0.0172** | **5.7996** | **0.7654** | **6.5650** | **2.9537** | **0.7041** | **3.6578** | **0.0000** | **1,666.5174** | **1,666.5174** | **0.5390** | | **1,679.9920** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0725 | 0.0629 | 0.4859 | 6.4000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.2441 | 63.2441 | 4.6700e-003 | | 63.3609 |
| **Total** | **0.0725** | **0.0629** | **0.4859** | **6.4000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.2441** | **63.2441** | **4.6700e-003** | | **63.3609** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.9146 | 0.0000 | 4.9146 | 2.5257 | 0.0000 | 2.5257 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2884 | 14.3307 | 6.3314 | 0.0141 | | 0.6379 | 0.6379 | | 0.5869 | 0.5869 | | 1,365.0648 | 1,365.0648 | 0.4415 | | 1,376.1020 |
| **Total** | **1.2884** | **14.3307** | **6.3314** | **0.0141** | **4.9146** | **0.6379** | **5.5525** | **2.5257** | **0.5869** | **3.1125** | | **1,365.0648** | **1,365.0648** | **0.4415** | | **1,376.1020** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0725 | 0.0629 | 0.4859 | 6.4000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.2441 | 63.2441 | 4.6700e-003 | | 63.3609 |
| **Total** | **0.0725** | **0.0629** | **0.4859** | **6.4000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.2441** | **63.2441** | **4.6700e-003** | | **63.3609** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.9146 | 0.0000 | 4.9146 | 2.5257 | 0.0000 | 2.5257 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2884 | 14.3307 | 6.3314 | 0.0141 | | 0.6379 | 0.6379 | | 0.5869 | 0.5869 | 0.0000 | 1,365.0648 | 1,365.0648 | 0.4415 | | 1,376.1020 |
| **Total** | **1.2884** | **14.3307** | **6.3314** | **0.0141** | **4.9146** | **0.6379** | **5.5525** | **2.5257** | **0.5869** | **3.1125** | **0.0000** | **1,365.0648** | **1,365.0648** | **0.4415** | | **1,376.1020** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0725 | 0.0629 | 0.4859 | 6.4000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.2441 | 63.2441 | 4.6700e-003 | | 63.3609 |
| **Total** | **0.0725** | **0.0629** | **0.4859** | **6.4000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.2441** | **63.2441** | **4.6700e-003** | | **63.3609** |

## 3.5 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.8125 | 13.6361 | 12.8994 | 0.0221 | | 0.6843 | 0.6843 | | 0.6608 | 0.6608 | | 2,001.2200 | 2,001.2200 | 0.3573 | | 2,010.1517 |
| **Total** | **1.8125** | **13.6361** | **12.8994** | **0.0221** | | **0.6843** | **0.6843** | | **0.6608** | **0.6608** | | **2,001.2200** | **2,001.2200** | **0.3573** | | **2,010.1517** |

## 3.5 Building Construction - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0466 | 1.0974 | 0.3369 | 2.4700e-003 | 0.0609 | 4.8600e-003 | 0.0657 | 0.0175 | 4.6500e-003 | 0.0222 | | 258.2336 | 258.2336 | 0.0127 | | 258.5521 |
| Worker | 0.1994 | 0.1731 | 1.3362 | 1.7600e-003 | 0.1807 | 1.8300e-003 | 0.1826 | 0.0479 | 1.6900e-003 | 0.0496 | | 173.9213 | 173.9213 | 0.0129 | | 174.2425 |
| **Total** | **0.2460** | **1.2705** | **1.6732** | **4.2300e-003** | **0.2416** | **6.6900e-003** | **0.2483** | **0.0655** | **6.3400e-003** | **0.0718** | | **432.1549** | **432.1549** | **0.0256** | | **432.7946** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.8125 | 13.6361 | 12.8994 | 0.0221 | | 0.6843 | 0.6843 | | 0.6608 | 0.6608 | 0.0000 | 2,001.2200 | 2,001.2200 | 0.3573 | | 2,010.1517 |
| **Total** | **1.8125** | **13.6361** | **12.8994** | **0.0221** | | **0.6843** | **0.6843** | | **0.6608** | **0.6608** | **0.0000** | **2,001.2200** | **2,001.2200** | **0.3573** | | **2,010.1517** |

## 3.5 Building Construction - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0466 | 1.0974 | 0.3369 | 2.4700e-003 | 0.0609 | 4.8600e-003 | 0.0657 | 0.0175 | 4.6500e-003 | 0.0222 | | 258.2336 | 258.2336 | 0.0127 | | 258.5521 |
| Worker | 0.1994 | 0.1731 | 1.3362 | 1.7600e-003 | 0.1807 | 1.8300e-003 | 0.1826 | 0.0479 | 1.6900e-003 | 0.0496 | | 173.9213 | 173.9213 | 0.0129 | | 174.2425 |
| **Total** | **0.2460** | **1.2705** | **1.6732** | **4.2300e-003** | **0.2416** | **6.6900e-003** | **0.2483** | **0.0655** | **6.3400e-003** | **0.0718** | | **432.1549** | **432.1549** | **0.0256** | | **432.7946** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.6487 | 12.5031 | 12.7264 | 0.0221 | | 0.5889 | 0.5889 | | 0.5689 | 0.5689 | | 2,001.5429 | 2,001.5429 | 0.3486 | | 2,010.2581 |
| **Total** | **1.6487** | **12.5031** | **12.7264** | **0.0221** | | **0.5889** | **0.5889** | | **0.5689** | **0.5689** | | **2,001.5429** | **2,001.5429** | **0.3486** | | **2,010.2581** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0432 | 1.0397 | 0.3067 | 2.4500e-003 | 0.0609 | 4.3300e-003 | 0.0652 | 0.0175 | 4.1500e-003 | 0.0217 | | 256.3269 | 256.3269 | 0.0123 | | 256.6331 |
| Worker | 0.1898 | 0.1570 | 1.2004 | 1.7000e-003 | 0.1807 | 1.7300e-003 | 0.1825 | 0.0479 | 1.5900e-003 | 0.0495 | | 168.7177 | 168.7177 | 0.0115 | | 169.0047 |
| **Total** | **0.2329** | **1.1968** | **1.5071** | **4.1500e-003** | **0.2416** | **6.0600e-003** | **0.2476** | **0.0655** | **5.7400e-003** | **0.0712** | | **425.0445** | **425.0445** | **0.0237** | | **425.6378** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.6487 | 12.5031 | 12.7264 | 0.0221 | | 0.5889 | 0.5889 | | 0.5689 | 0.5689 | 0.0000 | 2,001.5429 | 2,001.5429 | 0.3486 | | 2,010.2581 |
| **Total** | **1.6487** | **12.5031** | **12.7264** | **0.0221** | | **0.5889** | **0.5889** | | **0.5689** | **0.5689** | **0.0000** | **2,001.5429** | **2,001.5429** | **0.3486** | | **2,010.2581** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0432 | 1.0397 | 0.3067 | 2.4500e-003 | 0.0609 | 4.3300e-003 | 0.0652 | 0.0175 | 4.1500e-003 | 0.0217 | | 256.3269 | 256.3269 | 0.0123 | | 256.6331 |
| Worker | 0.1898 | 0.1570 | 1.2004 | 1.7000e-003 | 0.1807 | 1.7300e-003 | 0.1825 | 0.0479 | 1.5900e-003 | 0.0495 | | 168.7177 | 168.7177 | 0.0115 | | 169.0047 |
| **Total** | **0.2329** | **1.1968** | **1.5071** | **4.1500e-003** | **0.2416** | **6.0600e-003** | **0.2476** | **0.0655** | **5.7400e-003** | **0.0712** | | **425.0445** | **425.0445** | **0.0237** | | **425.6378** |

## 3.6 Architectural Coating - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.9685 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| **Total** | **1.1730** | **1.4085** | **1.8136** | **2.9700e-003** | | **0.0817** | **0.0817** | | **0.0817** | **0.0817** | | **281.4481** | **281.4481** | **0.0183** | | **281.9062** |

## 3.6 Architectural Coating - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0345 | 0.0286 | 0.2183 | 3.1000e-004 | 0.0329 | 3.1000e-004 | 0.0332 | 8.7200e-003 | 2.9000e-004 | 9.0100e-003 | | 30.6759 | 30.6759 | 2.0900e-003 | | 30.7281 |
| **Total** | **0.0345** | **0.0286** | **0.2183** | **3.1000e-004** | **0.0329** | **3.1000e-004** | **0.0332** | **8.7200e-003** | **2.9000e-004** | **9.0100e-003** | | **30.6759** | **30.6759** | **2.0900e-003** | | **30.7281** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.9685 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | 0.0000 | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| **Total** | **1.1730** | **1.4085** | **1.8136** | **2.9700e-003** | | **0.0817** | **0.0817** | | **0.0817** | **0.0817** | **0.0000** | **281.4481** | **281.4481** | **0.0183** | | **281.9062** |

## 3.6 Architectural Coating - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0345 | 0.0286 | 0.2183 | 3.1000e-004 | 0.0329 | 3.1000e-004 | 0.0332 | 8.7200e-003 | 2.9000e-004 | 9.0100e-003 | | 30.6759 | 30.6759 | 2.0900e-003 | | 30.7281 |
| **Total** | **0.0345** | **0.0286** | **0.2183** | **3.1000e-004** | **0.0329** | **3.1000e-004** | **0.0332** | **8.7200e-003** | **2.9000e-004** | **9.0100e-003** | | **30.6759** | **30.6759** | **2.0900e-003** | | **30.7281** |

## 3.7 Paving - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6877 | 6.7738 | 8.8060 | 0.0135 | | 0.3474 | 0.3474 | | 0.3205 | 0.3205 | | 1,297.3789 | 1,297.3789 | 0.4113 | | 1,307.6608 |
| Paving | 0.1153 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.8030** | **6.7738** | **8.8060** | **0.0135** | | **0.3474** | **0.3474** | | **0.3205** | **0.3205** | | **1,297.3789** | **1,297.3789** | **0.4113** | | **1,307.6608** |

## 3.7 Paving - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1121 | 0.0928 | 0.7094 | 1.0100e-003 | 0.1068 | 1.0200e-003 | 0.1078 | 0.0283 | 9.4000e-004 | 0.0293 | | 99.6968 | 99.6968 | 6.7900e-003 | | 99.8664 |
| **Total** | **0.1121** | **0.0928** | **0.7094** | **1.0100e-003** | **0.1068** | **1.0200e-003** | **0.1078** | **0.0283** | **9.4000e-004** | **0.0293** | | **99.6968** | **99.6968** | **6.7900e-003** | | **99.8664** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6877 | 6.7738 | 8.8060 | 0.0135 | | 0.3474 | 0.3474 | | 0.3205 | 0.3205 | 0.0000 | 1,297.3789 | 1,297.3789 | 0.4113 | | 1,307.6608 |
| Paving | 0.1153 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.8030** | **6.7738** | **8.8060** | **0.0135** | | **0.3474** | **0.3474** | | **0.3205** | **0.3205** | **0.0000** | **1,297.3789** | **1,297.3789** | **0.4113** | | **1,307.6608** |

### 3.7 Paving - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1121 | 0.0928 | 0.7094 | 1.0100e-003 | 0.1068 | 1.0200e-003 | 0.1078 | 0.0283 | 9.4000e-004 | 0.0293 | | 99.6968 | 99.6968 | 6.7900e-003 | | 99.8664 |
| **Total** | **0.1121** | **0.0928** | **0.7094** | **1.0100e-003** | **0.1068** | **1.0200e-003** | **0.1078** | **0.0283** | **9.4000e-004** | **0.0293** | | **99.6968** | **99.6968** | **6.7900e-003** | | **99.8664** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 0.00 | 0.00 | 0.00 | | |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 9.50 | 7.30 | 7.30 | 12.70 | 82.30 | 5.00 | 28 | 58 | 14 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |
| Day-Care Center | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |
| Parking Lot | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| Unmitigated | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0279 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0898 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 5.1000e-004 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | | **0.0125** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0279 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0898 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 5.1000e-004 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | | **0.0125** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# HSU Trinity Center Childcare Project_AQ Run

**North Coast Unified APCD Air District, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Day-Care Center | 3.80 | 1000sqft | 0.09 | 3,800.00 | 0 |
| Parking Lot | 49.00 | Space | 0.44 | 19,600.00 | 0 |
| City Park | 0.69 | Acre | 0.69 | 30,056.40 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 101 |
| **Climate Zone** | 1 | | | **Operational Year** | 2022 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The total square footage of the site is 1.44, this model does not include the approximately 9,800 square feet of retained structure existing onsite, as it will remain in place as a part of the project.

Construction Phase - Based on client provided information, with construction finishing in July of 2022.

Demolition - Per client provided demo plans

Vehicle Trips - According to W-Trans (2021) focused traffic study, no new net trips generated by the project.

Energy Use - Per 2019 Title 24 Standards (CEC 2019) to reduce non-residential energy usage by 30 percent. No natural gas

Water Mitigation - Per CaLGreen (Part 11 of Title 24)

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 10.00 | 105.00 |
| tblConstructionPhase | NumDays | 200.00 | 210.00 |
| tblConstructionPhase | NumDays | 20.00 | 22.00 |
| tblConstructionPhase | NumDays | 4.00 | 15.00 |
| tblConstructionPhase | NumDays | 2.00 | 5.00 |
| tblEnergyUse | NT24NG | 0.86 | 0.00 |
| tblEnergyUse | T24E | 1.62 | 1.13 |
| tblEnergyUse | T24NG | 13.50 | 0.00 |
| tblVehicleTrips | ST_TR | 22.75 | 0.00 |
| tblVehicleTrips | ST_TR | 6.21 | 0.00 |
| tblVehicleTrips | SU_TR | 16.74 | 0.00 |
| tblVehicleTrips | SU_TR | 5.83 | 0.00 |
| tblVehicleTrips | WD_TR | 1.89 | 0.00 |
| tblVehicleTrips | WD_TR | 74.06 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 2.1056 | 20.2725 | 15.3069 | 0.0265 | 5.8653 | 1.0442 | 6.6313 | 2.9711 | 0.9746 | 3.6759 | 0.0000 | 2,566.9939 | 2,566.9939 | 0.6052 | 0.0000 | 2,582.1241 |
| 2022 | 3.0481 | 15.0997 | 16.1249 | 0.0296 | 0.2744 | 0.6768 | 0.9512 | 0.0742 | 0.6564 | 0.7306 | 0.0000 | 2,748.2954 | 2,748.2954 | 0.4383 | 0.0000 | 2,758.0780 |
| **Maximum** | **3.0481** | **20.2725** | **16.1249** | **0.0296** | **5.8653** | **1.0442** | **6.6313** | **2.9711** | **0.9746** | **3.6759** | **0.0000** | **2,748.2954** | **2,748.2954** | **0.6052** | **0.0000** | **2,758.0780** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 2.1056 | 20.2725 | 15.3069 | 0.0265 | 5.8653 | 1.0442 | 6.6313 | 2.9711 | 0.9746 | 3.6759 | 0.0000 | 2,566.9939 | 2,566.9939 | 0.6052 | 0.0000 | 2,582.1241 |
| 2022 | 3.0481 | 15.0997 | 16.1249 | 0.0296 | 0.2744 | 0.6768 | 0.9512 | 0.0742 | 0.6564 | 0.7306 | 0.0000 | 2,748.2954 | 2,748.2954 | 0.4383 | 0.0000 | 2,758.0780 |
| **Maximum** | **3.0481** | **20.2725** | **16.1249** | **0.0296** | **5.8653** | **1.0442** | **6.6313** | **2.9711** | **0.9746** | **3.6759** | **0.0000** | **2,748.2954** | **2,748.2954** | **0.6052** | **0.0000** | **2,758.0780** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | **0.0000** | **2.0000e-005** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | **0.0000** | **0.0125** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | **0.0000** | **2.0000e-005** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | **0.0000** | **0.0125** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 7/1/2021 | 7/30/2021 | 5 | 22 | |
| 2 | Site Preparation | Site Preparation | 8/2/2021 | 8/6/2021 | 5 | 5 | |
| 3 | Grading | Grading | 8/9/2021 | 8/27/2021 | 5 | 15 | |
| 4 | Building Construction | Building Construction | 8/30/2021 | 6/17/2022 | 5 | 210 | |
| 5 | Architectural Coating | Architectural Coating | 2/15/2022 | 7/11/2022 | 5 | 105 | |
| 6 | Paving | Paving | 6/20/2022 | 7/1/2022 | 5 | 10 | |

**Acres of Grading (Site Preparation Phase): 2.5**

**Acres of Grading (Grading Phase): 5.63**

**Acres of Paving: 0.44**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,700; Non-Residential Outdoor: 1,900; Striped Parking Area: 1,176 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 5 | 13.00 | 0.00 | 37.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 22.00 | 9.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 4.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.3620 | 0.0000 | 0.3620 | 0.0548 | 0.0000 | 0.0548 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.9930 | 19.6966 | 14.4925 | 0.0241 | | 1.0409 | 1.0409 | | 0.9715 | 0.9715 | | 2,322.7171 | 2,322.7171 | 0.5940 | | 2,337.5658 |
| **Total** | **1.9930** | **19.6966** | **14.4925** | **0.0241** | **0.3620** | **1.0409** | **1.4029** | **0.0548** | **0.9715** | **1.0263** | | **2,322.7171** | **2,322.7171** | **0.5940** | | **2,337.5658** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0145 | 0.4922 | 0.0828 | 1.3400e-003 | 0.0293 | 2.2300e-003 | 0.0315 | 8.0200e-003 | 2.1400e-003 | 0.0102 | | 140.4460 | 140.4460 | 3.8300e-003 | | 140.5419 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0981 | 0.0838 | 0.7316 | 1.0500e-003 | 0.1068 | 1.0800e-003 | 0.1079 | 0.0283 | 1.0000e-003 | 0.0293 | | 103.8308 | 103.8308 | 7.4300e-003 | | 104.0164 |
| **Total** | **0.1126** | **0.5759** | **0.8143** | **2.3900e-003** | **0.1361** | **3.3100e-003** | **0.1394** | **0.0364** | **3.1400e-003** | **0.0395** | | **244.2768** | **244.2768** | **0.0113** | | **244.5583** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.3620 | 0.0000 | 0.3620 | 0.0548 | 0.0000 | 0.0548 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.9930 | 19.6966 | 14.4925 | 0.0241 | | 1.0409 | 1.0409 | | 0.9715 | 0.9715 | 0.0000 | 2,322.7171 | 2,322.7171 | 0.5940 | | 2,337.5658 |
| **Total** | **1.9930** | **19.6966** | **14.4925** | **0.0241** | **0.3620** | **1.0409** | **1.4029** | **0.0548** | **0.9715** | **1.0263** | **0.0000** | **2,322.7171** | **2,322.7171** | **0.5940** | | **2,337.5658** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0145 | 0.4922 | 0.0828 | 1.3400e-003 | 0.0293 | 2.2300e-003 | 0.0315 | 8.0200e-003 | 2.1400e-003 | 0.0102 | | 140.4460 | 140.4460 | 3.8300e-003 | | 140.5419 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0981 | 0.0838 | 0.7316 | 1.0500e-003 | 0.1068 | 1.0800e-003 | 0.1079 | 0.0283 | 1.0000e-003 | 0.0293 | | 103.8308 | 103.8308 | 7.4300e-003 | | 104.0164 |
| **Total** | **0.1126** | **0.5759** | **0.8143** | **2.3900e-003** | **0.1361** | **3.3100e-003** | **0.1394** | **0.0364** | **3.1400e-003** | **0.0395** | | **244.2768** | **244.2768** | **0.0113** | | **244.5583** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7996 | 0.0000 | 5.7996 | 2.9537 | 0.0000 | 2.9537 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5558 | 17.4203 | 7.5605 | 0.0172 | | 0.7654 | 0.7654 | | 0.7041 | 0.7041 | | 1,666.5174 | 1,666.5174 | 0.5390 | | 1,679.9920 |
| **Total** | **1.5558** | **17.4203** | **7.5605** | **0.0172** | **5.7996** | **0.7654** | **6.5650** | **2.9537** | **0.7041** | **3.6578** | | **1,666.5174** | **1,666.5174** | **0.5390** | | **1,679.9920** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0516 | 0.4502 | 6.5000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.8959 | 63.8959 | 4.5700e-003 | | 64.0101 |
| **Total** | **0.0604** | **0.0516** | **0.4502** | **6.5000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.8959** | **63.8959** | **4.5700e-003** | | **64.0101** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7996 | 0.0000 | 5.7996 | 2.9537 | 0.0000 | 2.9537 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5558 | 17.4203 | 7.5605 | 0.0172 | | 0.7654 | 0.7654 | | 0.7041 | 0.7041 | 0.0000 | 1,666.5174 | 1,666.5174 | 0.5390 | | 1,679.9920 |
| **Total** | **1.5558** | **17.4203** | **7.5605** | **0.0172** | **5.7996** | **0.7654** | **6.5650** | **2.9537** | **0.7041** | **3.6578** | **0.0000** | **1,666.5174** | **1,666.5174** | **0.5390** | | **1,679.9920** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0516 | 0.4502 | 6.5000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.8959 | 63.8959 | 4.5700e-003 | | 64.0101 |
| **Total** | **0.0604** | **0.0516** | **0.4502** | **6.5000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.8959** | **63.8959** | **4.5700e-003** | | **64.0101** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.9146 | 0.0000 | 4.9146 | 2.5257 | 0.0000 | 2.5257 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2884 | 14.3307 | 6.3314 | 0.0141 | | 0.6379 | 0.6379 | | 0.5869 | 0.5869 | | 1,365.0648 | 1,365.0648 | 0.4415 | | 1,376.1020 |
| **Total** | **1.2884** | **14.3307** | **6.3314** | **0.0141** | **4.9146** | **0.6379** | **5.5525** | **2.5257** | **0.5869** | **3.1125** | | **1,365.0648** | **1,365.0648** | **0.4415** | | **1,376.1020** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0516 | 0.4502 | 6.5000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.8959 | 63.8959 | 4.5700e-003 | | 64.0101 |
| **Total** | **0.0604** | **0.0516** | **0.4502** | **6.5000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.8959** | **63.8959** | **4.5700e-003** | | **64.0101** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.9146 | 0.0000 | 4.9146 | 2.5257 | 0.0000 | 2.5257 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2884 | 14.3307 | 6.3314 | 0.0141 | | 0.6379 | 0.6379 | | 0.5869 | 0.5869 | 0.0000 | 1,365.0648 | 1,365.0648 | 0.4415 | | 1,376.1020 |
| **Total** | **1.2884** | **14.3307** | **6.3314** | **0.0141** | **4.9146** | **0.6379** | **5.5525** | **2.5257** | **0.5869** | **3.1125** | **0.0000** | **1,365.0648** | **1,365.0648** | **0.4415** | | **1,376.1020** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0516 | 0.4502 | 6.5000e-004 | 0.0657 | 6.6000e-004 | 0.0664 | 0.0174 | 6.1000e-004 | 0.0180 | | 63.8959 | 63.8959 | 4.5700e-003 | | 64.0101 |
| **Total** | **0.0604** | **0.0516** | **0.4502** | **6.5000e-004** | **0.0657** | **6.6000e-004** | **0.0664** | **0.0174** | **6.1000e-004** | **0.0180** | | **63.8959** | **63.8959** | **4.5700e-003** | | **64.0101** |

## 3.5 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.8125 | 13.6361 | 12.8994 | 0.0221 | | 0.6843 | 0.6843 | | 0.6608 | 0.6608 | | 2,001.2200 | 2,001.2200 | 0.3573 | | 2,010.1517 |
| **Total** | **1.8125** | **13.6361** | **12.8994** | **0.0221** | | **0.6843** | **0.6843** | | **0.6608** | **0.6608** | | **2,001.2200** | **2,001.2200** | **0.3573** | | **2,010.1517** |

## 3.5 Building Construction - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0433 | 1.0924 | 0.2911 | 2.5400e-003 | 0.0609 | 4.6500e-003 | 0.0655 | 0.0175 | 4.4500e-003 | 0.0220 | | 265.7218 | 265.7218 | 0.0115 | | 266.0090 |
| Worker | 0.1660 | 0.1418 | 1.2380 | 1.7700e-003 | 0.1807 | 1.8300e-003 | 0.1826 | 0.0479 | 1.6900e-003 | 0.0496 | | 175.7136 | 175.7136 | 0.0126 | | 176.0278 |
| **Total** | **0.2093** | **1.2342** | **1.5292** | **4.3100e-003** | **0.2416** | **6.4800e-003** | **0.2480** | **0.0655** | **6.1400e-003** | **0.0716** | | **441.4354** | **441.4354** | **0.0241** | | **442.0368** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.8125 | 13.6361 | 12.8994 | 0.0221 | | 0.6843 | 0.6843 | | 0.6608 | 0.6608 | 0.0000 | 2,001.2200 | 2,001.2200 | 0.3573 | | 2,010.1517 |
| **Total** | **1.8125** | **13.6361** | **12.8994** | **0.0221** | | **0.6843** | **0.6843** | | **0.6608** | **0.6608** | **0.0000** | **2,001.2200** | **2,001.2200** | **0.3573** | | **2,010.1517** |

## 3.5 Building Construction - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0433 | 1.0924 | 0.2911 | 2.5400e-003 | 0.0609 | 4.6500e-003 | 0.0655 | 0.0175 | 4.4500e-003 | 0.0220 | | 265.7218 | 265.7218 | 0.0115 | | 266.0090 |
| Worker | 0.1660 | 0.1418 | 1.2380 | 1.7700e-003 | 0.1807 | 1.8300e-003 | 0.1826 | 0.0479 | 1.6900e-003 | 0.0496 | | 175.7136 | 175.7136 | 0.0126 | | 176.0278 |
| **Total** | **0.2093** | **1.2342** | **1.5292** | **4.3100e-003** | **0.2416** | **6.4800e-003** | **0.2480** | **0.0655** | **6.1400e-003** | **0.0716** | | **441.4354** | **441.4354** | **0.0241** | | **442.0368** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.6487 | 12.5031 | 12.7264 | 0.0221 | | 0.5889 | 0.5889 | | 0.5689 | 0.5689 | | 2,001.5429 | 2,001.5429 | 0.3486 | | 2,010.2581 |
| **Total** | **1.6487** | **12.5031** | **12.7264** | **0.0221** | | **0.5889** | **0.5889** | | **0.5689** | **0.5689** | | **2,001.5429** | **2,001.5429** | **0.3486** | | **2,010.2581** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0401 | 1.0360 | 0.2648 | 2.5300e-003 | 0.0609 | 4.1400e-003 | 0.0650 | 0.0175 | 3.9600e-003 | 0.0215 | | 263.8500 | 263.8500 | 0.0110 | | 264.1255 |
| Worker | 0.1577 | 0.1287 | 1.1170 | 1.7200e-003 | 0.1807 | 1.7300e-003 | 0.1825 | 0.0479 | 1.5900e-003 | 0.0495 | | 170.4615 | 170.4615 | 0.0113 | | 170.7439 |
| **Total** | **0.1978** | **1.1647** | **1.3818** | **4.2500e-003** | **0.2416** | **5.8700e-003** | **0.2474** | **0.0655** | **5.5500e-003** | **0.0710** | | **434.3115** | **434.3115** | **0.0223** | | **434.8695** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.6487 | 12.5031 | 12.7264 | 0.0221 | | 0.5889 | 0.5889 | | 0.5689 | 0.5689 | 0.0000 | 2,001.5429 | 2,001.5429 | 0.3486 | | 2,010.2581 |
| **Total** | **1.6487** | **12.5031** | **12.7264** | **0.0221** | | **0.5889** | **0.5889** | | **0.5689** | **0.5689** | **0.0000** | **2,001.5429** | **2,001.5429** | **0.3486** | | **2,010.2581** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0401 | 1.0360 | 0.2648 | 2.5300e-003 | 0.0609 | 4.1400e-003 | 0.0650 | 0.0175 | 3.9600e-003 | 0.0215 | | 263.8500 | 263.8500 | 0.0110 | | 264.1255 |
| Worker | 0.1577 | 0.1287 | 1.1170 | 1.7200e-003 | 0.1807 | 1.7300e-003 | 0.1825 | 0.0479 | 1.5900e-003 | 0.0495 | | 170.4615 | 170.4615 | 0.0113 | | 170.7439 |
| **Total** | **0.1978** | **1.1647** | **1.3818** | **4.2500e-003** | **0.2416** | **5.8700e-003** | **0.2474** | **0.0655** | **5.5500e-003** | **0.0710** | | **434.3115** | **434.3115** | **0.0223** | | **434.8695** |

## 3.6 Architectural Coating - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.9685 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| **Total** | **1.1730** | **1.4085** | **1.8136** | **2.9700e-003** | | **0.0817** | **0.0817** | | **0.0817** | **0.0817** | | **281.4481** | **281.4481** | **0.0183** | | **281.9062** |

## 3.6 Architectural Coating - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0287 | 0.0234 | 0.2031 | 3.1000e-004 | 0.0329 | 3.1000e-004 | 0.0332 | 8.7200e-003 | 2.9000e-004 | 9.0100e-003 | | 30.9930 | 30.9930 | 2.0500e-003 | | 31.0444 |
| **Total** | **0.0287** | **0.0234** | **0.2031** | **3.1000e-004** | **0.0329** | **3.1000e-004** | **0.0332** | **8.7200e-003** | **2.9000e-004** | **9.0100e-003** | | **30.9930** | **30.9930** | **2.0500e-003** | | **31.0444** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.9685 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | 0.0000 | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| **Total** | **1.1730** | **1.4085** | **1.8136** | **2.9700e-003** | | **0.0817** | **0.0817** | | **0.0817** | **0.0817** | **0.0000** | **281.4481** | **281.4481** | **0.0183** | | **281.9062** |

## 3.6 Architectural Coating - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0287 | 0.0234 | 0.2031 | 3.1000e-004 | 0.0329 | 3.1000e-004 | 0.0332 | 8.7200e-003 | 2.9000e-004 | 9.0100e-003 | | 30.9930 | 30.9930 | 2.0500e-003 | | 31.0444 |
| **Total** | **0.0287** | **0.0234** | **0.2031** | **3.1000e-004** | **0.0329** | **3.1000e-004** | **0.0332** | **8.7200e-003** | **2.9000e-004** | **9.0100e-003** | | **30.9930** | **30.9930** | **2.0500e-003** | | **31.0444** |

## 3.7 Paving - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6877 | 6.7738 | 8.8060 | 0.0135 | | 0.3474 | 0.3474 | | 0.3205 | 0.3205 | | 1,297.3789 | 1,297.3789 | 0.4113 | | 1,307.6608 |
| Paving | 0.1153 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.8030** | **6.7738** | **8.8060** | **0.0135** | | **0.3474** | **0.3474** | | **0.3205** | **0.3205** | | **1,297.3789** | **1,297.3789** | **0.4113** | | **1,307.6608** |

## 3.7 Paving - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0932 | 0.0760 | 0.6601 | 1.0200e-003 | 0.1068 | 1.0200e-003 | 0.1078 | 0.0283 | 9.4000e-004 | 0.0293 | | 100.7272 | 100.7272 | 6.6800e-003 | | 100.8941 |
| **Total** | **0.0932** | **0.0760** | **0.6601** | **1.0200e-003** | **0.1068** | **1.0200e-003** | **0.1078** | **0.0283** | **9.4000e-004** | **0.0293** | | **100.7272** | **100.7272** | **6.6800e-003** | | **100.8941** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6877 | 6.7738 | 8.8060 | 0.0135 | | 0.3474 | 0.3474 | | 0.3205 | 0.3205 | 0.0000 | 1,297.3789 | 1,297.3789 | 0.4113 | | 1,307.6608 |
| Paving | 0.1153 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.8030** | **6.7738** | **8.8060** | **0.0135** | | **0.3474** | **0.3474** | | **0.3205** | **0.3205** | **0.0000** | **1,297.3789** | **1,297.3789** | **0.4113** | | **1,307.6608** |

### 3.7 Paving - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0932 | 0.0760 | 0.6601 | 1.0200e-003 | 0.1068 | 1.0200e-003 | 0.1078 | 0.0283 | 9.4000e-004 | 0.0293 | | 100.7272 | 100.7272 | 6.6800e-003 | | 100.8941 |
| **Total** | **0.0932** | **0.0760** | **0.6601** | **1.0200e-003** | **0.1068** | **1.0200e-003** | **0.1078** | **0.0283** | **9.4000e-004** | **0.0293** | | **100.7272** | **100.7272** | **6.6800e-003** | | **100.8941** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 0.00 | 0.00 | 0.00 | | |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 9.50 | 7.30 | 7.30 | 12.70 | 82.30 | 5.00 | 28 | 58 | 14 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |
| Day-Care Center | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |
| Parking Lot | 0.492202 | 0.044480 | 0.207604 | 0.135310 | 0.040374 | 0.006490 | 0.012772 | 0.047881 | 0.003361 | 0.001607 | 0.005537 | 0.001401 | 0.000981 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| Unmitigated | 0.1182 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0279 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0898 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 5.1000e-004 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | | **0.0125** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0279 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0898 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 5.1000e-004 | 5.0000e-005 | 5.4700e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0117 | 0.0117 | 3.0000e-005 | | 0.0125 |
| **Total** | **0.1182** | **5.0000e-005** | **5.4700e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | | **0.0117** | **0.0117** | **3.0000e-005** | | **0.0125** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# HSU Trinity Center Childcare Project_GHG Run

**North Coast Unified APCD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Day-Care Center | 3.80 | 1000sqft | 0.09 | 3,800.00 | 0 |
| Parking Lot | 49.00 | Space | 0.44 | 19,600.00 | 0 |
| City Park | 0.69 | Acre | 0.69 | 30,056.40 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 101 |
| **Climate Zone** | 1 | | | **Operational Year** | 2030 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 292.85 | **CH4 Intensity (lb/MWhr)** | 0.013 | **N2O Intensity (lb/MWhr)** | 0.003 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per SB 100, RPS utility factors

Land Use - The total acreage of the site is 1.44, this model does not include the approximately 9,800 square feet of retained structure existing onsite, as it will remain in place as a part of the project.

Construction Phase - Based on client provided information, with construction finishing in July of 2022.

Demolition - Per client provided demo plans

Vehicle Trips - According to W-Trans (2021) traffic study, no new trips generated by the proposed project.

Energy Use - Per 2019 Title 24 Standards (CEC 2019) to reduce non-residential energy usage by 30 percent. No natural gas.

Water Mitigation - Per CALGreen (Part 11 of Title 24)

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 20.00 | 22.00 |
| tblConstructionPhase | NumDays | 2.00 | 5.00 |
| tblConstructionPhase | NumDays | 4.00 | 15.00 |
| tblConstructionPhase | NumDays | 200.00 | 210.00 |
| tblConstructionPhase | NumDays | 10.00 | 105.00 |
| tblEnergyUse | NT24NG | 0.86 | 0.00 |
| tblEnergyUse | T24E | 1.62 | 1.13 |
| tblEnergyUse | T24NG | 13.50 | 0.00 |
| tblProjectCharacteristics | CH4IntensityFactor | 0.029 | 0.013 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 292.85 |
| tblProjectCharacteristics | N2OIntensityFactor | 0.006 | 0.003 |
| tblVehicleTrips | ST_TR | 22.75 | 0.00 |
| tblVehicleTrips | ST_TR | 6.21 | 0.00 |
| tblVehicleTrips | SU_TR | 16.74 | 0.00 |
| tblVehicleTrips | SU_TR | 5.83 | 0.00 |
| tblVehicleTrips | WD_TR | 1.89 | 0.00 |
| tblVehicleTrips | WD_TR | 74.06 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1291 | 1.0444 | 0.8919 | 1.6300e-003 | 0.0676 | 0.0493 | 0.1169 | 0.0303 | 0.0469 | 0.0772 | 0.0000 | 138.8025 | 138.8025 | 0.0259 | 0.0000 | 139.4501 |
| 2022 | 0.1794 | 0.9303 | 1.0035 | 1.8200e-003 | 0.0158 | 0.0417 | 0.0575 | 4.2900e-003 | 0.0404 | 0.0447 | 0.0000 | 153.5878 | 153.5878 | 0.0231 | 0.0000 | 154.1651 |
| **Maximum** | **0.1794** | **1.0444** | **1.0035** | **1.8200e-003** | **0.0676** | **0.0493** | **0.1169** | **0.0303** | **0.0469** | **0.0772** | **0.0000** | **153.5878** | **153.5878** | **0.0259** | **0.0000** | **154.1651** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1291 | 1.0444 | 0.8919 | 1.6300e-003 | 0.0676 | 0.0493 | 0.1169 | 0.0303 | 0.0469 | 0.0772 | 0.0000 | 138.8024 | 138.8024 | 0.0259 | 0.0000 | 139.4500 |
| 2022 | 0.1794 | 0.9303 | 1.0035 | 1.8200e-003 | 0.0158 | 0.0417 | 0.0575 | 4.2900e-003 | 0.0404 | 0.0447 | 0.0000 | 153.5877 | 153.5877 | 0.0231 | 0.0000 | 154.1649 |
| **Maximum** | **0.1794** | **1.0444** | **1.0035** | **1.8200e-003** | **0.0676** | **0.0493** | **0.1169** | **0.0303** | **0.0469** | **0.0772** | **0.0000** | **153.5877** | **153.5877** | **0.0259** | **0.0000** | **154.1649** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 7-1-2021 | 9-30-2021 | 0.5736 | 0.5736 |
| 2 | 10-1-2021 | 12-31-2021 | 0.5574 | 0.5574 |
| 3 | 1-1-2022 | 3-31-2022 | 0.5433 | 0.5433 |
| 4 | 4-1-2022 | 6-30-2022 | 0.5482 | 0.5482 |
| 5 | 7-1-2022 | 9-30-2022 | 0.0131 | 0.0131 |
| | | Highest | 0.5736 | 0.5736 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0913 | 4.0913 | 1.8000e-004 | 4.0000e-005 | 4.1083 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.0150 | 0.0000 | 1.0150 | 0.0600 | 0.0000 | 2.5145 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0517 | 0.6942 | 0.7459 | 5.3400e-003 | 1.3000e-004 | 0.9189 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **1.0667** | **4.7865** | **5.8531** | **0.0655** | **1.7000e-004** | **7.5428** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0913 | 4.0913 | 1.8000e-004 | 4.0000e-005 | 4.1083 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.0150 | 0.0000 | 1.0150 | 0.0600 | 0.0000 | 2.5145 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0414 | 0.6708 | 0.7122 | 4.2800e-003 | 1.1000e-004 | 0.8511 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **1.0563** | **4.7630** | **5.8194** | **0.0644** | **1.5000e-004** | **7.4749** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.97** | **0.49** | **0.58** | **1.62** | **11.76** | **0.90** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 7/1/2021 | 7/30/2021 | 5 | 22 | |
| 2 | Site Preparation | Site Preparation | 8/2/2021 | 8/6/2021 | 5 | 5 | |
| 3 | Grading | Grading | 8/9/2021 | 8/27/2021 | 5 | 15 | |
| 4 | Building Construction | Building Construction | 8/30/2021 | 6/17/2022 | 5 | 210 | |
| 5 | Architectural Coating | Architectural Coating | 2/15/2022 | 7/11/2022 | 5 | 105 | |
| 6 | Paving | Paving | 6/20/2022 | 7/1/2022 | 5 | 10 | |

**Acres of Grading (Site Preparation Phase): 2.5**

**Acres of Grading (Grading Phase): 5.63**

**Acres of Paving: 0.44**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,700; Non-Residential Outdoor: 1,900; Striped Parking Area: 1,176 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 5 | 13.00 | 0.00 | 37.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 22.00 | 9.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 4.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 3.9800e-003 | 0.0000 | 3.9800e-003 | 6.0000e-004 | 0.0000 | 6.0000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0219 | 0.2167 | 0.1594 | 2.7000e-004 | | 0.0115 | 0.0115 | | 0.0107 | 0.0107 | 0.0000 | 23.1785 | 23.1785 | 5.9300e-003 | 0.0000 | 23.3266 |
| **Total** | **0.0219** | **0.2167** | **0.1594** | **2.7000e-004** | **3.9800e-003** | **0.0115** | **0.0154** | **6.0000e-004** | **0.0107** | **0.0113** | **0.0000** | **23.1785** | **23.1785** | **5.9300e-003** | **0.0000** | **23.3266** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.6000e-004 | 5.4200e-003 | 9.5000e-004 | 1.0000e-005 | 3.1000e-004 | 2.0000e-005 | 3.3000e-004 | 8.0000e-005 | 2.0000e-005 | 1.1000e-004 | 0.0000 | 1.3901 | 1.3901 | 4.0000e-005 | 0.0000 | 1.3911 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1700e-003 | 1.0000e-003 | 8.3300e-003 | 1.0000e-005 | 1.1000e-003 | 1.0000e-005 | 1.1200e-003 | 2.9000e-004 | 1.0000e-005 | 3.1000e-004 | 0.0000 | 1.0317 | 1.0317 | 7.0000e-005 | 0.0000 | 1.0335 |
| **Total** | **1.3300e-003** | **6.4200e-003** | **9.2800e-003** | **2.0000e-005** | **1.4100e-003** | **3.0000e-005** | **1.4500e-003** | **3.7000e-004** | **3.0000e-005** | **4.2000e-004** | **0.0000** | **2.4218** | **2.4218** | **1.1000e-004** | **0.0000** | **2.4247** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 3.9800e-003 | 0.0000 | 3.9800e-003 | 6.0000e-004 | 0.0000 | 6.0000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0219 | 0.2167 | 0.1594 | 2.7000e-004 | | 0.0115 | 0.0115 | | 0.0107 | 0.0107 | 0.0000 | 23.1784 | 23.1784 | 5.9300e-003 | 0.0000 | 23.3266 |
| **Total** | **0.0219** | **0.2167** | **0.1594** | **2.7000e-004** | **3.9800e-003** | **0.0115** | **0.0154** | **6.0000e-004** | **0.0107** | **0.0113** | **0.0000** | **23.1784** | **23.1784** | **5.9300e-003** | **0.0000** | **23.3266** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.6000e-004 | 5.4200e-003 | 9.5000e-004 | 1.0000e-005 | 3.1000e-004 | 2.0000e-005 | 3.3000e-004 | 8.0000e-005 | 2.0000e-005 | 1.1000e-004 | 0.0000 | 1.3901 | 1.3901 | 4.0000e-005 | 0.0000 | 1.3911 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1700e-003 | 1.0000e-003 | 8.3300e-003 | 1.0000e-005 | 1.1000e-003 | 1.0000e-005 | 1.1200e-003 | 2.9000e-004 | 1.0000e-005 | 3.1000e-004 | 0.0000 | 1.0317 | 1.0317 | 7.0000e-005 | 0.0000 | 1.0335 |
| **Total** | **1.3300e-003** | **6.4200e-003** | **9.2800e-003** | **2.0000e-005** | **1.4100e-003** | **3.0000e-005** | **1.4500e-003** | **3.7000e-004** | **3.0000e-005** | **4.2000e-004** | **0.0000** | **2.4218** | **2.4218** | **1.1000e-004** | **0.0000** | **2.4247** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0145 | 0.0000 | 0.0145 | 7.3800e-003 | 0.0000 | 7.3800e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.8900e-003 | 0.0436 | 0.0189 | 4.0000e-005 | | 1.9100e-003 | 1.9100e-003 | | 1.7600e-003 | 1.7600e-003 | 0.0000 | 3.7796 | 3.7796 | 1.2200e-003 | 0.0000 | 3.8102 |
| **Total** | **3.8900e-003** | **0.0436** | **0.0189** | **4.0000e-005** | **0.0145** | **1.9100e-003** | **0.0164** | **7.3800e-003** | **1.7600e-003** | **9.1400e-003** | **0.0000** | **3.7796** | **3.7796** | **1.2200e-003** | **0.0000** | **3.8102** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 1.4000e-004 | 1.1600e-003 | 0.0000 | 1.5000e-004 | 0.0000 | 1.6000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1443 | 0.1443 | 1.0000e-005 | 0.0000 | 0.1446 |
| **Total** | **1.6000e-004** | **1.4000e-004** | **1.1600e-003** | **0.0000** | **1.5000e-004** | **0.0000** | **1.6000e-004** | **4.0000e-005** | **0.0000** | **4.0000e-005** | **0.0000** | **0.1443** | **0.1443** | **1.0000e-005** | **0.0000** | **0.1446** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0145 | 0.0000 | 0.0145 | 7.3800e-003 | 0.0000 | 7.3800e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.8900e-003 | 0.0436 | 0.0189 | 4.0000e-005 | | 1.9100e-003 | 1.9100e-003 | | 1.7600e-003 | 1.7600e-003 | 0.0000 | 3.7796 | 3.7796 | 1.2200e-003 | 0.0000 | 3.8102 |
| **Total** | **3.8900e-003** | **0.0436** | **0.0189** | **4.0000e-005** | **0.0145** | **1.9100e-003** | **0.0164** | **7.3800e-003** | **1.7600e-003** | **9.1400e-003** | **0.0000** | **3.7796** | **3.7796** | **1.2200e-003** | **0.0000** | **3.8102** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 1.4000e-004 | 1.1600e-003 | 0.0000 | 1.5000e-004 | 0.0000 | 1.6000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1443 | 0.1443 | 1.0000e-005 | 0.0000 | 0.1446 |
| **Total** | **1.6000e-004** | **1.4000e-004** | **1.1600e-003** | **0.0000** | **1.5000e-004** | **0.0000** | **1.6000e-004** | **4.0000e-005** | **0.0000** | **4.0000e-005** | **0.0000** | **0.1443** | **0.1443** | **1.0000e-005** | **0.0000** | **0.1446** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0369 | 0.0000 | 0.0369 | 0.0189 | 0.0000 | 0.0189 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.6600e-003 | 0.1075 | 0.0475 | 1.1000e-004 | | 4.7800e-003 | 4.7800e-003 | | 4.4000e-003 | 4.4000e-003 | 0.0000 | 9.2877 | 9.2877 | 3.0000e-003 | 0.0000 | 9.3628 |
| **Total** | **9.6600e-003** | **0.1075** | **0.0475** | **1.1000e-004** | **0.0369** | **4.7800e-003** | **0.0416** | **0.0189** | **4.4000e-003** | **0.0233** | **0.0000** | **9.2877** | **9.2877** | **3.0000e-003** | **0.0000** | **9.3628** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.9000e-004 | 4.2000e-004 | 3.4900e-003 | 0.0000 | 4.6000e-004 | 0.0000 | 4.7000e-004 | 1.2000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 0.4329 | 0.4329 | 3.0000e-005 | 0.0000 | 0.4337 |
| **Total** | **4.9000e-004** | **4.2000e-004** | **3.4900e-003** | **0.0000** | **4.6000e-004** | **0.0000** | **4.7000e-004** | **1.2000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **0.4329** | **0.4329** | **3.0000e-005** | **0.0000** | **0.4337** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0369 | 0.0000 | 0.0369 | 0.0189 | 0.0000 | 0.0189 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.6600e-003 | 0.1075 | 0.0475 | 1.1000e-004 | | 4.7800e-003 | 4.7800e-003 | | 4.4000e-003 | 4.4000e-003 | 0.0000 | 9.2877 | 9.2877 | 3.0000e-003 | 0.0000 | 9.3628 |
| **Total** | **9.6600e-003** | **0.1075** | **0.0475** | **1.1000e-004** | **0.0369** | **4.7800e-003** | **0.0416** | **0.0189** | **4.4000e-003** | **0.0233** | **0.0000** | **9.2877** | **9.2877** | **3.0000e-003** | **0.0000** | **9.3628** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.9000e-004 | 4.2000e-004 | 3.4900e-003 | 0.0000 | 4.6000e-004 | 0.0000 | 4.7000e-004 | 1.2000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 0.4329 | 0.4329 | 3.0000e-005 | 0.0000 | 0.4337 |
| **Total** | **4.9000e-004** | **4.2000e-004** | **3.4900e-003** | **0.0000** | **4.6000e-004** | **0.0000** | **4.7000e-004** | **1.2000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **0.4329** | **0.4329** | **3.0000e-005** | **0.0000** | **0.4337** |

## 3.5 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0816 | 0.6136 | 0.5805 | 9.9000e-004 | | 0.0308 | 0.0308 | | 0.0297 | 0.0297 | 0.0000 | 81.6964 | 81.6964 | 0.0146 | 0.0000 | 82.0611 |
| **Total** | **0.0816** | **0.6136** | **0.5805** | **9.9000e-004** | | **0.0308** | **0.0308** | | **0.0297** | **0.0297** | **0.0000** | **81.6964** | **81.6964** | **0.0146** | **0.0000** | **82.0611** |

## 3.5 Building Construction - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.0100e-003 | 0.0491 | 0.0140 | 1.1000e-004 | 2.6000e-003 | 2.1000e-004 | 2.8200e-003 | 7.5000e-004 | 2.0000e-004 | 9.6000e-004 | 0.0000 | 10.7191 | 10.7191 | 4.9000e-004 | 0.0000 | 10.7314 |
| Worker | 8.0700e-003 | 6.9600e-003 | 0.0577 | 8.0000e-005 | 7.6400e-003 | 8.0000e-005 | 7.7300e-003 | 2.0400e-003 | 8.0000e-005 | 2.1100e-003 | 0.0000 | 7.1423 | 7.1423 | 5.2000e-004 | 0.0000 | 7.1552 |
| **Total** | **0.0101** | **0.0561** | **0.0717** | **1.9000e-004** | **0.0102** | **2.9000e-004** | **0.0106** | **2.7900e-003** | **2.8000e-004** | **3.0700e-003** | **0.0000** | **17.8613** | **17.8613** | **1.0100e-003** | **0.0000** | **17.8866** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0816 | 0.6136 | 0.5805 | 9.9000e-004 | | 0.0308 | 0.0308 | | 0.0297 | 0.0297 | 0.0000 | 81.6963 | 81.6963 | 0.0146 | 0.0000 | 82.0610 |
| **Total** | **0.0816** | **0.6136** | **0.5805** | **9.9000e-004** | | **0.0308** | **0.0308** | | **0.0297** | **0.0297** | **0.0000** | **81.6963** | **81.6963** | **0.0146** | **0.0000** | **82.0610** |

## 3.5 Building Construction - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.0100e-003 | 0.0491 | 0.0140 | 1.1000e-004 | 2.6000e-003 | 2.1000e-004 | 2.8200e-003 | 7.5000e-004 | 2.0000e-004 | 9.6000e-004 | 0.0000 | 10.7191 | 10.7191 | 4.9000e-004 | 0.0000 | 10.7314 |
| Worker | 8.0700e-003 | 6.9600e-003 | 0.0577 | 8.0000e-005 | 7.6400e-003 | 8.0000e-005 | 7.7300e-003 | 2.0400e-003 | 8.0000e-005 | 2.1100e-003 | 0.0000 | 7.1423 | 7.1423 | 5.2000e-004 | 0.0000 | 7.1552 |
| **Total** | **0.0101** | **0.0561** | **0.0717** | **1.9000e-004** | **0.0102** | **2.9000e-004** | **0.0106** | **2.7900e-003** | **2.8000e-004** | **3.0700e-003** | **0.0000** | **17.8613** | **17.8613** | **1.0100e-003** | **0.0000** | **17.8866** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0989 | 0.7502 | 0.7636 | 1.3200e-003 | | 0.0353 | 0.0353 | | 0.0341 | 0.0341 | 0.0000 | 108.9462 | 108.9462 | 0.0190 | 0.0000 | 109.4205 |
| **Total** | **0.0989** | **0.7502** | **0.7636** | **1.3200e-003** | | **0.0353** | **0.0353** | | **0.0341** | **0.0341** | **0.0000** | **108.9462** | **108.9462** | **0.0190** | **0.0000** | **109.4205** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.4800e-003 | 0.0621 | 0.0170 | 1.5000e-004 | 3.4700e-003 | 2.5000e-004 | 3.7200e-003 | 1.0100e-003 | 2.4000e-004 | 1.2500e-003 | 0.0000 | 14.1894 | 14.1894 | 6.3000e-004 | 0.0000 | 14.2052 |
| Worker | 0.0102 | 8.4200e-003 | 0.0692 | 1.0000e-004 | 0.0102 | 1.0000e-004 | 0.0103 | 2.7200e-003 | 1.0000e-004 | 2.8100e-003 | 0.0000 | 9.2382 | 9.2382 | 6.2000e-004 | 0.0000 | 9.2537 |
| **Total** | **0.0127** | **0.0705** | **0.0862** | **2.5000e-004** | **0.0137** | **3.5000e-004** | **0.0140** | **3.7300e-003** | **3.4000e-004** | **4.0600e-003** | **0.0000** | **23.4276** | **23.4276** | **1.2500e-003** | **0.0000** | **23.4588** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0989 | 0.7502 | 0.7636 | 1.3200e-003 | | 0.0353 | 0.0353 | | 0.0341 | 0.0341 | 0.0000 | 108.9460 | 108.9460 | 0.0190 | 0.0000 | 109.4204 |
| **Total** | **0.0989** | **0.7502** | **0.7636** | **1.3200e-003** | | **0.0353** | **0.0353** | | **0.0341** | **0.0341** | **0.0000** | **108.9460** | **108.9460** | **0.0190** | **0.0000** | **109.4204** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.4800e-003 | 0.0621 | 0.0170 | 1.5000e-004 | 3.4700e-003 | 2.5000e-004 | 3.7200e-003 | 1.0100e-003 | 2.4000e-004 | 1.2500e-003 | 0.0000 | 14.1894 | 14.1894 | 6.3000e-004 | 0.0000 | 14.2052 |
| Worker | 0.0102 | 8.4200e-003 | 0.0692 | 1.0000e-004 | 0.0102 | 1.0000e-004 | 0.0103 | 2.7200e-003 | 1.0000e-004 | 2.8100e-003 | 0.0000 | 9.2382 | 9.2382 | 6.2000e-004 | 0.0000 | 9.2537 |
| **Total** | **0.0127** | **0.0705** | **0.0862** | **2.5000e-004** | **0.0137** | **3.5000e-004** | **0.0140** | **3.7300e-003** | **3.4000e-004** | **4.0600e-003** | **0.0000** | **23.4276** | **23.4276** | **1.2500e-003** | **0.0000** | **23.4588** |

## 3.6 Architectural Coating - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0509 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0107 | 0.0740 | 0.0952 | 1.6000e-004 | | 4.2900e-003 | 4.2900e-003 | | 4.2900e-003 | 4.2900e-003 | 0.0000 | 13.4046 | 13.4046 | 8.7000e-004 | 0.0000 | 13.4264 |
| **Total** | **0.0616** | **0.0740** | **0.0952** | **1.6000e-004** | | **4.2900e-003** | **4.2900e-003** | | **4.2900e-003** | **4.2900e-003** | **0.0000** | **13.4046** | **13.4046** | **8.7000e-004** | **0.0000** | **13.4264** |

## 3.6 Architectural Coating - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6300e-003 | 1.3400e-003 | 0.0110 | 2.0000e-005 | 1.6200e-003 | 2.0000e-005 | 1.6400e-003 | 4.3000e-004 | 2.0000e-005 | 4.5000e-004 | 0.0000 | 1.4697 | 1.4697 | 1.0000e-004 | 0.0000 | 1.4722 |
| **Total** | **1.6300e-003** | **1.3400e-003** | **0.0110** | **2.0000e-005** | **1.6200e-003** | **2.0000e-005** | **1.6400e-003** | **4.3000e-004** | **2.0000e-005** | **4.5000e-004** | **0.0000** | **1.4697** | **1.4697** | **1.0000e-004** | **0.0000** | **1.4722** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0509 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0107 | 0.0740 | 0.0952 | 1.6000e-004 | | 4.2900e-003 | 4.2900e-003 | | 4.2900e-003 | 4.2900e-003 | 0.0000 | 13.4046 | 13.4046 | 8.7000e-004 | 0.0000 | 13.4264 |
| **Total** | **0.0616** | **0.0740** | **0.0952** | **1.6000e-004** | | **4.2900e-003** | **4.2900e-003** | | **4.2900e-003** | **4.2900e-003** | **0.0000** | **13.4046** | **13.4046** | **8.7000e-004** | **0.0000** | **13.4264** |

## 3.6 Architectural Coating - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6300e-003 | 1.3400e-003 | 0.0110 | 2.0000e-005 | 1.6200e-003 | 2.0000e-005 | 1.6400e-003 | 4.3000e-004 | 2.0000e-005 | 4.5000e-004 | 0.0000 | 1.4697 | 1.4697 | 1.0000e-004 | 0.0000 | 1.4722 |
| **Total** | **1.6300e-003** | **1.3400e-003** | **0.0110** | **2.0000e-005** | **1.6200e-003** | **2.0000e-005** | **1.6400e-003** | **4.3000e-004** | **2.0000e-005** | **4.5000e-004** | **0.0000** | **1.4697** | **1.4697** | **1.0000e-004** | **0.0000** | **1.4722** |

## 3.7 Paving - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 3.4400e-003 | 0.0339 | 0.0440 | 7.0000e-005 | | 1.7400e-003 | 1.7400e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 5.8848 | 5.8848 | 1.8700e-003 | 0.0000 | 5.9315 |
| Paving | 5.8000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **4.0200e-003** | **0.0339** | **0.0440** | **7.0000e-005** | | **1.7400e-003** | **1.7400e-003** | | **1.6000e-003** | **1.6000e-003** | **0.0000** | **5.8848** | **5.8848** | **1.8700e-003** | **0.0000** | **5.9315** |

## 3.7 Paving - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.0000e-004 | 4.1000e-004 | 3.4100e-003 | 1.0000e-005 | 5.0000e-004 | 1.0000e-005 | 5.1000e-004 | 1.3000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4549 | 0.4549 | 3.0000e-005 | 0.0000 | 0.4557 |
| **Total** | **5.0000e-004** | **4.1000e-004** | **3.4100e-003** | **1.0000e-005** | **5.0000e-004** | **1.0000e-005** | **5.1000e-004** | **1.3000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4549** | **0.4549** | **3.0000e-005** | **0.0000** | **0.4557** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 3.4400e-003 | 0.0339 | 0.0440 | 7.0000e-005 | | 1.7400e-003 | 1.7400e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 5.8848 | 5.8848 | 1.8700e-003 | 0.0000 | 5.9314 |
| Paving | 5.8000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **4.0200e-003** | **0.0339** | **0.0440** | **7.0000e-005** | | **1.7400e-003** | **1.7400e-003** | | **1.6000e-003** | **1.6000e-003** | **0.0000** | **5.8848** | **5.8848** | **1.8700e-003** | **0.0000** | **5.9314** |

### 3.7 Paving - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.0000e-004 | 4.1000e-004 | 3.4100e-003 | 1.0000e-005 | 5.0000e-004 | 1.0000e-005 | 5.1000e-004 | 1.3000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4549 | 0.4549 | 3.0000e-005 | 0.0000 | 0.4557 |
| **Total** | **5.0000e-004** | **4.1000e-004** | **3.4100e-003** | **1.0000e-005** | **5.0000e-004** | **1.0000e-005** | **5.1000e-004** | **1.3000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4549** | **0.4549** | **3.0000e-005** | **0.0000** | **0.4557** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 0.00 | 0.00 | 0.00 | | |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 9.50 | 7.30 | 7.30 | 12.70 | 82.30 | 5.00 | 28 | 58 | 14 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | 0.545242 | 0.031723 | 0.210276 | 0.118629 | 0.019463 | 0.003710 | 0.011169 | 0.048581 | 0.003892 | 0.001066 | 0.004408 | 0.001326 | 0.000515 |
| Day-Care Center | 0.545242 | 0.031723 | 0.210276 | 0.118629 | 0.019463 | 0.003710 | 0.011169 | 0.048581 | 0.003892 | 0.001066 | 0.004408 | 0.001326 | 0.000515 |
| Parking Lot | 0.545242 | 0.031723 | 0.210276 | 0.118629 | 0.019463 | 0.003710 | 0.011169 | 0.048581 | 0.003892 | 0.001066 | 0.004408 | 0.001326 | 0.000515 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0913 | 4.0913 | 1.8000e-004 | 4.0000e-005 | 4.1083 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0913 | 4.0913 | 1.8000e-004 | 4.0000e-005 | 4.1083 |
| NaturalGas Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 23940 | 3.1801 | 1.4000e-004 | 3.0000e-005 | 3.1933 |
| Parking Lot | 6860 | 0.9112 | 4.0000e-005 | 1.0000e-005 | 0.9150 |
| **Total** | | **4.0913** | **1.8000e-004** | **4.0000e-005** | **4.1083** |

### Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 23940 | 3.1801 | 1.4000e-004 | 3.0000e-005 | 3.1933 |
| Parking Lot | 6860 | 0.9112 | 4.0000e-005 | 1.0000e-005 | 0.9150 |
| **Total** | | **4.0913** | **1.8000e-004** | **4.0000e-005** | **4.1083** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| Unmitigated | 0.0215 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 5.0800e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0164 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 4.0000e-005 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **9.6000e-004** | **9.6000e-004** | **0.0000** | **0.0000** | **1.0200e-003** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 5.0800e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0164 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 4.0000e-005 | 0.0000 | 4.9000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.6000e-004 | 9.6000e-004 | 0.0000 | 0.0000 | 1.0200e-003 |
| **Total** | **0.0215** | **0.0000** | **4.9000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **9.6000e-004** | **9.6000e-004** | **0.0000** | **0.0000** | **1.0200e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 0.7122 | 4.2800e-003 | 1.1000e-004 | 0.8511 |
| Unmitigated | 0.7459 | 5.3400e-003 | 1.3000e-004 | 0.9189 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| City Park | 0 / 0.822122 | 0.3822 | 2.0000e-005 | 0.0000 | 0.3838 |
| Day-Care Center | 0.16298 / 0.419092 | 0.3637 | 5.3200e-003 | 1.3000e-004 | 0.5351 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.7459** | **5.3400e-003** | **1.3000e-004** | **0.9189** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| City Park | 0 / 0.822122 | 0.3822 | 2.0000e-005 | 0.0000 | 0.3838 |
| Day-Care Center | 0.130384 / 0.419092 | 0.3299 | 4.2600e-003 | 1.0000e-004 | 0.4672 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.7122** | **4.2800e-003** | **1.0000e-004** | **0.8511** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 1.0150 | 0.0600 | 0.0000 | 2.5145 |
| Unmitigated | 1.0150 | 0.0600 | 0.0000 | 2.5145 |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| City Park | 0.06 | 0.0122 | 7.2000e-004 | 0.0000 | 0.0302 |
| Day-Care Center | 4.94 | 1.0028 | 0.0593 | 0.0000 | 2.4843 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.0150** | **0.0600** | **0.0000** | **2.5145** |

### Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| City Park | 0.06 | 0.0122 | 7.2000e-004 | 0.0000 | 0.0302 |
| Day-Care Center | 4.94 | 1.0028 | 0.0593 | 0.0000 | 2.4843 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.0150** | **0.0600** | **0.0000** | **2.5145** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# HSU Trinity Center Childcare Project

*Natural Gas to Electricity Conversion and Emissions Estimation Tool*

| Total Estimated Natural Gas Usage (kBTU) | Equivalent Electricity Usage (kBtu) | Equivalent Electricity Usage (MWh) |
|---|---|---|
| 54,568 | 54,568 | 16 |

## GHG Emission Calculations

| | PG&E | | $CO_2e$ Conversion Calculations | |
|---|---|---|---|---|
| | Energy Intensity Factor (lbs/MWh) | Emissions (lbs) | Total $CO_2e$ Emissions (lbs) | Total $CO_2e$ Emissions (MT) |
| $CO_2$ | 292.85 | 4,684 | 4,684 | 2 |
| $CH_4$ | 0.013 | 0 | 5 | 0 |
| $N_2O$ | 0.003 | 0 | 14 | 0 |
| | | | **TOTAL GHG EMISSIONS FROM ELECTRICITY** | **2** |

## Notes

- Natural gas usage calculated in CalEEMod.
- Energy intensity factors for PG&E based on 2008 energy intensity factor and RPS targets for 2030.
- Natural gas to electricity conversion assumes an equal energy demand would be supplied by electricity rather than natural gas.
- $CH_4$ conversion assumes 1 lb $CH_4$ is equivalent to 25 lbs $CO_2e$ (consistent with IPCC AR4 [2007], which informs CARB's 2017 Scoping Plan)
- $N_2O$ conversion assumes 1 lb $N_2O$ is equivalent to 298 lbs $CO_2e$ (consistent with IPCC AR4 [2007], which informs CARB's 2017 Scoping Plan)

# Appendix CRS

Cultural Resources Report

# Humboldt State University Trinity Annex Project

## Cultural Resources Technical Report

*prepared for*

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**May 2021**

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# Executive Summary

## Purpose and Scope

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to complete a cultural resources study for the HSU Trinity Annex Project in the City of Arcata, Humboldt County, California (project). This study was completed in support of a planned adaptive reuse/rehabilitation of Trinity Annex, a former hospital complex built in stages between 1943 and 1956. The adaptive reuse project, which would include upgrades, modernization, limited demolition and expansion, is described in more detail in Section 1 ("Introduction") and Section 6 ("Project Impacts Analysis"). This study included a cultural resource records search, Native American consultation, archival research, and a historic resources field survey and evaluation according to the criteria of the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) and as a California Historical Landmark (CHL). The project site is home to the University Annex/Trinity Hospital building, annexed in 1973 to HSU and formerly known as Trinity Hospital.

For purposes of this report, the former hospital facility is referred to as "Trinity Annex."

All activities were conducted in accordance with the requirements of the Public Resources Code (PRC) and California Environmental Quality Act (CEQA) as well as applicable best practices and regulations. HSU is the lead agency under CEQA.

## Dates of Investigation

Rincon conducted a California Historical Resources Information System (CHRIS) records search for the project on October 20, 2017 at the Northwest Information Center (NWIC), located at Sonoma State University. See **Appendix A** for the Records Search Summary. The results of a search of the Sacred Lands Files from the Native American Heritage Commission (NAHC) were received on November 6, 2017. Letters were sent to the identified Native American groups and individuals on November 8, 2017. See **Appendix B** for the Native American Consultation Documentation. An intensive-level historic resource survey of the project site was conducted on November 6, 2017. Archival research at the Humboldt State University Archives and the Eureka Public Library were conducted on November 6-7, 2017. Following the finding of eligibility of the historical resource and modification of project plans, Rincon coordinated with HSU and the design team to identify the primary, secondary, and tertiary contributors and character-defining features of Trinity Annex. Rincon reviewed conceptual and schematic drawings of the proposed project and provided input to facilitate compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties (Secretary's Standards)*, to avoid significant adverse impacts to the historical resource.

Following completion of the 50% Preliminary Design phase, Rincon again analyzed the architectural plans for conformance with the *Secretary's Standards*. Those findings, as well as an impacts analysis, are documented in this technical study.

## Summary of Findings

Background record search at the NWIC identified six (6) previous studies within a 0.5-mile radius of the project site. Background research further identified six (6) previously recorded cultural

resources. However, none of these previous studies and recorded resources are within the project site.

The intensive-level historic resource survey and archival research identified the former Trinity Hospital building constructed at the project site in 1944. The property is listed on the City of Arcata's "Noteworthy Structures" list (Kaplan Chen Kaplan 2005). As a result of the current evaluation, the Trinity Annex appears eligible for individual listing in the NRHP and CRHR at the local level of significance. The property is eligible under Criteria A/1, for its association with broad patterns of development, as the first purpose-built hospital constructed in Arcata, and under Criteria C/3, as a distinctive, intact expression of the Colonial Revival style applied to an institutional property. The period of significance for Criteria A/1 is 1944 to 1969, marking the beginning and ending of the Sisters' operation of the hospital. The period of significance for Criteria C/3 is 1944, the year of completion of the hospital.

As such, the property qualifies as an historical resource for the purposes of CEQA. The period of significance spans the year of completion of the hospital, in 1944 to 1969. The contributing components of the property include the Main Block, 1948 Addition, and 1956 Expansion; the contributing features of these buildings include their overall plan, one- to two-story massing, board siding, the central pavilion and the cupola, and the typical wood-frame windows found on the complex. The property was recorded and evaluated under the current study on a Department of Parks and Recreation (DPR) 523 form. See **Appendix C** for the Resource Record.

Rincon's analysis of the adaptive reuse plans for Trinity Annex shows that the proposed project appears to be in conformance with the *Secretary's Standards for Rehabilitation* and the National Park Service guidance for exterior additions. The project would not be expected to have a substantial adverse impact on Trinity Annex. See **Appendix D** for the complete 3D renderings and 50% Preliminary Design drawings.

# Recommendations

No archaeological or tribal cultural resources were identified within the project site; thus, the project would result in no impact to archaeological or tribal cultural resources. Although Rincon recommends no further archaeological resources work for the proposed project at this time, the following measures should be implemented to reduce potential impacts to unanticipated archaeological and tribal cultural resources: cease all construction work in the event that unanticipated buried cultural deposits are encountered and contact a qualified archaeologist (Mitigation CR-1); follow Native American consultation procedures if a previously unidentified cultural resource is determine to be of Native American origin by the qualified archaeologist (CR-2); and contact the Humboldt County Coroner if human remains are discovered (CR-3).

As discussed above, the former Trinity Hospital is a historical resource for the purposes of CEQA. Rincon's analysis of the adaptive reuse plans for Trinity Annex shows that the proposed project appears to be in conformance with the *Secretary's Standards for Rehabilitation* and the National Park Service guidance for exterior additions. The project would not be expected to have a substantial adverse impact on Trinity Annex. One Continuing Best Practice (CBP), for ongoing preservation plan review as the plans evolve and construction begins, is recommended to facilitate ongoing compliance with the *Secretary's Standards*.

# 1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to complete a cultural resources study for the HSU Trinity Annex Project in the City of Arcata, Humboldt County, California (project). This study was completed in support of planned upgrades, modernization, and expansion of the facility, described in more detail in Section 1 ("Introduction") and Section 6 ("Project Impacts Analysis"). This study included a cultural resource records search, Native American consultation, archival research, and a historic resources field survey and evaluation according to the criteria of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR) and as a California Historical Landmark (CHL). The project site is home to the University Annex/Trinity Hospital building, a complex of interconnected buildings constructed between 1943 and 1956. For purposes of this report, the buildings and additions comprising the hospital complex are referred to collectively as the "Trinity Annex."

## 1.1 Project Description

Located on the HSU campus, the Trinity Annex complex occupies a 1.44-acre site, with adjacent hardscaping and landscaping. The site is bounded by B Street and C Street, and 13th Street and 14th Street. In 1969, the HSU Auxiliary purchased the site, and ownership of the site was transferred to HSU in April 2018. HSU has operated Trinity Annex for a variety of functions, including offices, storage, and laboratory space. The Trinity Annex is no longer in active use, and much of the complex is in poor condition. Figure 1 shows the regional location of the project. Figure 2 shows the project site.

Purpose-built as Arcata's first hospital, the Trinity Annex complex was constructed, then expanded in phases, between 1943 and 1956. The complex buildings display similar design elements and materials, but the focal point of the Colonial Revival design is limited to the façade. Overall, Trinity Annex consists of the three connected components:

1. **Main Block, 1943-1944**
    a. This includes the hospital's signature elevation along the façade, with its Colonial Revival-style architecture. The rear elevation, which lacks the Colonial Revival styling and presents a more utilitarian design, contains all the functional spaces and wards of the facility, including the kitchen, laundry room, boiler room, and garage, as well as a Chapel and Sisters' Quarters, which were relocated to the rear elevation of the hospital at the time of its construction. Many of these facilities are stand-alone buildings, connected to the Main Block through covered breezeways and connection points. The Main Block occupies the western portion of the parcel.
2. **The 1948 Addition**
    a. This is a small addition to the hospital's rear elevation, with an additional hospital ward. The 1948 Addition extends east from the south wing of the Main Block.
3. **The 1956 Expansion**
    a. This is a small expansion of the south wing of the main building; this rectangular extension mirrors the scale and general design treatment of the Main Block.

Figure 1 Project Vicinity

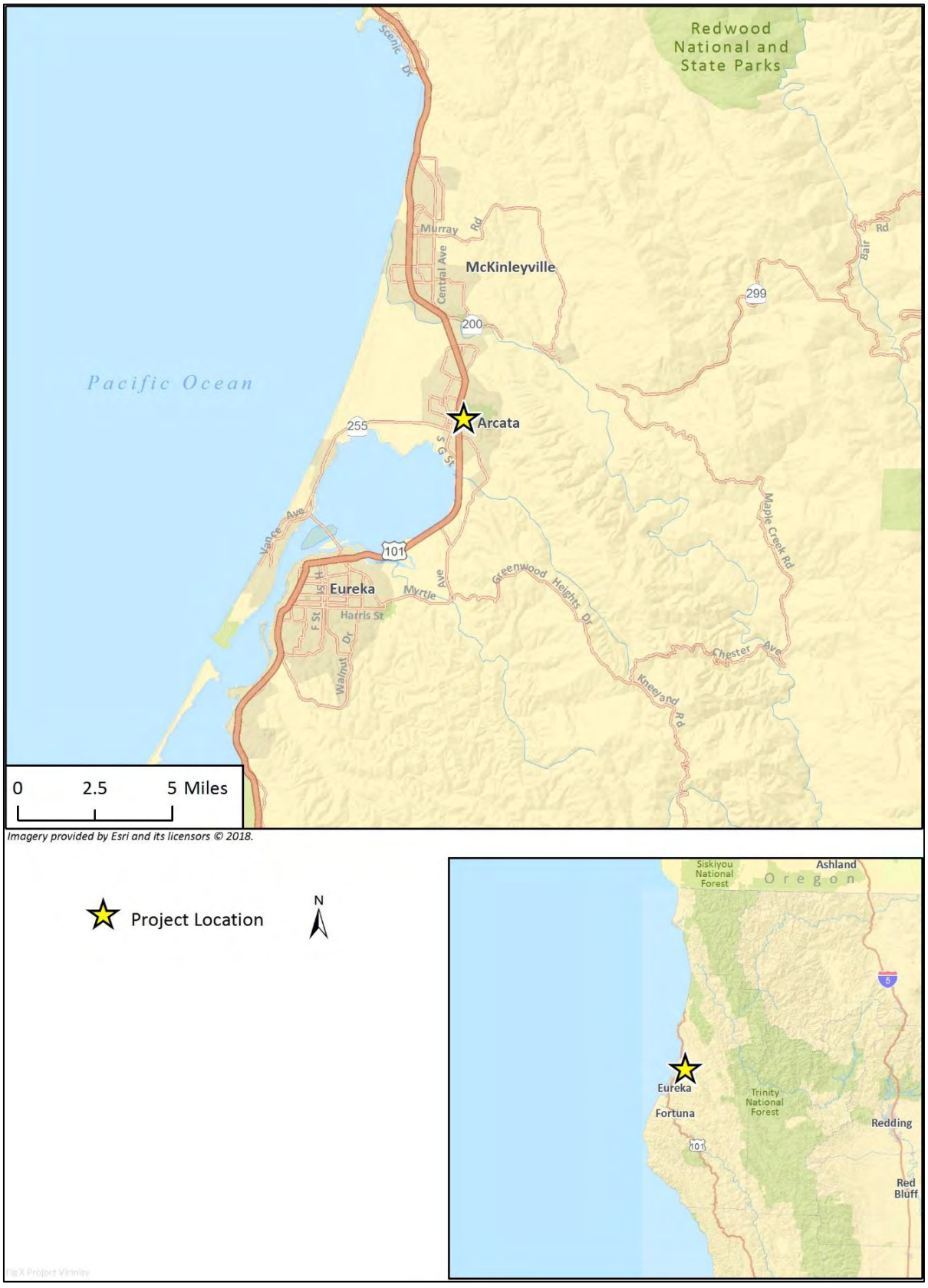


Figure 2 Project Location

*Imagery provided by Google and its licensors © 2018.*

Fig X Project Location

An earlier iteration of a proposed project called for demolition of Trinity Annex. Upon completion of a historic resources evaluation, Trinity Annex was found individually eligible for listing in the NRHP and CRHR. Therefore, the building's planned demolition would result in a significant adverse impact under CEQA. Accordingly, a focused Environmental Impact Report (EIR) was completed to further evaluate impacts to historical resources, as well as aesthetics. HSU distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on June 26, 2018 and ending on July 25, 2018.

Given Trinity Annex's historic resource status, the proposed project was re-envisioned as an adaptive reuse/rehabilitation rather than demolition. Project architects worked with Rincon preservation planners to identify the primary, secondary, and tertiary character-defining components and features of the complex, in order to proactively plan for the preservation of the site and retention of its historic integrity.

The updated project would involve the adaptive reuse/rehabilitation and modernization of Trinity Annex as a Childcare Center (CC) and Child Development Lab (CDL). To accommodate the new use, a portion of the rear elevation of the Main Block, including the small 1948 Addition, would be demolished (See Figure 6). The project would house programs currently provided on the main HSU campus. The proposed building complex would measure 13,600 square feet and rise up to 25 feet. Approximately 8,100 square feet would be demolished, and approximately 10,900 square feet of the existing building would remain. An addition measuring approximately 2,700 square feet would be built on the eastern elevation of the adaptively reused Trinity Annex. The new building footprint and layout would provide the space required to accommodate the CDL classroom.

The Main Block would be renovated and adaptively reused. Those key historically significant, character-defining features of the building would be retained, in particular all those reflecting its Colonial Revival architectural style. Many notable building features, such as wood columns, pilasters, and window surrounds, would be retained and repaired, or replaced in-kind as needed. Other features, such as original windows in places, would be replaced in-kind to match existing in appearance and materials, and the existing size and locations of wall openings would not be altered. Construction would also incorporate abatement of hazardous materials. The wood siding, currently covered with lead-based paint, would be stripped according to the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, using the gentlest means possible, and repainted in a compatible color palette. The roof of the existing hospital building would be removed, repaired, and re-sheathed in a similar shingle roofing material.

The adaptively reused Trinity Annex would be used for children's classrooms, faculty and staff offices, an observation room, educational space, and support spaces, all housed on the first floor. The second floor and basement would be used for storage and utilities equipment housing. Six new fenced play areas with play structures would be placed around the building to provide separation for each age group of the CC and CDL. The project would also include a small garden adjacent to the parking area and a bus stop at the northeastern portion of the project site. Covered walkways would be constructed along the new addition to the Annex and the western frontage of the Annex to provide shading for the proposed play areas that would surround the building. On-site vegetation would be removed, and 38 trees would be planted on site. A majority of new trees would be planted in the perimeter of the site, partially screening views of on-site features, such as the parking lot, play areas, and remodeled building.

The proposed site plan is presented in Figure 3; the proposed landscaping plan is presented in Figure 4. Additional project detail and drawings are provided in Section 6 ("Project Impacts Analysis").

Figure 3 Proposed Site Plan, with Areas Slated for Retention and Removal

Figure 4 Proposed Landscaping Site Plan

*Source: PBK Architects, Inc. 2021.*

# 2 Regulatory Setting

This section describes the applicable federal and state laws, regulations, and standards governing cultural resources that were considered in the preparation of this study.

This evaluation did not include local level criteria. Per California State Government Code Section 53094, the properties of California school districts, including the CSU system, are statutorily exempt from most provisions of local ordinances, including landmark designation. California State Government Code, Section 53094 permits "the governing board of a school district, by vote of two-thirds of its members... [to] render a city or county zoning ordinance inapplicable to a proposed use of property by such school district." The legislative history of Section 53094 indicates that "the Legislature deliberately accorded different treatment to school districts than to other local agencies because it was well aware that school construction was subject to almost complete control by the state…. The Legislature accordingly provided in section 53094 that school districts, as opposed to other local agencies, should retain the right to exempt themselves from local zoning ordinances (Santa Clara, supra, 22 Cal.App.3d at p. 158 fn. 3.)."

## 2.1 Federal

### 2.1.1 National Register of Historic Places

The National Register of Historic Places (NRHP) was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (CFR 36 CFR 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. A property is eligible for the NRHP if it:

**Criterion A** Is associated with events that have made a significant contribution to the broad patterns of our history; or

**Criterion B** Is associated with the lives of persons significant in our past; or

**Criterion C** Embodies the distinctive characteristics of a type, period, or method of installation, or represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or

**Criterion D** Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting these criteria, a property must retain historic integrity, which is defined in National Register Bulletin 15 as the "ability of a property to convey its significance" (National Park Service 1990). In order to assess integrity, the National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity.

To retain integrity, a property must possess several, if not all, of these seven qualities, which are defined in the following manner in National Register Bulletin 15:

1. **Location.** The place where the historic property was constructed or the place where the historic event occurred.
2. **Design.** The combination of elements that create the form, plan, space, structure, and style of a property.
3. **Setting.** The physical environment of a historic property.
4. **Materials** are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5. **Workmanship.** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
6. **Feeling.** A property's expression of the aesthetic or historic sense of a particular period of time.
7. **Association.** The direct link between an important historic event or person and a historic property.

Some aspects of integrity may be accorded more weight than others, depending on the type of resource being evaluated and the applicable eligibility criteria. Integrity can be assessed only after it has been concluded that a resource is significant.

### 2.1.2 Secretary of the Interior's Standards for Rehabilitation

In accordance with the National Park Service and CEQA Guidelines, projects that comply with the *Secretary's Standards for the Treatment of Historic Properties* and *Secretary's Standards for Rehabilitation* (*Secretary's Standards*) are projects that retain the historic integrity of the resource. According to CEQA Guidelines, a project that complies with the *Secretary's Standards* is generally considered to be a project that will not cause a significant adverse impact to a historical resource.

The goal of the *Secretary's Standards* is to outline treatment approaches that allow for the retention of and/or sensitive changes to the distinctive materials and features that lend a historical resource its significance. The *Secretary's Standards* and Guidelines offer general recommendations for preserving, maintaining, repairing, and replacing historical materials and features, as well as designing new additions or making alterations. These standards also provide guidance on new construction adjacent to historic districts and properties, in order to ensure that there are no indirect adverse impacts to historic properties.

Rehabilitation is the most flexible treatment approach of the *Secretary's Standards*. The ten *Secretary's Standards for Rehabilitation* are:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The *Secretary's Standards and Guidelines* offer general recommendations for preserving, maintaining, repairing, and replacing historical materials and features, as well as designing new additions or making alterations. The *Secretary's Standards for Rehabilitation* also provide guidance on new construction adjacent to historic districts and properties, in order to ensure that there are no adverse indirect impacts to integrity as a result of a change in setting. Applying the *Secretary's Standards* to new construction adjacent to historic resources helps ensure avoidance of indirect impacts and retention of the setting and feeling of the historic resource and its surrounding environment.

*Secretary's Standards* compliance begins with the identification and documentation of the "character-defining," or historically significant, features of the historical resource. According to Preservation Brief 17, *Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character*, there is a three-step process to identifying character-defining features (Nelson, 1982). Step 1 involves assessing the physical aspects of the building exterior as a whole, including its setting, shape and massing, orientation, roof and roof features, projections, and openings. Step 2 looks at the building more closely—at materials, trim, secondary features, and craftsmanship. Step 3 encompasses the interior, including individual spaces, relations or sequences of spaces (floor plan), surface finishes and materials, exposed structure, and interior features and details. Alterations and replacement of character-defining features over time can impair a historic property's integrity and result in a loss of historic status. Therefore, to ensure that a historic property remains eligible after implementation of projects, character-defining features should be identified and preserved.

## 2.2 State

The policies of the NHPA are implemented at the state level by the California Office of Historic Preservation, a division of the California Department of Parks and Recreation. The Office of Historic Preservation is also tasked with carrying out the duties described in the Public Resources Code (PRC) and maintaining the California Historic Resources Inventory and CRHR. The state-level regulatory

framework also includes CEQA, which requires the identification and mitigation of substantial adverse impacts that may affect the significance of eligible historical and archeological resources.

### 2.2.1 California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing on the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included on the CRHR.

According to PRC Section 5024.1(c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

**Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage

**Criterion 2:** It is associated with the lives of persons important in our past

**Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

**Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history

Properties that do not retain sufficient integrity for NRHP listing can still qualify for listing in the CRHR. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

### 2.2.2 California Environmental Quality Act (CEQA)

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (PRC Section 21084.1). Answering this question is a two-part process: first, the determination must be made as to whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential "substantial adverse change in the significance" of the resource.

According to CEQA Guidelines Section 15064.5, historic resources are:

1. A resource listed in, or formally determined eligible for listing in, the California Register of Historical Resources (PRC 5024.1, Title 14 CCR, Section 4850 et seq);
2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historic resources survey meeting the requirements of PRC Section 5024.1(g);
3. Any building, structure, object, site, or district that the lead agency determines eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if

the resource meets the criteria for listing on the California Register (as defined in PRC Section 5024.1, Title 14 CCR, Section 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined in previous section) does not meet NRHP criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the California Register or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be an historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines, Section 15064.5(b).

CEQA Guidelines specify that "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" or eligibility for inclusion in the NRHR, CRHR, or local register. In addition, pursuant to CEQA Guidelines Section 15126.2, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

In terms of indirect impacts, according to CEQA Guidelines Section 15378, study of a project under CEQA requires consideration of "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition, in 2015, California Assembly Bill 52 (AB 52) was enacted. AB52 expands CEQA by defining a new resource category, "tribal cultural resources," and establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). AB52 further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC

Section 21074 (a)(1)(A) and (B) define tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying this criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

### 2.2.3 Public Resources Code Sections 5024 and 5024.5

The California State Legislature enacted PRC Section 5024 and 5024.5 as part of an effort to establish a state-level program to identify and preserve historical resources. These PRC provisions require state agencies to take a number of actions to ensure the identification and preservation of state-owned historical resources in their jurisdiction. These actions include evaluating resources for NRHP and CHL eligibility, maintaining an inventory of eligible and designated resources, and managing historical resources according to best preservation practice, in order to retain their historic integrity. (PRC Sections 5024 and 5024.5 were enacted prior to the establishment of the CRHR, therefore these requirements do not apply to potentially CRHR eligible or designated resources.)

According to PRC Section 5024(g), a state agency is defined as any "agency, department, division, commission, board, bureau, officer, or other authority of the State of California." This includes campuses in the California State University system. Under PRC Section 5024, a qualifying historical resource includes properties that are listed or eligible for listing in the NRHP or as a CHL. A property may be eligible for designation as a CHL if it represents the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California). In addition, a property may be CHL eligible if it is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

PRC Sections 5024 and 5024.5 require that state agencies provide notification and documentation to SHPO on any project having potential to affect a historical resource. These code sections are designed to give SHPO the opportunity to review and comment on historical resource determinations and proposed projects that might affect such historical resources.

# 3 Cultural and Historic Setting

## 3.1 Prehistory

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of northern California (Jones and Klar 2007; Moratto 1984). The HSU Trinity Annex project site lies within the Northwest California archaeological region (Hildebrandt 2007). According to Hildebrandt (2007), the prehistoric chronology for the area can be generally divided into six periods: the Pleistocene- Holocene transition (11,500 to 8,000 B.C.), the Early Holocene (8,000 to 5,000 B.C.), the Middle Holocene (5,000 to 2,000 B.C.), and the Late Holocene (Post 2,000 B.C.).

### 3.1.1 Pleistocene-Holocene Transition (ca. 11,500 to 8,000 B.C.)

Very little is known about this period in the Northwest region. Limited finds dating to the Pleistocene-Holocene transition have been made in the Northwest Coast region, including Post Pattern sites near Clear Lake and Cache Creek in Lake County and isolated finds in Mendocino County and at Bodega Head (Hildebrandt et al. 2007). Post Pattern assemblages typically include fluted (Clovis-like) projectile points.

### 3.1.2 Early Holocene (8,000 to 5,000 B.C.)

The Early Holocene in this area is primarily categorized by the Borax Lake Pattern, which has been extensively studied throughout the interior of Northwest California (Hildebrandt 2007). This pattern is categorized by large, wide-stemmed projectile points, serrated bifaces, ovoid flake tools, handstones, millingslabs, and edge-flaked spalls and is found in a variety of contexts. Its material culture and the lack of evidence of storage, the Borax Lake Pattern suggests a mobile forager strategy. Evidence for this period in coastal areas is lacking. Only one clear Borax Lake Pattern site has been identified near the ocean, a hunting camp apparently focused on hunting Roosevelt elk, located approximately two kilometers from the coast.

### 3.1.3 Middle Holocene (5,000 to 2,000 B.C.)

The Middle Holocene is poorly represented throughout northwestern California, particularly the early part of the period (Hildebrandt 2007). North of Cape Mendocino, no occupation evidence has been identified until after 3,000 B.C. when the Mendocino Pattern becomes apparent. Common artifacts attributed to this pattern include various side-notched, corner-notched, and concave-base projectile points, handstones and millingslabs, and several types of flake tools.

### 3.1.4 Late Holocene (Post 2,000 B.C.)

The Late Holocene in the project vicinity demonstrates a continuation of the Mendocino Pattern of the Middle Holocene, though by A.D. 500, a major change occurs represented by the emergence of the Gunther Pattern, a precursor to the ethnographic cultures of the area (Hildebrandt 2007). The Gunther Pattern is represented by Gunther barbed projectile points, and concave-based points used on harpoons, ground and polished stone artifacts, and artistic items. Sites are often complex, with defined house areas, cemeteries, storage, and midden areas.

## 3.2 Ethnographic Background

The project site is situated within the traditional territory of the Wiyot (Elsasser 1978). Wiyot territory extends from Little River south to the Bear River Mountains and east generally to the first mountain range beyond the coastal plain and was located almost entirely within the redwood belt. Wiyot subsistence was especially focused on the harvesting of shellfish, sea mammal hunting, and whale scavenging. The primary source of animal protein was salmon, fished from both rivers and the ocean. Land mammals, including deer, elk, wolf, fox, and bear, were also hunted. Acorn use by the Wiyot has been debated, with some arguing that it was not an important plant resource, primarily due to the scarcity of oak in redwood forests, whiles others have indicated the prevalence of pestles at some archaeological sites and the possibility of trade for acorns with other groups or logistical forays into oak-rich areas (Elsasser 1978). The Wiyot placed a much lower emphasis on wealth than neighboring groups, however, similar to the neighboring Yurok, the Wiyot used dentalium money in trade and exchange.

Wiyot villages were made up of rectangular dwellings of split redwood planks and included a sweathouse (Elsasser 1978). Villages averaged six to nine houses and were typically located along bays, lagoons, or the mouths of streams (Kroeber 1925). The Wiyot are not known to have any formal organization, though social stratification based on wealth was present (Elsasser 1978). Wiyot ceremonies centered primarily on the “World Renewal” and “Big Time,” and involved a series of dances. Shamans were typically women and served their primary purpose of curing diseases (Kroeber 1925). The Wiyot, like most Native American groups, were heavily impacted by the arrival of white settlers. Major reductions in their population began in 1852, when American settlement in the area began increasing dramatically. Many settlers killed Wiyot peoples for supposed transgressions, the worst event occurring in 1860 on Gunther Island where an estimated 60 to 250 people were massacred (Elsasser 1978).

## 3.3 History

Post-European contact history for California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present).

### 3.3.1 Spanish Period (1769 - 1822)

In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. In addition to the missions, four presidios and three pueblos (towns) were established throughout the state (State Lands Commission 1982).

During this period, Spain also deeded ranchos to prominent citizens and soldiers, though very few in comparison to the subsequent Mexican Period. The missions were responsible for administrating to the local Indians as well as converting the population to Christianity (Engelhardt 1927b). The influx of European settlers brought the local Native American population in contact with European diseases which they had no immunity against, resulting in a catastrophic reduction in native populations throughout the state including the Wiyot in the Humboldt Bay region (McCawley 1996).

### 3.3.2 Mexican Period (1822 - 1848)

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. The Mexican Period ended in early January 1848, following several decisive battles against the United States. On January 10, leaders of the Pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to US Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga.

### 3.3.3 American Period (1848 - Present)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, which included California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of southern California continued to increase during the early American Period. Many ranchos in the county were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns.

The discovery of gold in northern California in 1848 led to the California Gold Rush (Guinn 1977; Workman 1935:26) and California's population grew exponentially. During this time, San Francisco became California's first true city, growing from a population of 812 to 25,000 in only a few years (Rolle 2003). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to pour into the state, particularly after the completion of the transcontinental railroad in 1869. By the 1880s, the railroads had established networks throughout northern California, resulting in fast and affordable shipment of goods, as well as a means to transport new residents to the booming region (Dumke 1944).

### 3.3.4 City of Arcata

Euro-American settlement in the Humboldt Bay area began in the 1850s, spurred by the discovery of gold in the Trinity and Klamath River regions. As a supply center for the surrounding mining districts, Arcata (first known as Union Town or Union) was selected as the townsite for the Union Company in 1850. The construction of a wharf at Arcata Bay followed shortly after, and the town name officially changed to Arcata in 1860. Lumber emerged as the region's primary industry, sustaining the economy of Arcata and other Northern California towns from their founding well into the mid-twentieth century.

During the 1880s, following the establishment of the transcontinental railroad, a building boom took place. In this period, the Union Water Company and fire department were established in 1884. A local newspaper, *Arcata Union,* was also founded in 1886 (City of Arcata 2008; Guerra McBane LLC 2012).

By the turn of the century, though, Arcata remained a small, rural town surrounded by forests. The town, along with the neighboring community of Eureka, served as the population and business centers of California's still-remote north coast. In the early twentieth century, the Northwestern Pacific Railroad linked Arcata to San Francisco in 1914. The completion of the Redwood Highway in 1926 also contributed to the growth of the town, by greatly easing access to and from the area, and tourism expanded in the early to mid twentieth century as a result. During the Great Depression, relief funds from national recovery programs such as the Works Progress Administration (WPA)

brought renewed construction and infrastructure and civic improvements. In 1937, Arcata acquired the Union Water Company and with new construction created a municipal water supply system that same year (City of Arcata 2008). A few years later, however, during World War II as Trinity Hospital was constructed, the War Department had placed restrictions on building permits, in order to conserve materials by limiting new construction; the fact that the hospital's construction proceeded reflects how urgently it was needed in Arcata at the time.

In the immediate postwar period, Arcata (as did so many other communities throughout California) experienced rapid expansion in residential settlement as well as industrial development. Between 1940 and 1950, the town's population more than doubled, growing from 1,800 in 1940 to over 3,700 by 1950. At this time, dairy and lumber represented the two largest industries in Arcata, employing over 2,000 people combined. In 1947, in an expansion of the lumber industry that reflected one of Arcata's largest postwar construction projects, the Van-De-Nor Lumber Company constructed a sawmill and manufacturing plant. During the same year, the California Barrel Company added two new warehouses; Sound Lumber Company built a one-story lumber mill; and Coast Redwood constructed a workshop.

In 1946, in an effort to control the wave of postwar development already apparent at the time, the Arcata Planning Commission adopted a zoning plan dividing the City into five separate zones. This approach reflected postwar planning in cities throughout the United States, and in Arcata, it helped create buffers and separation between residential neighborhoods and booming industrial concerns. In the postwar years, Arcata's industry boomed, as mass production became the norm to meet consumer demand. Neighborhoods also flourished, as affordable, single-family residences constructed on suburban tracts, designed in the rambling Ranch House style, emerged throughout Arcata.

### 3.3.5 Humboldt State University (HSU)

In the early twentieth century, California's nascent communities and towns expanded quickly enough that many areas faced teacher shortages. Northern California and Humboldt County, which were still remote at the time, were no exception in this regard.

In response, in 1913, the State Legislature authorized funds for the development of a north coast-based teachers' college. Arcata was chosen as the site for the new facility, beating out its neighbor, Eureka. The town's proposal was prepared by the Chamber of Commerce, which included early leaders of the area such as William Preston, J.F. Benton, W.W. Stone, J.J. Krohn, Henry Brizard, and George Burchard (Kaplan and Kaplan, 2005). In their proposal, the team pledged seed money of $12,000, a two-year lease to the Arcata Grammar School, collaboration with Arcata High School faculty and facilities, as well as the use of 20 acres of land for an agricultural experiment station (Kaplan and Kaplan, 2005). The state accepted this proposal, and a date of 1914 was proposed for the college's opening. As plans for the new facility moved forward, donations of land for the campus were made by William Preston, a pioneering resident of the region, who donated 25 acres, and the Union Water Company, which donated over 25 acres.

Initially known as the Humboldt State Normal School, the college focused on the training of teachers. The initial site of the new school was 11$^{th}$ and M Streets, which was also home of the Arcata Grammar School at the time. Following the college's opening in 1914, with attendance rising, the state legislature appropriated another $245,000 for a new administration building for the school. World War I delayed construction, however, and construction finally commenced for the new building in the early 1920s. The decade brought other changes, as well, including a name

change to the Humboldt State Teachers College and Junior College. With this change, the college began offering a four-year teacher training course as well as a two-year associate degree program.

The 1920s signaled continuing growth and change for the school. Early buildings on the campus had been temporary, single-story wood-frame buildings. In 1922, the first permanent building, known as the "Main Building" (later renamed Founder's Hall) was constructed. Through the late 1920s, the college transitioned from a teachers' training school to a four-year academic college. Teacher training remained a focal point in the curriculum, but in 1926 and 1937, new Bachelor of Arts programs and a Bachelor of Science degree in education were added, respectively.

The interwar years represented an era of transition for the university. College enrollment fluctuated from 400 in 1939, to about 150 by 1945. A second growth period for the college ensued after World War II. The return of G.I.s and the federal G.I. Bill, combined with the state's rapidly expanding population, spurred enrollment and precipitated the need for additional housing and classroom development. During this time, the number of students rose from 255 at the end of war in 1945 to 650 students during the fall of 1946, with the faculty growing from 27 to 63 full-time instructors (Kaplan Chen Kaplan 2005; Guerra McBane LLC 2012).

The school underwent a construction boom in the 1950s and 1960s as demand continued to grow. New buildings constructed over the course of the decade included additional science buildings, an Education and Psychology Building, Forestry Building, library, and new student activities center. This ambitious building program also required the university to acquire new properties:

> [B]y mid-century residential neighborhoods had grown up to the campus' borders, so when land was acquired for expansion, a street grid was already in place. Since the land acquisition was incremental, and construction happening at a fast pace, the underlying street form often remained as did a number of houses which were reconverted to support institutional uses (Kaplan Chen Kaplan 2005).

New buildings continued to be added through the 1970s and 1980s, in addition to new athletic and other education facilities. As of 2020, the campus spans 144 acres, with 90 buildings serving nearly 8,000 students each year.

Figure 5 Humboldt State University, circa 1975

# 4 Methods

## 4.1 Records Search

Rincon conducted a review of the California Historical Resources Information System (CHRIS) on October 20, 2017 at the Northwest Information Center (NWIC) to identify previously conducted cultural studies and previously recorded cultural resources within and a 0.5-mile radius around the HSU Trinity Annex project site. The CHRIS search included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. Rincon received the results of the records search on October 20, 2017. See **Appendix A** for the Record Search Results Summary.

### 4.1.1 Previous Cultural Resources Studies

The NWIC identified three previous studies within a 0.5-mile radius of the project site (Table 1). None of these cover any portions of the project site.

Table 1 Previous Cultural Resource Studies within 0.5-miles of the Project Site

| Report Number | Author | Year | Title | Relationship to Project Site |
|---|---|---|---|---|
| S-000130 | Gary Berg | 1975 | Archaeological Impacts Evaluation: Seventh and Union, Arcata. City of Arcata Road Widening. | Outside |
| S-000205 | William G. Ropp and Katherine Flynn | 1975 | Archaeological Impact Evaluation: Results of Subsurface Sampling. City of Arcata Road Widening. | Outside |
| S-009097 | Darlena K. Blucher | 1975 | Report of an Archaeological Field Survey of the Old Arcata Road for the Department of Public Works, County of Humboldt | Outside |
| S-014104 | Brad A. Paula and James L. Able | 1992 | Archaeological and Historical Resources Survey and Impact Assessment McDowell Project: A Supplemental Report for a Timber Harvesting Plan | Outside |
| S-040129 | Mark Andre | 1999 | City of Arcata-NTMP: Archaeological Addendum for Timber Operations on Non-Federal Lands in California | Outside |
| S-046914 | Holly D. Moore | 2015 | Section 106 Review: Proposed AT&T Mobility LLC Telecommunications Tower AT&T Site CCL00921 – Humboldt State University | Outside |

### 4.1.2 Previously Recorded Cultural Resources

The NWIC records search identified six (6) previously recorded cultural resources (Table 2). None of these are within the project site.

Table 2 Previously Recorded Resources within 0.5-mile of the Project Site

| Primary Number | Trinomial | Resource Type | Description | Recorder(s) and Year(s) | NRHP/ CRHR Status | Relationship to APE |
|---|---|---|---|---|---|---|
| P-12-000101 | CA-HUM-43 | Prehistoric site | None provided | Loud 1918 | Not evaluated | Outside |
| P-12-000363 | CA-HUM-351/H | Prehistoric/ historic site | Multicomponent prehistoric habitation site; historic domestic refuse and structural materials | Gary Berg 1975; Janet P. Eidsness 1988 | Eligible | Outside |
| P-12-001305 | N/A | Historic structure | Campbell Creek Dam | Mark Andre 1999 | Not evaluated | Outside |
| P-12-001306 | N/A | Historic | Campbell Creek Corduroy Road remains | Mark Andre 1999 | Not evaluated | Outside |
| P-12-002595 | N/A | Historic building | University Center, Humboldt State University | Britta F. Tonn 2013 | Ineligible | Outside |
| P-12-003526 | N/A | Historic building, element of district | Arcata Fire Station – Wyatt Building | William C. Rich 2014 | Eligible | Outside |

### 4.1.3 Previous Historic Resources Surveys

Additional background research revealed that the project site includes one built-environment property, the HSU Trinity Annex. Trinity Annex has been previously identified and recorded on several occasions. The property is included in the City of Arcata's Noteworthy Structures list, which lists properties that may be eligible for Historic Landmark designation (City of Arcata Municipal Code 9.100.020). In 2005, Kaplan Chen Kaplan conducted a historic resources survey of the HSU campus, which included fieldwork, research, and preparation of a technical report (Kaplan Chen Kaplan 2005). The study confirmed the subject property's status as an Arcata "Noteworthy Structure" but concluded that it did not appear eligible for the NRHP or CRHR. (It is worth noting that this 2005 evaluation did not include a due-diligence, intensive-level evaluation incorporating NRHP and CRHR designation criteria.) In 2006, the property was recorded on a Primary Record of the Department of Parks and Recreation (DPR) Series 523 form by the College of Redwood, in Eureka, for the Bayview Neighborhood Reconnaissance Survey. The survey identified the property as having a "commanding presence in the neighborhood" (College of the Redwoods 2006a, 2006b). This recordation, however, did not include an evaluation of the property according to NRHP and CRHR designation criteria.

## 4.2 Field Survey

Rincon Senior Architectural Historian Steven Treffers, M.H.P., conducted an intensive historic architectural resource field survey of the project site on November 6, 2017. The field survey of the property consisted of a visual inspection of all built environment features at the project site, including buildings, structures, and associated features to assess their overall condition and

integrity, and to identify and document any potential character-defining features. Mr. Treffers documented the field survey using field notes and digital photographs. Copies of the field notes and digital photographs from both surveys are on file with Rincon's Oakland office. Because the project site is occupied entirely by structures, pavement, and landscaping, an archaeological survey was not completed.

## 4.3 Archival Research

Property-specific archival research was completed in person and online between October and December 2017. Research methodology focused on the review of a variety of primary and secondary source materials relating to the history and development of the property. Sources included, but were not limited to, historical maps, aerial photographs, plans and drawings, and written histories of the area. The following repositories, publications, and individuals were contacted and visited to identify known historical land uses and the locations of research materials pertinent to the project site:

- Humboldt Room, Humboldt State University in Arcata, California
- Eureka Public Library, Redwood Room in Eureka, California
- Humboldt County Historical Society Archives in Eureka, California
- Sanborn Fire Insurance Company Maps
- Historic United States Geological Survey topographic maps
- Historic archives of The Times-Standard and Arcata Union
- The Arcata Historic Context Statement of 2012 by Guerra-McBane
- Bayview Reconnaissance Survey of 2006 by the College of Redwoods in Eureka
- The City of Arcata General Plan, Historic Preservation Element, 2008
- Digital database of the National Register of Historic Places, National Park Service
- Online Archive of California
- Calisphere, University of California

## 4.4 Native American Scoping

Rincon contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search of the project site. The purpose of the SLF search is to identify lands or resources important to Native Americans within or near the project site that could be impacted by project development. The NAHC responded on November 6, 2017, stating that the SLF search was returned with negative results. However, the NAHC noted that the absence of specific site information in the SLF does not negate the possibility of important cultural resources existing within the project area. The NAHC additionally provided a list of Native American individuals and tribal organizations that may have knowledge of cultural resources in the area. Letters were sent to the five Native American individuals identified by the NAHC on November 8, 2017. Rachel Sundberg, Tribal Historic Preservation Officer (THPO) for the Cher-Ae Heights Indian Community of the Trinidad Rancheria, responded on December 8, 2017 and stated that the project site is outside of their area of geographic concern and thus they have no information to provide or interest in the project. At the time of completion of this report, no additional responses had been received. See **Appendix B** for Native American Consultation Documentation.

# 5 Evaluation

## 5.1 Archaeological Resources

The project site is within a developed, urban context and consists of the buildings and structures on the Humboldt State Trinity Annex property. Two archaeological sites have been recorded within a 0.5-mile radius of the project site, one located 0.2 miles away and the other 0.3 miles away. No archaeological resources have been recorded within the project site, though the project site is developed and an archaeological survey was not completed. Although the project site has been disturbed by past construction, there remains a limited potential to identify subsurface archaeological resources.

## 5.2 Built Environment/Historical Resources

The intensive-level architectural survey on November 6, 2017 identified one built environment resource, the former Trinity Hospital building at the Trinity Annex project site. The following provides a description of the building at the site, its construction chronology, and an evaluation of the building's eligibility for listing in the NRHP/CRHR and as a CHL.

### 5.2.1 Architectural Description

As noted previously, Trinity Annex consists of a complex of separate but interconnected buildings, all serving the diverse functions and needs of the hospital. The complex overall is in poor condition. Purpose-built as Arcata's first hospital, the Trinity Annex complex was constructed, then expanded in phases, between 1943 and 1956. The complex buildings display similar design elements and materials, but the focal point of the Colonial Revival design is limited to the façade. Overall, Trinity Annex consists of the three connected components:

1. **Main Block, 1943-1944**
    a. This includes the hospital's signature elevation along the façade, with its Colonial Revival-style architecture. The rear elevation, which lacks the Colonial Revival styling and presents a more utilitarian design, contains all the functional spaces and wards of the facility, including the kitchen, laundry room, boiler room, and garage, as well as a Chapel and Sisters' Quarters, which were relocated to the rear elevation of the hospital at the time of its construction. Many of these facilities are stand-alone buildings, connected to the Main Block through covered breezeways and connection points. The Main Block occupies the western portion of the parcel.
2. **The 1948 Addition**
    a. This is a small addition to the hospital's rear elevation, with an additional hospital ward. The 1948 Addition extends east from the south wing of the Main Block.
3. **The 1956 Expansion**
    a. This is a small expansion of the south wing of the main building; this rectangular extension mirrors the scale and general design treatment of the Main Block.

Figure 6 provides a visual overview of these components, each of which is described in detail below.

Figure 6 Trinity Annex, Building Components and Dates of Construction

## Trinity Annex, Main Block, 1944

As noted previously, the Main Block of Trinity Annex consists of a collection of buildings, expanded over time and joined through a series of sheltered breezeways on the rear elevation of the hospital.

The façade of this one-story, wood-frame complex represents a distinctive, intact example of the Colonial Revival style as applied to an institutional property. Irregular in plan, the Main Block rests on a concrete slab foundation and raised basement. The building is capped with a combination gable and hip roof, sheathed in asphalt shingles. The main building faces C Street (west) and is set back on a deep grass lawn with mature trees and shrubs, which presently obscure most of the façade (Figure 7). The horizontality of the façade is expressed by a two-story central pavilion flanked by nested, adjoining wings.

Figure 7 Main Block, Trinity Hospital, with Façade Largely Concealed by Landscaping

The height of the central pavilion, as well as the decorative cupola with an oculus atop the ridge of its roof, distinguishes it from the rest of the façade. It is divided into three bays and is reached by a short flight of wide concrete steps set from the sidewalk and a set of Mexican paver steps topped by metal railing. The center bay containing the entrance is recessed and features two full-height columns of wood posts supporting the extended eave and simple cornice at the roof, which shelters the pavilion. The main entrance is a wood-frame, double-hinged door with multi-pane glazing, and a fan light above, flanked by large wood-frame, multi-pane, fixed windows. Smaller fixed decorative and jalousie windows are at the clerestory level. A drop light hangs from the pavilion ceiling. Pilasters similar to the post columns cap the edges of the flanking wood bays of the central pavilion. The pavilion walls are sheathed in vertical flush board siding (Figure 8; Figure 9).

Figure 8 Main Block, Postcard of Trinity Hospital (n.d., Source: Humboldt Room, HSU)

Figure 9 Main Block, Primary Elevation and Entrance

Elsewhere the building is sheathed in rustic, wood shiplap siding. Fenestration consists of a variety of wood-framed windows, single and paired, double- and single-hung sashes. This includes three-over-three, three-over-one, and one-over-one lights with simple wood surrounds.

Along the rear elevation of the Main Block, the original 1944 building extends east forming a T-shape. This T-shape extending from the rear elevation includes many of the spaces for the everyday functioning of the hospital, including the kitchen and connection point to the Chapel and Sister's Quarters, both of which were relocated to the site upon its construction in 1944.

The Chapel and Sisters' Quarters are adjacent to the kitchen, facing the complex's central courtyard (Figure 10 and Figure 11). Both segments of the building display the same wood siding and fenestration patterns/materials observed elsewhere in the complex. The Chapel displays a single diamond-paned, wood-framed window on its east wall. A flat-roof segment with multi-pane, wood-hung windows connects the Chapel and Sisters' Quarters. The Chapel and Sisters' Quarters are accessed via single-entry doors sheltered beneath an unadorned pent roof resting on curved brackets (Figure 10). Located adjacent to the 1948 Addition, the Sisters' Quarters displays one-over-one, wood-frame windows and a shed roof extension with a single-entry door.

Figure 10 Main Block, Chapel (left), with Flat-roof Segment Connecting to Sisters' Quarters (right); Both Buildings were Relocated to the Site in 1944 and Incorporated into the Footprint of Trinity Hospital

Figure 11 Main Block, Sisters' Quarters

The eastern portion of the complex at the corner of 14th and B Streets includes the boiler room, laundry, and garage buildings (Figure 12). This segment is not depicted on the original 1943 plans but it appears on plans for the 1948 Addition. Therefore, it is assumed this portion of the building, which includes utilitarian spaces needed for everyday operations of the hospital, was constructed concurrently with the original hospital, in circa 1944. A paved parking lot is located adjacent to this corner of the building. This section of the complex exhibits shiplap wood siding, single and paired six-over-one, wood-frame windows and single-entry doors with glazing. A flat roof garage extension was added in 2004, which fronts the original attached garage, at the southeast corner.

Figure 12 Main Block, Boiler Room and Laundry

The west elevation facing the parking lot displays two replacement doors and a wheelchair-access ramp extending from the replacement door at the center of the elevation. A sheltered breezeway connects this building to the Main Block's Chapel, Sisters' Quarters, and Kitchen (Figure 13). The east elevation of the former boiler room/laundry/garage building contains various service entries, including a wood porch, a replacement wood door with raised wood steps, and a concrete ramp which leads to the basement (Figure 14).

Figure 13 West Elevation of Former Laundry/Boiler Room with Connecting Breezeway

Figure 14 Entrance at Northeast Portion of North Wing, Looking Southwest

## 1956 Extension

In 1956, the Main Block was extended at the southern edge (Figure 15). This 1956 Extension displays the same wood siding, and double and triple set multi-pane, wood-hung windows seen throughout the complex. A small utility shed capped with a shed roof projects from the south façade. The 1948 Addition and 1956 Extension are set back and separated from the street by a parking lot (Figure 16).

Figure 15 1956 Extension, South Wing

Figure 16 Overview of 1956 Extension (Left) and 1948 Addition (Right)

### 1948 Addition

The wing extending east was added in 1948 to accommodate 14 additional hospital beds. As shown in Figure 17, the addition mirrors the mass/scale, roof form and features, and wall cladding and general window patterns seen on the Main Block. In a departure from the Main Block, the 1948 Addition has single-pane, double-hung windows (whereas the Main Block on this elevation exhibits grouped six-over-one sashes). The north elevation faces a landscaped central courtyard; the east elevation features a central entry accessed from a gravel parking lot. The entry contains a simple wood door with the glazing painted, sheltered beneath a small gable roof.

Figure 17 1948 Addition, with New Wards and Beds

## 5.2.2 Trinity Hospital History and Construction Chronology

Originally known as “Trinity Hospital,” Trinity Annex was constructed between 1943 and 1944 as Arcata’s first purpose-built hospital. The project came about after the City of Arcata Chamber of Commerce gifted the property to the Sisters of St. Joseph of Orange in 1943. The Sisters of St. Joseph of Orange operated and administered Trinity Hospital until 1969. That year, the HSU Auxiliary purchased the site and, since that time, has utilized the property for a variety of uses, including office, storage, and laboratory spaces. In April 2018, ownership of the site was transferred to HSU.

The following section presents the history of the Sisters of St. Joseph of Orange and their work in the Humboldt Bay region, the developmental history of the former Trinity Hospital, and background on Newton Ackerman, the architect of the property.

## Sisters of St. Joseph of Orange in Humboldt County

The Congregation known as Sisters of St. Joseph was originally founded in 1648 in Le Puy, France, by a Jesuit priest. Forced to disband during the French Revolution, the Sisters of St. Joseph of Orange reorganized in the early 1800s and continued to grow in the following decades. In 1836, a group of six sisters traveled to the United States as missionaries, establishing a so-called Motherhouse, or residential and social center, in Carondelet, Missouri.

In 1912, a group of eight sisters traveled to Eureka from La Grange, Illinois. They had been persuaded to go to Eureka by Bishop Thomas Grace, based in Sacramento, who convinced them of the need of Catholic schools for the children of Humboldt County (Foster 1978). The following year, they established a school and a new "Motherhouse," from which they expanded their efforts across the region and developed additional schools. In 1918, Humboldt County was significantly affected by the severe influenza pandemic that spread across the United States and much of the world. The other two hospitals in the area, the Union Labor Hospital (now the Eureka General Hospital), founded in 1906 by the Union Labor Health Association, and Sequoia Labor Hospital were ill-equipped to handle the epidemic. In response, the Sisters of St. Joseph closed their school for use as an infirmary, eventually also taking patients at their Motherhouse as the need continued. With a new mission of providing healthcare to the community, they purchased an abandoned hospital in 1920 at Trinity and F streets in Eureka from two brothers known as the Doctors Falk and renamed it St. Joseph's Hospital (Sisters of St. Joseph of Orange 2018; Claasen 2002a).

Due to lack of reliable and fast transportation to the region and a relatively small population compared to Southern California, the congregation decided to move their Motherhouse from Eureka to Orange, California, in 1922, henceforth called the Sisters of St. Joseph of Orange (Schwegerl 1967). Although, the Sisters of St. Joseph relocated their Motherhouse, they continued to maintain an active presence both in Eureka and across northern California. In 1927, they took over the Trinity Hospital at 13$^{th}$ and G Streets in Arcata, which was later lost to a fire and rebuilt as the subject property as discussed in greater detail below.

In 1954, they moved the St. Joseph's Hospital (later renamed St. Joseph Health) to a new location in Eureka at 2700 Dolbeer Street. The property continues to house the former St. Joseph's Hospital, though the 1954 constructed building has been significantly altered since it was originally constructed. The Sisters of St. Joseph opened their third hospital in 1956, the Redwood Memorial in Fortuna. The Fortuna Chamber of Commerce raised $150,000 in local funds with matching funds by the Sisters to purchase the site and construct the Ranch style hospital complex (Schwegerl 1967).

Outside of Humboldt County, Sisters of St. Joseph of Orange also expanded their education and health care mission. In the 1940s and 1950s, they extended their work to the people of Papua New Guinea and Australia. They continued to support their health care mission over the following decades and today oversee facilities across California and Texas, including 16 acute care hospitals, rehabilitation programs, home health care, community education, and primary care clinics (Sisters of St. Joseph of Orange 2018).

## Development of Trinity Hospital

Health care in Humboldt County largely followed pace with the development of the greater region. Early services in the 1850s were offered by county physicians, who typically traveled long distances to serve their patients. The area's first hospitals began appearing in the 1860s and were commonly housed in residences or commercial buildings. One of the first hospitals in Arcata was founded in 1893 by Drs. Francis Horel and John Leveringhouse. Initially located at 12$^{th}$ and I streets, the facility

was soon moved to a residential building at 980 13th Street where it also provided treatment for alcohol and narcotic addition (Irvine 2004).

Four years later in 1897, Dr. George W. McKinnon established a medical practice in Arcata. McKinnon had arrived in Arcata in 1891, forming a practice with another doctor and marrying native Arcatan Annie Richert that same year. Operating his own practice through the first decade of the 1900s, McKinnon eventually opened a hospital in 1911 in the former Italianate-style residence of his parents-in-law located at 13th and G streets (Figure 18). He named the new facility Trinity Hospital and with his wife converted the house into a hospital with a 25-bed capacity, a nursery and two sunrooms. They operated the hospital for 12 years, after which they sold it to a Dr. Purlenky, who ran the hospital for two years. The Arcata Chamber of Commerce subsequently purchased the property by raising $5,000 through local efforts and with the help of citizens and local doctors, successfully petitioned the Sisters of St. Joseph from Eureka to administer the hospital beginning on August 28, 1927 (Schwegerl 1967).

Figure 18 View of the Old Trinity Hospital on 13th and G Streets in Arcata, 1927 Postcard

Source: Schwegerl 1967

The Sisters ran the hospital at the old site until a fire razed the building on February 3, 1943. The Arcata Chamber of Commerce purchased the Emerson Block at the subject project site on March 25, 1943, for $2,000. Raising money for the purchase was a combined local effort. Newspaper accounts detail the contributions from the local residents and Arcata businesses. The Arcata Fire Department and the Chamber of Commerce held a dance benefit to raise money, netting $1,500. The Sisters sent an application to the War Production Board in Washington for permission to build due to the wartime restrictions on building permits (Schwegerl 1967; Arcata Union 1943a, 1943b).

The new hospital opened with great fanfare. The land-breaking ceremony was held on July 2, 1943. Chamber of Commerce President, Howard Frakes presented Sister Bertrand, then administrator, with the deed for the land (Figure 19). The final cost of the hospital came to $90,000. An open house for the public was held on May 7, 1944, which was attended by 2,000 people (Figure 20) (Arcata Union 1943c, 1944; Schwegerl 1967).

Figure 19 Sister Bertrand, Administrator and Howard Frakes, President, Arcata Chamber of Commerce at Ground-breaking Ceremonies, July 2, 1943

Source: Humboldt Room, HSU

Figure 20 Lobby of Newly Opened Trinity Hospital in 1944

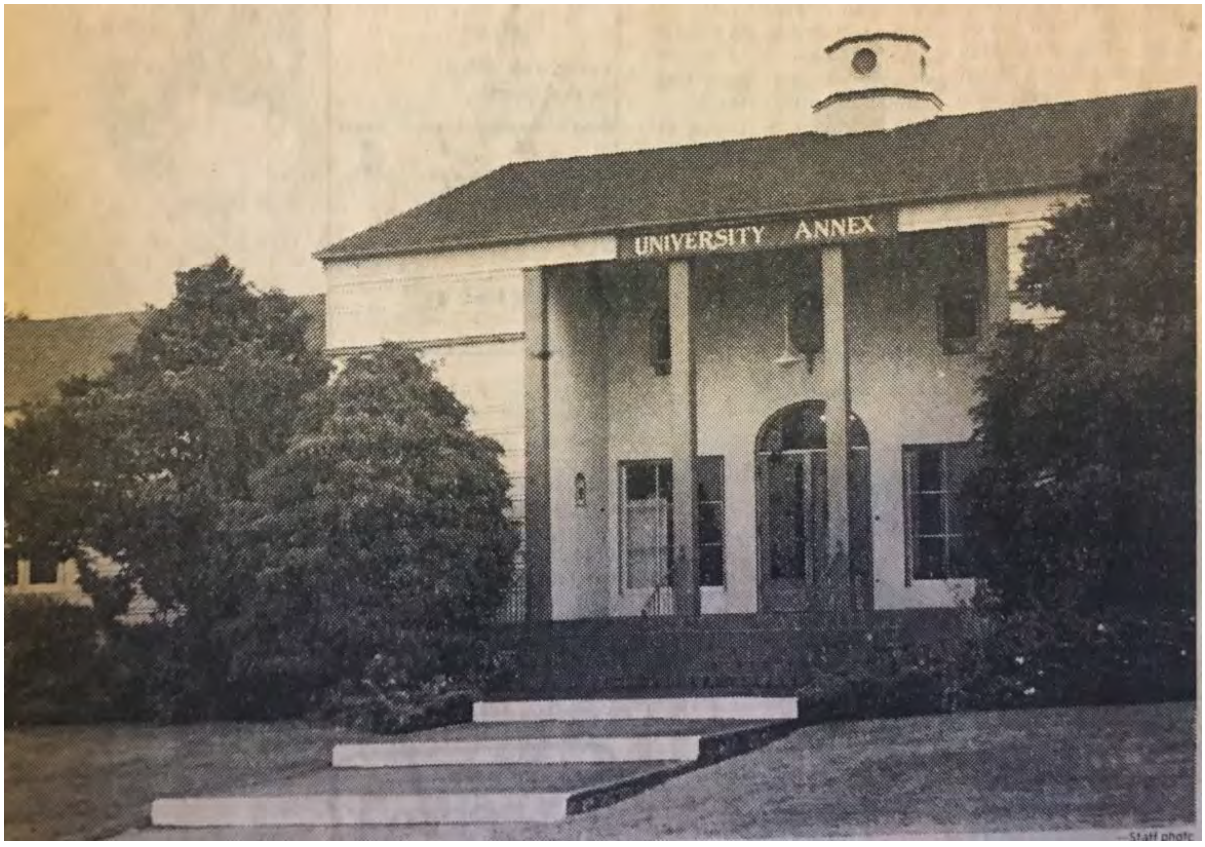
Source: Arcata Union 1943c

The hospital's early years were characterized by adaptation to new conditions and continued growth. The Sisters experienced a nursing shortage in 1945. Concrete emergency ramps were installed in January and sprinklers in March of 1946. By February 1948, they had commissioned a new wing consisting of 14 beds and two isolation rooms and one soundproof room. In 1956-1957, the south wing was expanded with a pediatric unit of 12 additional beds (Schwegerl 1967).

In 1968, the Sisters of St. Joseph of Orange decided to leave the Trinity Hospital by June 1969, citing "a lack of Sister-power to maintain operations."(The Times-Standard 1968a) This news of closure caused considerable tension within the Arcata community, as it was the only hospital in Arcata. Newspaper articles show that local residents were concerned about traveling to Eureka for their needs. Civic leaders, concerned citizens and doctors met on May of 1968 to discuss the creation of an "action committee," with the primary goal being the creation of another local Arcata hospital before the looming closure of Trinity Hospital (The Times-Standard 1968b). A new site was purchased for the hospital near the Pacific Union School in May 1969 for construction by 1971.

A dedication ceremony for the purchase of the new site, which included an appreciation ceremony to the Sisters of St. Joseph of Orange for their 40 years of service to Arcata, was held on May 25, 1969 at St. Mary's School Hall (The Times-Standard 1969). HSU made plans to purchase the site during the 1969-1970 fiscal year (Schwegerl 1967). The University drafted plans for the conversion of the interior of the main building for school uses as early as March of 1968, drawn by architect Ernest Fredrick Winkler (Winkler 1968). The HSU Auxiliary operated the converted Trinity Hospital from 1969 through 1970 as office space (Kaplan Chan Kaplan 2005) (Figure 21). Plans indicate that the interior continued to be remodeled during the 1980s and 1990s by HSU (HSU 1982, 1986, 1992).

Figure 21 Former Trinity Hospital as the University Annex in 1983




Source: Webster 1983

## Newton Ackerman, Architect

The plans for the new hospital were drafted by local Eureka architect, Newton Ackerman in July 1943. These early plans show the footprint of the complex largely in its current form except for the boiler room/laundry/garage building at the rear of the complex. The west and east elevation plans were revised by architect Gene Verge of Los Angeles in 1944, prior to the building's construction. The early drawings also show that Ackerman envisioned a more ornate building with additional decorative cupolas at each wing of the main building and a grand two-story central pavilion (Figure 22) (Ackerman 1943a, 1943b; Verge c.1944).

Ackerman was born Oliver Newton Ackerman (1875-1955) in Petaluma, California. He graduated from Eureka High School in 1894, and married Ivy Ackerman (ne: Monette). His occupation was listed as "Artist," in the 1910 census, and "Architect," by the 1920 census (Ancestry.com). Ackerman first became a partner in the firm of Jacobs, Ackerman and Crozier. He then joined George C. Jacobs to form the firm of Jacobs and Ackerman. He designed many hospital buildings including the former hospital for the Sisters of St. Joseph of Orange in Eureka.

Other properties designed by Ackerman include the Humboldt County Community Hospital, the Veterans Memorial building in Eureka, Arcata and Fortuna, St. Luke's hospital in Altadena and many school properties in Humboldt County. He also designed a number of residences, one of which is a local landmark in Eureka, at 2333 E Street (The Times-Standard 1955, 2011).

Figure 22 Drawing by Ackerman of Trinity Hospital Primary View, 1943 (Ackerman, 1943)

## 5.3 Trinity Hospital Historic Resources Evaluation

### 5.3.1 NRHP/CRHR Criteria A/1: Events and Patterns of Development

Based on site inspection, research, and literature review, the Trinity Annex **appears eligible for listing in the NRHP and the CRHR under Criteria A/1**, at the local level of significance, for its association with the broad pattern of the developmental history of Arcata as the town's first purpose-built hospital.

The original Trinity Hospital was constructed at the site between 1943 and 1944, with funds obtained through community efforts as well as an investment by the Sisters of St. Joseph of Orange. Its construction was highly anticipated in the community, and, upon its complication, Trinity Hospital became Arcata's first purpose-built hospital. An earlier hospital in Arcata had operated out of a converted residence. From its opening in 1944 through its closure in 1968, the property remained the only purpose-built hospital in Arcata.

As a highly celebrated and anticipated property that was the sole hospital for the local Arcata community for 24 years, Trinity Annex is eligible for listing in the NRHP/CRHR under Criteria A/1 at the local level of significance as a significant exemplification of pre-World War II institutional development in Arcata.

### 5.3.2 NRHP/CRHR Criteria B/2: Significant Individuals

Trinity Hospital **does not appear eligible under Criteria B/2**. To be eligible under NRHP/CRHR Criteria B/2, a property must have a strong, demonstrated association with a person(s) significant in the history of the region, city, state, or nation, during that individual's most productive and/or influential years. The Sisters of St. Joseph of Orange represented an important organization in the development of Arcata, Eureka, and the greater Humboldt Bay region.

Although the property has this association, research conducted for this study did not suggest that the property is the best, most representative exemplification of the organization during the height of its influence or work. The property also does not appear to have an association with the work of any specific Sister of the congregation, or healthcare provider or pioneer. As such, the subject property does not appear eligible for listing in the NRHP/CRHR under Criteria B/2.

### 5.3.3 NRHP/CRHR Criteria C/3: Architecture/Design

Trinity Annex **appears eligible for listing in the NRHP and CRHR under Criteria C/3** as a distinctive, intact example of the Colonial Revival-style, with Minimal Traditional influences, as applied to an institutional property.

The original portion of Trinity Annex was designed by local Eureka architect Newton Ackerman. Information on the life and work of Ackerman is relatively limited; available sources suggest that Ackerman led a fairly active practice and was a noted local architect. His designs reflected the dominant styles of the era, such as Classical Revival, Colonial Revival, and Craftsman styles. Early plans and drawings drafted by Ackerman for Trinity Hospital show a more exuberant example of the Colonial Revival style, with a more prominent and elaborated central portico and larger, more ornate copulas above the central pavilion and at each end of the wings. Prior to its construction, an architect from Los Angeles re-drafted the plans and elevations, which show the more subdued design ultimately built. Given these changes in the design and the overall lack of evidence

suggesting that Ackerman was a master architect, Trinity Annex does not appear significant as the work of a master architect.

Trinity Annex does, however, represent a distinctive, intact example of the Colonial Revival style as applied to an institutional property. The building displays some of the hallmark features of the Colonial Revival style, including the centered, elaborated front entrance, with fanlight, sidelights and ornamental entrance portico; symmetrical design composition; horizontal wood siding; use of grouped, multi-light, double-hung sashes, in a regular pattern across the façade; the prominent side-gabled roof with decorative tower; and the incorporation of a main central block flanked with lower side wings. (Additional character-defining features are described below.)

As a distinctive, intact expression of the Colonial Revival style, with Minimal Traditional style influences, Trinity Hall appears eligible for individual listing in the NRHP/CRHR under Criteria C/3.

The contributing components of Trinity Annex are the Main Block, the 1948 Addition, and the 1956 Expansion, built as a pediatric ward.

### 5.3.4 Integrity Analysis

Although the property is in poor condition, it retains sufficient historic integrity to convey its significance. The complex overall retains its integrity of materials, design, and workmanship, as well as its integrity of location. The setting of the property remains largely unchanged from that of a rural residential community. Although it no longer retains its association as a former hospital complex administered by the Sisters of St. Joseph of Orange, the subject property does retain all other aspects of its integrity and conveys an association as an institutional complex constructed during the mid-century. The period of significance for Criteria A/1 is 1944 to 1969, the year the Sisters of St. Joseph Orange vacated the property and relinquished ownership in trust for the Humboldt State University.

### 5.3.5 Character-Defining Features of Trinity Annex

This section describes Trinity Annex's character-defining components (i.e., buildings and additions over time) and features (i.e., architectural details and materials).

Character-defining features are the distinctive, tangible elements and physical features that convey the historical significance of a property. According to National Park Service Preservation Brief 17, *Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character*, there is a three-step process to identifying character-defining features (Nelson, 1982). Step 1 involves assessing the physical aspects of the building exterior as a whole, including its setting, shape and massing, orientation, roof and roof features, projections, and openings. Step 2 looks at the building more closely—at materials, trim, secondary features, and craftsmanship. Step 3 encompasses the interior, including individual spaces, relations or sequences of spaces (floor plan), surface finishes and materials, exposed structure, and interior features and details. Alterations and replacement of character-defining features over time can impair a historic property's integrity and result in a loss of historic status. Therefore, to ensure that a historic property remains eligible after implementation of projects, character-defining features should be identified and preserved.

The starting point in identifying a property's character defining features is to understand the reasons for its significance. Constructed between 1943 and 1944, Trinity Annex is eligible for listing in the NRHP and CRHR at the local level of significance, under Criteria A/1, for its exemplification of pre-1945 institutional growth, as the first hospital constructed in Arcata, and under Criteria C/3, as a

distinctive and intact expression of the Colonial Revival-style applied to an institutional property. The period of significance spans 1944 to 1969, the year the Sisters of St. Joseph of Orange vacated the property and it ceased use as a hospital.

The former hospital was constructed in phases over a roughly 13-year period, with additions made to serve distinct functions within the larger facility. These building components of the Trinity Annex include the Main Block (1944), the 1948 Addition, and the 1956 Expansion. A majority of the complex is occupied by the Main Block, which includes the hospital's signature elevation along the façade, with its Colonial Revival-style architecture. The rear elevation, which lacks the Colonial Revival styling and presents a more utilitarian design, contains all the functional spaces and wards of the facility, including the kitchen, laundry room, boiler room, and garage, as well as a Chapel and Sisters' Quarters, which were relocated to the rear elevation of the hospital at the time of its construction. Many of these facilities are stand-alone buildings, connected to the Main Block through covered breezeways and connection points. The Main Block occupies the western portion of the parcel.

Although all these portions and wings of the building were constructed during the period of significance, some are more strongly representative of the property's significant associations with important events (Criteria A/1) and architecture (Criteria C/3). The Main Block is a principal contributor to Trinity Annex, and the 1948 Addition and 1956 Expansion are considered to be secondary contributors to the complex.

The following sections document the primary, secondary, and tertiary character-defining features of Trinity Annex. Primary character-defining features are the most important elements of the property in conveying its historic significance. Secondary character-defining features are contributing elements to the historic property but less central in conveying significance. Tertiary features are the least central in conveying the significance of the historic property.

Figure 23 provides an overview of the Trinity Annex site plan and the locations of the Main Block, 1948 Addition, and 1956 Expansion. Descriptions of character-defining features for each of the three contributors follow below.

## Main Block

With its distinctive Colonial Revival style, the façade of the Main Block serves as the focal point and signature elevation of Trinity Annex. Extending eastward, the Main Block also includes wings that represent the varied functions and use of the hospital.

Designed by architect Newton Ackerman in 1943, the Main Block supported the primary mission of the hospital by housing the facility's healthcare and administrative functions. It is directly and most strongly representative of the property's significance under Criteria A/1 as the first purpose-built hospital in Arcata. It is also the only portion of the property designed in a Colonial Revival style by Ackerman and is therefore the focal point for eligibility under Criteria C/3.

The retention of the Main Block is critical in Trinity Annex's ability to convey its historical significance and retain eligibility for listing on the NRHP and CRHR. In order to inform the future adaptive reuse/rehabilitation of the property, details on primary, secondary, and tertiary character-defining features are provided below in Table 3.

Figure 23 Contributing Components of Trinity Annex

Table 3 Main Block, Character-Defining Features

| Type | Primary | Secondary | Tertiary |
|---|---|---|---|
| Shape/Form | ▪ Central pavilion and 2 wings<br>▪ "T"-shaped footprint<br>▪ 1 to 2- story height<br>▪ Recessed Main Entry Porch | N/A | N/A |
| Roof | ▪ Gable-and-hip roof with projecting eave | ▪ Shingle roofing material | ▪ Roof vents<br>▪ Flat roof connecting Main Block to chapel and sisters' quarters<br>▪ Flat roofs over loading docks and stairs on east (rear) elevation |
| Openings | ▪ Original main door<br>▪ Fan-light and fixed sidelights in entry porch<br>▪ Decorative and jalousie windows at clerestory level in entry porch | ▪ Single, paired, and ribbons of double or single-hung wood windows with one-over-one and 6-over-1 panes<br>▪ Original wood secondary entrances | ▪ Circular and square vents for passive air flow<br>▪ Subterranean concrete ramp entrance to basement at north elevation |
| Projections | ▪ Decorative cupola with oculus at roof ridgeline | ▪ N/A | ▪ Rear ramps, loading docks, and stairs |
| Trim and Secondary Features | ▪ Two-story wood columns<br>▪ Pilasters<br>▪ Wood window surrounds | ▪ Drop light from pavilion ceiling | ▪ Metal water pipes and drains<br>▪ Exposed concrete foundation |
| Materials | ▪ Horizontal wood siding | ▪ Rustic wood shiplap siding<br>▪ Tile clad primary entrance stairs with wrought metal, curving railing | ▪ Concrete pathway<br>▪ Paint |
| Setting | ▪ Setback from C Street | N/A | ▪ Relationship to chapel/sisters' quarters |

## Main Block, Chapel and **Sisters'** Quarters

Added to the site after construction of the Main Block, the Chapel and Sisters' Quarters extend eastward from the rear elevation of the hospital. The Chapel and Sister's Quarters served as the religious and domestic sphere for the Sisters of St. Joseph of Orange, who owned and maintained the hospital for over 25 years.

Supplemental research completed as part of this study confirmed that these two small buildings, though currently attached to the Main Block, were not originally designed by Ackerman as part of Trinity Hospital. According to original architectural plans for the hospital, these two small buildings were relocated from the Trinity Hospital's previous location in a residence at the southeast corner of G and 13th streets in Arcata. Building records did not confirm the date of the relocation of the Chapel and Sisters' Quarters. As relocated additions to the hospital, these buildings do not exhibit the Colonial Revival design featured on the façade of the Main Block.

The Chapel and Sisters' Quarters are considered secondary character-defining features for the complex overall. The character-defining features of the Chapel and Sisters' Quarters include:

- One-story mass and residential scale/appearance
- Roughly rectangular in plan
- Low-pitched, front gable roof, trimmed with simple wood boards and no overhanging eaves
- Wood horizontal siding
- Fenestration primarily consisting of one-over-one, six-over-one, and fixed, wood-framed double-hung windows with unadorned wood surrounds; one diamond-paned, single-hung window is set in the east wall of the former chapel building
- Sisters' Quarters connected to Former Chapel via central flat-roof passage; flat-roof passage includes a small metal front-entrance shelter, door with single-pane window, elevated on one step; entrance is flanked with six-over-one wood-framed windows

### Main Block, Boiler Room/Laundry and Garage

The Boiler Room/Laundry and Garage are connected to the Sisters' Quarters and Chapel via a covered breezeway. The Boiler Room/Laundry and Garage, which are included in the original building footprint, are highly utilitarian spaces that served the daily functions of the hospital. The Boiler Room/Laundry and Garage are considered tertiary contributors to the complex overall. They mirror the overall scale/mass and configuration of the other areas of the Main Block.

### 1948 Addition and 1956 Extension

The two additions at the southwest corner of the property were added to the Main Block in 1948 and 1956, respectively. The original 1943 building completed by Newtown Ackerman identified a general footprint for a "future bed wing extension" in the location of the larger 1948 Addition. The addition however was not ultimately designed by Ackerman, but rather San Francisco architect Ernest Winkler. The smaller 1956 Extension was not envisioned by Ackerman and was completed by Eureka architect Gerald Matson.

Both these additions were constructed during the period of significance for Criteria A/1 (identified as 1944 to 1969), and both exhibit some influences and elements of Colonial Revival and Minimal Traditional-style architecture.

The 1948 Addition and 1956 Extension are secondary contributors to Trinity Annex. The character-defining features of these elements include:

- One-story mass
- Capped with hipped/side-gable roof with simple wood boards and no overhanging eaves
- Small additions, roughly rectangular in plan; wood horizontal siding
- Fenestration primarily consisting of grouped, wood-framed double-hung windows with unadorned wood surrounds
- Set back and separated from the street by a parking lot

## 5.3.6 Criteria D/4: Source of Historic Information

Under NRHP/CRHR Criterion D/4, the subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies.

### 5.3.7 California Historical Landmark Eligibility

**CHL Criteria: property is first, last, only, or most significant of its type in the state or within a large geographic region**

Although Trinity Hospital was the first purpose-built hospital in Arcata, it was not the first hospital constructed in California or the Northern California region. In addition, it is not the oldest existing example of the property type in the region. Hospitals have been constructed throughout California since the beginning of Euro-American settlement, and older examples of the property type survive, such as the NRHP-listed St. Joseph's Hospital in San Francisco (1928). (Despite its name, the San Francisco hospital was not established or run by the Sisters of St. Joseph of Orange.) Additionally, research conducted for this study did not suggest that Trinity Hospital was the most significant hospital in the state or Northern California. By all accounts, the facility served as a local healthcare provider of modest size and was not notable for pioneering any broad scientific or medical achievement or for any other historical event with lasting regional or statewide implications.

As such, Trinity Hospital does not appear eligible for CHL designation under this criterion.

Trinity Hospital is directly and most strongly associated perhaps with the efforts of the Sisters of St. Joseph of Orange, an organization that operated health care facilities in coastal Humboldt County and other parts of California since the early twentieth century. Despite the congregation's longstanding involvement in healthcare provision in California and its demonstrated importance locally in Arcata, no evidence consulted for this study found that the Sister of St. Joseph of Orange's efforts meet the threshold for establishing "profound influence" regionally or statewide. Although the organization has come to operate hospitals in several regions of the state, hospitals and hospital chains are ubiquitous in the state, and it has not been proven that the Sister of St. Joseph of were essential to, or pioneering in, the provision of health care in California as a whole. Rather they were among many organizations who operated health care facilities in California in the twentieth century. Whatever local significance Trinity and Sisters of St. Joseph of Orange locations may have had, that significance does not extend to the level of the region or state as is required to meet the standards for CHL designation. Therefore, Trinity Church is recommended ineligible for designation under this criterion.

**CHL Criteria: property is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder**

Although Trinity Hospital displays a distinctive Colonial Revival style, the building does not represent an outstanding or prototypical example of the style. Some features—such as the recessed entrance with full-height wood columns and the cupola with oculus—reflect the Colonial Revival-style. However, these features are concentrated at the building's central bay, leaving the remainder of the building generally free of distinguishing elements.

Overall, the modest character of the building does not merit designation under this criterion as an outstanding or prototypical example of any period, style, architectural movement, of construction. The building was originally designed by architect Newton Ackerman, who appears to have been a prolific and noted local designer. However, available sources did not suggest that Ackerman was a pioneering or master architect. Moreover, the building is not the only extant building designed by Ackerman. For example, as noted previously, three Veterans Memorial buildings in Eureka, Arcata, and Fortuna remain as good, if not better, examples of Ackerman's work. In light of this, Trinity Hospital appears ineligible for the CHL under this criterion.

# 6 Project Impacts Analysis

## 6.1 Thresholds for Significance

CEQA (Section 21084.1) requires that a lead agency determine whether a project may have a significant effect on cultural resources. Impacts to significant cultural resources that affect the characteristics of the resource that qualify it for the CRHR or adversely alter the significance of a resource listed on or eligible for the CRHR are considered a significant effect on the environment.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

In terms of historical resources, these impacts could result from "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines, Section 15064.5 [b][1], 2000). Material impairment is defined as demolition or alteration "in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register." (CEQA Guidelines Section 15064.5[b][2][A]).

The potential for the proposed project to result in impacts to cultural resources is based on the CEQA thresholds of significance outlined in Appendix G of the State CEQA Guidelines. They are as follows:

- Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?
- Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?
- Would the project disturb any human remains, including those interred outside of formal cemeteries?
- Does the project site contain known historic structures or sites?
- Is the project site in or near an area containing known archaeological resources or containing features (drainage course, spring, knoll, rock outcroppings, or oak trees) that indicate potential archaeological sensitivity?

Impacts to tribal cultural resources are identified through consultation between the lead agency and local California Native Americans and are thus not discussed here. The following significance thresholds are provided for informational purposes only. Significance thresholds for impacts to tribal cultural resources are also included in Appendix G of the State CEQA Guidelines and are as follows:

- Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

### 6.1.1 Archaeological Resources

The 1.44-acre project area has been previously developed, and the site contains buildings and infrastructure such as parking lots, pavement, and landscaping. It is likely that surface soils have been scattered across the surface of the site during initial construction, grading, and landscaping of the area. No archaeological resources have been recorded within the project site, though the project has not been surveyed for archaeological resources. Based on the presence of archaeological sites nearby and the lack of previous archaeological investigation at the project site, construction of the proposed project has potential to encounter previously unidentified subsurface archaeological resources. Proposed mitigation measures are described below in Section 6.2, Recommendations.

### 6.1.2 Built Environment/Historical Resources

As discussed above, Trinity Annex appears eligible for listing in the NRHP and CRHR and therefore qualifies as a historical resource for the purposes of CEQA. As described in Section 1 ("Introduction"), the proposed project involves an adaptive reuse of Trinity Annex, which has remained under-utilized for a number of years. The adaptive reuse of Trinity Annex will ensure that the historic building is well utilized and remains a viable part of the HSU campus in the future. The project would house programs currently provided on the main HSU campus.

The following sections include (1) a narrative overview of the Trinity Annex Adaptive Re-Use plans; (2) an elevation-by-elevation description of the project with existing and proposed elevations and their character-defining features illustrated in 3-D renderings; and (3) a *Secretary's Standards* project analysis, examining the project to each of the ten Standards for Rehabilitation. A complete set of the 3D renderings and 50% Preliminary Design drawings is presented in Appendix D.

#### Overview of Trinity Annex Adaptive Re-Use Plans

As noted previously, Trinity Annex will provide the space for a Childcare Center and Child Development Lab. The new building footprint and layout would provide the space required to accommodate the Child Development Laboratory classroom. The objective of the adaptive reuse is modifying and expanding the hospital building to accommodate the proposed new use while also retaining the property's character-defining features such that it will retain historic integrity.

Along the façade of the 1944 Main Block, which is the key element conveying the property's significance under Criteria A/1 and Criteria C/3, adaptive reuse plans call for the retention and/or in-kind replacement where necessary of a majority of the building's character-defining features. Windows will be updated to meet current Title 24 energy code standards, but no window openings will be enlarged or moved in the process. Care will be taken to utilize existing surrounds and to re-create existing muntin patterns in size/profile, materials, and appearance. To accommodate the new use as a childcare center, several egress doors are proposed for the main and rear elevations,

to allow access to and from play areas and restrooms. The design, size, and locations of these single doors are compatible with the design of the façade and do not unduly obstruct, obscure, or destroy character-defining features or spaces. In addition, to accommodate the new use, a portion of the rear elevation, including the small 1948 Addition, would be demolished. The proposed building complex would measure 13,600 square feet and rise up to 25 feet, with the addition located on the rear elevation and set back from and visually subordinate to the historic roof line. Approximately 8,100 square feet would be demolished, and approximately 10,900 square feet of the existing building would remain. An addition measuring approximately 2,700 square feet would be built on the eastern elevation of the adaptively reused Trinity Annex.

The Main Block would be renovated and adaptively reused. Key character-defining features of the building would be retained, in particular those reflecting its Colonial Revival architectural style. Features such as wood columns, pilasters, and window surrounds, would be retained and repaired, or replaced in-kind as needed. Other features, such as original windows, would be replaced in-kind to match existing in appearance and materials. The horizontal wood siding, currently coated with lead-based paint, would be stripped according to the *Secretary's Standards*, using the gentlest means possible, and repainted in a compatible color palette. The roof of Trinity Annex would be removed, repaired, and re-sheathed in a similar roofing material.

The following section presents elevation-by-elevation descriptions of the project along with illustrations of existing and proposed treatments as shown in 3D renderings of the project.

### *Northeast Perspective (Façade)*

The 3-D renderings shown in Figure 24 and Figure 25 below detail the proposed adaptive reuse and rehabilitation project from the **northeast perspective**. As shown in these figures, a majority of Trinity Annex's primary character-defining features would be retained on the façade. In the rear elevation, the covered breezeways, Chapel, Sisters' Quarters, Boiler Room/Laundry, Garage, 1948 Addition, and 1956 Expansion would be demolished to make room for the new facilities of the Child Development Laboratory and Childcare Center.

The main entrance would shift to the rear elevation, and the present-day façade would be repurposed to provide outdoor recreation areas and seating areas. This would be accomplished by removing some (but not all) of the extant grass lawn and landscaping and installing playground equipment, reversible fencing, and seating areas. In addition, three simple, post-and-beam sun canopies would be installed on the façade utilizing connection points that are reversible and minimally invasive to the character-defining wood sheathing of the building.

On the west elevation, a small shed-roof utility addition would be removed and replaced with a single door offering code-compliance egress. Overall, asphalt roof shingles will be replaced in kind, and original horizontal wood siding will be rehabilitated, with present paint layers removed using the gentlest means possible and repainted in a period-appropriate color palette. Original windows will be retained where possible, and replaced in-kind where necessary, with the original muntin layout, size/profile, and window surrounds all the match existing.

Along the façade, several windows will be replaced with doors to allow for egress, access to restroom from play areas, and code/licensing requirements. These will be unobtrusive in design and occupy/modify the existing wall openings.

### *Southeast Perspective (façade)*

The 3-D renderings shown in Figure 26 and Figure 27 detail the proposed adaptive reuse and rehabilitation project from the **southeast perspective**. As shown in these figures, the focal point of the Colonial Revival-style design is the elaborated entrance. The most significant change to the character-defining entrance would be shifting its use to a secondary rather than primary entrance. The entrance stairs would be preserved, and the extant concrete walkway would be removed. Original jalousie windows would be replaced with energy-efficient windows meeting Title 24 code requirements. The original main door would be retained if possible, and replaced in-kind to match existing in materials, appearance, finishes, and any detailing. The original drop light fixture installed in the entrance pavilion ceiling would be rehabilitated and reused if possible, and replaced in-kind to match existing in materials, appearance, and detailing if necessary.

### *Southwest Perspective (rear elevation)*

The 3-D renderings shown in Figure 28 and Figure 29 detail the proposed changes and new construction at the rear elevation, from the **southwest perspective**. The most significant change would be removal of the sheltered breezeways and later additions to the hospital. A new wing would be constructed in existing footprint of the property, with the roofline stepped back from the historic roof line, to ensure that this important character-defining feature remains intact. This will be accomplished through the incorporation of a lower, shed-roof hyphen, connecting to a higher side-gable portion extending eastward with classroom spaces, play areas, and other amenities and facilities. The design of the new construction echoes but does not copy that of the Colonial Revival-style façade; it is compatible, in materials and design composition, but differentiated. Sun canopies would also be installed to provide sheltered recreation and seating areas.

In addition, at the rear-center of the Main Block, an upper-level clerestory window would be removed to accommodate the addition. This change would not involve the obstruction or removal of other character-defining roof features. Existing basement windows, wells, and ramps on the rear elevation would also be removed to eliminate the tripping hazard and facilitate the new programming use. The rear elevation would also see the addition of attached sun canopies, installed to be reversible and with minimal intrusion to the character-defining wood sheathing. One window would be installed to allow for views to the outdoors and play areas; this window would be compatible but differentiated from the existing historic windows in terms of materials, appearance, and muntin patterns/framing. Two doors would also be installed to allow for egress, access to restroom from play areas, and code/licensing requirements. These will be unobtrusive in design and occupy/modify the existing wall openings.

### *Northwest Perspective (rear elevation)*

The 3-D renderings shown in Figure 30 and Figure 31 detail the proposed adaptive reuse/changes to the rear elevation, from the **northwest perspective**. This perspective offers a thorough overview of the proposed site plan, which would be proportionally appropriate to that of the historic hospital. The removal of additions restores the original proportions of the site plan and design, while not overwhelming or detracting from the historic scale/mass and character of the hospital. Changes proposed for this area include the removal of a door that currently allows for unmonitored access from exterior (the new use requires that this be eliminated) and removing basement window wells. Additions/new construction would include three doors for egress and access to restrooms and outdoor play areas and one window to provide daylight and views to outdoor playing area. This side of the rear elevation also include a sun canopy.

Figure 24 Existing Conditions, Main Block, Façade, Northeast Perspective; Image shows the Colonial Revival-style Features on Main Block Façade and Additions and Sheltered Breezeways on Rear Elevation

Figure 25 Proposed Northeast Perspective; in Adaptive Reuse, the Main Entrance Would Shift to the Rear Elevation; Arrows Indicate Areas Slated for New Elements, including Code-compliant Egress Doors, Windows, and Sun Canopies

Figure 26 Existing Southeast Perspective, Showing Colonial Revival-style Features on Main Block Façade and Additions and Sheltered Breezeways on Rear Elevation; Arrows Indicate Areas Slated for Alteration, In-kind Replacement, Limited Demolition/Removal

Figure 27 Proposed Southeast Perspective, with Mass/Scale and Colonial Revival-style Features Retained and Adapted for re-use as Childcare Center and Child Development Lab; Arrows Indicate Areas Slated for New Elements, Including Code-compliant Egress Doors, Windows, and Sun Canopies

Figure 28 Existing Southwest Perspective, Showing Extant Rear Elevation and Additions Over Time; Arrows Indicate Areas Slated for Limited Demolition/Removal, including Removal of Upper-level Clerestory on Central Bay and Sheltered Breezeways and Additions on Rear Elevation

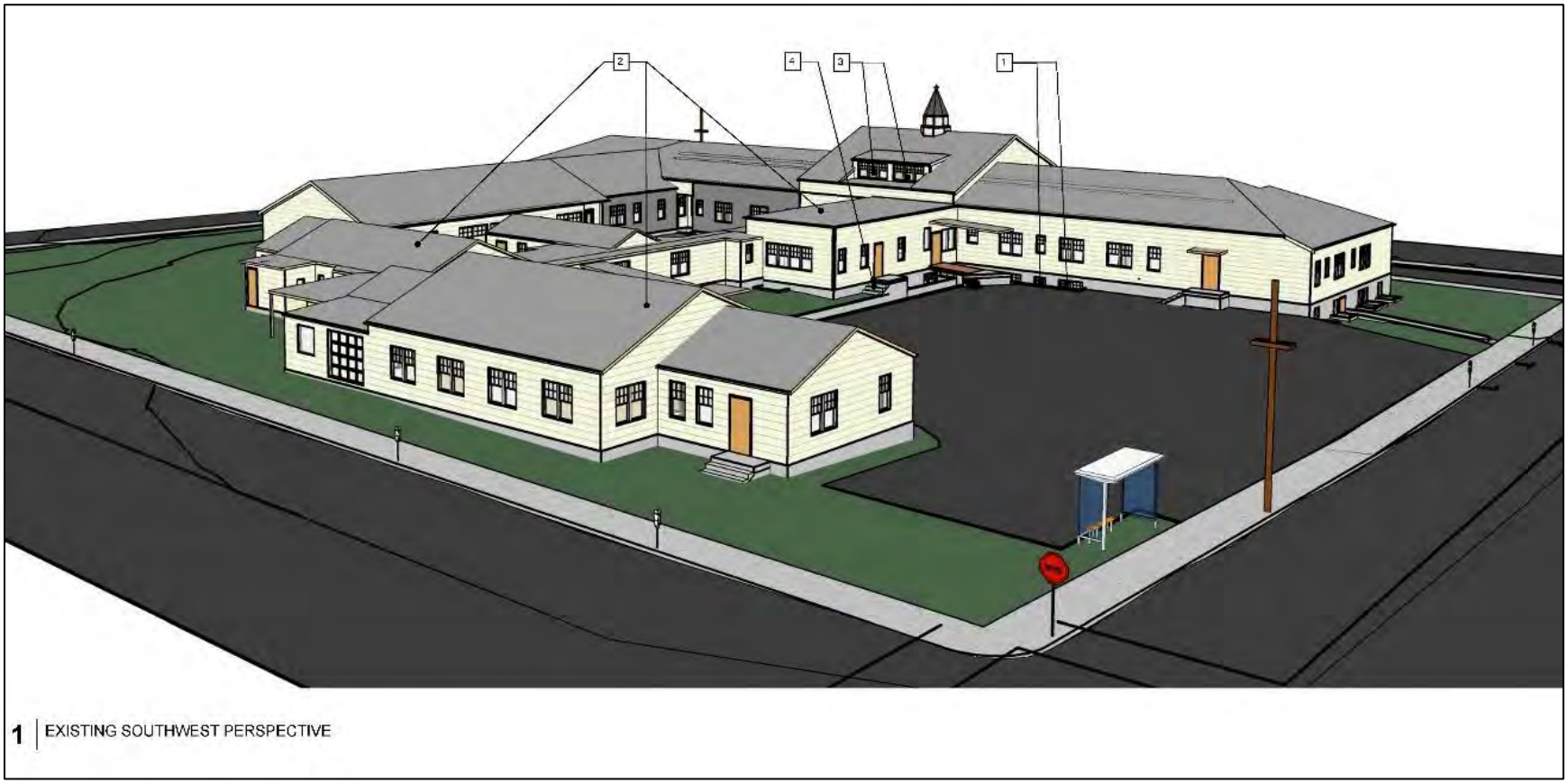


Figure 29 Proposed Southwest Perspective, Showing Proposed, More Compact Site Plan and Compatible New Construction; Arrows Indicate Areas Slated for New Elements, Including Code-compliant Egress Doors, Windows, and Sun Canopies

Figure 30 Existing Northwest Perspective, Showing Extant Rear Elevation and Additions over Time; Arrows Indicate Areas Slated for Limited Demolition/Removal and New Construction

Figure 31 Proposed Northwest Perspective, Showing Proposed, More Compact Site Plan and Compatible New Construction; Arrows Indicate Areas Slated for New Elements, Including Code-compliant Egress Doors, Windows, and Sun Canopies

## *Secret**ary's Standards*** Project Review

This section provides an analysis of the proposed components of the Trinity Annex project vis-à-vis the *Secretary's Standards*. The *Secretary's Standards* provide guidance on the preservation and protection of historic properties. As discussed in CEQA Guidelines Section 10564.5, a project that is complaint with the *Secretary's Standards* generally would not have a significant impact to historical resources. The *Secretary's Standards* make broad-brush recommendations for maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. They cannot, in and of themselves, be used to make essential decisions about which features of a historic property should be saved and which might be changed. Rather, once an appropriate treatment is selected, the *Secretary's Standards* provide philosophical consistency to the work. There are separate Standards for four distinct, but interrelated, approaches to the treatment of historic properties: preservation, rehabilitation, restoration, and reconstruction. As the most flexible of the three approaches, rehabilitation would be the appropriate treatment approach for the adaptive reuse of Trinity Annex. Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values (Weeks and Grimmer, 1995).

In 2017, the National Park Service issued an update to the *Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*. The updated version of the Standards includes additional guidance on alterations and additions to historic properties; this guidance essentially expands upon Standards for Rehabilitation No. 9 and 10:

> 9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
>
> 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The additional guidance available for Standards-compliant rehabilitation projects includes the following recommendations, excerpted from the 2017 Standards for Rehabilitation, for alterations and additions for a new use to historic properties:

> **Recommended:** Designing new onsite features…when required by a new use, so that they are as unobtrusive as possible, retain the historic relationship between the building or buildings and the landscape, and are compatible with the historic character of the property.
>
> **Recommended:** Designing new exterior additions to historic buildings or adjacent new construction that are compatible with the historic character of the site and preserves the historic relationship between the building or buildings and the landscape.
>
> **Not Recommended:** Introducing new construction on the building site which is visually incompatible in terms of size, scale, design, material, or color, which destroys historic relationships on the site.

This expanded guidance is addressed in Standards No. 9 and 10 in the analysis below.

The following presents a standard-by-standard analysis of the adaptive reuse plans for Trinity Annex.

### *Rehabilitation Standard No. 1*

> A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

#### PROJECT ANALYSIS

The Trinity Annex adaptive reuse project is considered **in conformance with Rehabilitation Standard No. 1**. The project would reuse Trinity Annex as a childcare center and child development laboratory, thereby relocating an important campus amenity to this underutilized building. Adaptive reuse plans involve relatively minimal changes to the building's primary contributors and character-defining features and the retention of the distinctive characteristics of the building and its site. Most of the building's primary character-defining features would be retained and/or replaced in-kind where necessary.

The most significant changes to Trinity Annex would be shifting the primary entrance to the rear elevation (though the design configuration/stylistic features of the current entrance would be retained); the removal of rear-elevation additions and replacement with a new, stepped-back, side-gable wing that is visually subordinate to the historic roofline but provides the space needed for the new use; the addition of single egress doors on the façade and rear elevation (many in the location of extant windows, to reduce visual impacts) to meet code and licensing requirements. At the entry porch, the project would also replace in-kind the decorative and jalousie windows at the clerestory level; these are currently cracked, damaged and/or inoperable.

On the rear elevation, sheltered breezeways and additions would be removed, and a new wing would be constructed within the existing footprint of the property. The roofline would be stepped back to be visually subordinate to the existing historic roofline, its prominent side gable, and central cupola feature. New construction on the rear elevation is compatible but differentiated from that of the Colonial Revival-style façade. An upper-level clerestory window would be removed to accommodate the addition. Existing basement windows, wells, loading docks, and ramps on the rear elevation would also be removed.

The front and rear elevations would also see the addition of attached sun canopies, installed to be reversible and with minimal intrusion to the character-defining wood sheathing.

One window would be installed on the rear elevation to allow for views to the outdoors and play areas; this window would be compatible but differentiated from the existing historic windows in terms of materials, appearance, and muntin patterns/framing. The rear elevation would see two new doors installed to allow for egress, access to restroom from play areas, and code/licensing requirements. These will be unobtrusive in design and occupy/modify the existing wall openings.

In general, the project includes the retention of the following primary character-defining features of the Main Block:

- Façade design composition of a central pavilion flanked with two lower wings
- T-shaped building footprint and setback from street
- Decorative cupola with oculus at roof ridgeline; would be cleaned and restored
- 1- to 2-story height and gable-and-hip roof shape/height/design, projecting eaves, and roof vents

- Recessed, elaborated entrance porch and main door location; main door will be replaced with an in-kind replacement that matches existing in materials, features, finishes, and overall appearance
- Fan-light and fixed sidelights in entry porch; fan light will be assessed for reuse and preserved if possible; fixed sidelights will be restored
- Two-story wood columns at entry porch
- Decorative pilasters
- Horizontal wood siding; lead-based paint will be mitigated and siding repainted; pattern and appearance of original siding will remain intact
- Wood-window surrounds; window trim would be removed to allow for window replacement; if original surrounds can be reused, they will be reinstalled. If not feasible, they will be replaced in kind
- Tile-clad primary entrance stairs with curved, wrought-metal railing; this feature will be preserved as best possible; if replacement is needed, new applications will match the existing features as closely as possible. Handrails will be replaced with compliant features matching existing as closely as possible.

As the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to facilitate ongoing compliance with Standard No. 1.

### *Rehabilitation Standard No. 2*

> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

### PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 2**. Plans for the adaptive reuse of Trinity Annex allow for the repurposing of the space, and its long-term retention, in a manner that retains and preserves the historic character of the property and avoids the removal wherever possible of materials and features that characterize the historic property. In examining the physical characteristics of the building, the project would retain most of those aspects that contribute to the historic significance of Trinity Annex.

Along the Main Block façade, as illustrated in Figure 24, Figure 25, Figure 26, and Figure 27, adaptive reuse plans call for the retention and/or in-kind replacement of a majority of the building's character-defining features. This will include features such as wood columns, pilasters, and window surrounds, which will be retained and repaired, or replaced in-kind as needed. Original windows will be retained where possible, and replaced in-kind where necessary, with the original muntin layout, size/profile, and window surrounds all the match existing. Horizontal wood siding would also be retained and repainted. The roof form, shape, and detailing of Trinity Annex would also remain intact, with roof repairs and re-sheathing in a similar composition shingle roofing material.

Although the main entrance would shift to the rear elevation, the entrance portico with its architectural detailing and design configuration would remain intact. The original main door would be retained if possible, and replaced in-kind to match existing in materials, appearance, finishes, and any detailing. The original drop light fixture installed in the entrance pavilion ceiling would be

rehabilitated and reused if possible, and replaced in-kind to match existing in materials, appearance, and detailing if necessary.

In terms of additions, three simple, post-and-beam sun canopies would be installed on the façade utilizing connection points that are reversible and minimally invasive to the character-defining wood sheathing of the building. On the west elevation, a small shed-roof utility addition would be removed and replaced with a single door offering code-compliance egress. Along the façade, several windows will be replaced with doors to allow for egress, access to restroom from play areas, and code/licensing requirements. These will be unobtrusive in design and occupy/modify the existing wall openings.

As the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to resolve any issues and to facilitate ongoing compliance with Standard No. 2.

### *Rehabilitation Standard No. 3*

> Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

#### PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 3**. As noted in the project description for Rehabilitation Standard No. 1, the project does not include conjectural features or architectural elements from other buildings or architectural styles. The new addition will be differentiated from the historic building. As the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to resolve any issues and to facilitate ongoing compliance with Standard No. 3.

### *Rehabilitation Standard No. 4*

> Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

#### PROJECT ANALYSIS

The proposed project **does not conform with Rehabilitation Standard No. 4**. The project would remove changes to the building that have acquired significance in their own right; this includes the 1948 Addition, as well as the series of sheltered breezeways and support structures on the rear elevation.

However, these highly specialized support structures do not fit the updated programming change planned for the adaptive reuse; these areas are also considered secondary and tertiary contributing elements to the Trinity Annex complex overall.

Therefore, though the project does not conform with Standard No. 4, the removal of these secondary contributors would not be expected to result in a significant adverse impact and therefore material impairment to the significance of Trinity Annex, and Trinity Annex would remain a historical resource.

### *Rehabilitation Standard No. 5*

Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

#### PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 5**. See response to Standards No. 1 and 2 above.

### *Rehabilitation Standard No. 6*

Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

#### PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 6**. As noted in Standards No. 1 and 2 above, some character-defining features may require in-kind replacement should repair be infeasible. Where replacement is needed—potentially for the main door, windows, wrought-iron hand railing at entrance porch, drop light fixture in entrance pavilion—replacement features will match existing in kind, in materials, appearance, finishes, and detailing. As the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to resolve any issues and to facilitate ongoing compliance with Standard No. 6.

### *Rehabilitation Standard No. 7*

Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

#### PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 7**. The proposed project would include repair/in-kind replacement/repainting of existing wood windows, roof sheathing, and horizontal wood-siding, among other features. These projects would be undertaken using the gentlest means possible, with treatments that do not damage any historic materials or adjacent materials/surfaces. As the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to facilitate ongoing compliance with Standard No. 7.

### *Rehabilitation Standard No. 8*

Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 8**. Archaeological testing, research and mitigation have been established for the project to ensure the project conforms with Rehabilitation Standard No 8.

### *Rehabilitation Standard No. 9*

> New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 9**. Standard No. 9 focuses on two primary qualities for new additions or related adjacent construction: differentiation from and compatibility with the historic resource. In terms of differentiation, the goal is to ensure – through design composition, materials, finishes—that the new construction is clearly discernible as a later, non-historic addition to the historic property. In terms of compatibility, the goal is ensuring that the new addition or construction blends seamlessly with the historic property, that it is (ideally) visually subordinate and unobtrusive to the historic property.

The proposed project would complement but not copy the primary character-defining features of the building. Differentiation is achieved through a number of characteristics—the siting, scale, and mass of the new construction, which are located on the rear elevation and designed to be visually subordinate to the historic property, in terms of its scale, roof height, and features. The addition on the rear elevation conforms with the original T-shaped building plan; the addition is capped with a side-gable roof attached to the historic building by way of a short, shed-roof hyphen. New construction will be identified through subtle differences in the patterns/size of wood siding and window treatments.

On the second count, in terms of compatibility, the project complies with Standard No. 9. The additions are designed to be visually subordinate to the historic property while also utilizing the same palette of materials and overall design elements, such as rhythmic patterns of multi-light windows, horizontal wood siding, and extended roof eaves.

As the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to resolve any issues and to facilitate ongoing compliance with Standard No. 9.

### *Rehabilitation Standard No. 10*

> New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

PROJECT ANALYSIS

The proposed project is considered **in conformance with Rehabilitation Standard No. 10**. The primary character-defining features of Trinity Annex are associated with the 1944 Main Block, which would remain intact if the addition planned for the rear elevation were removed in the future. As

the plans proceed and construction commences, it is recommended that input to the design team be provided by a qualified historic architect or architectural historian to resolve any issues and to facilitate ongoing compliance with Standard No. 10.

## 6.2 Evaluation of Impacts to Integrity of Trinity Annex upon Implementation of Adaptive Reuse Plans

The following section presents an analysis of the potential impact of the adaptive reuse plans on the integrity of Trinity Annex. Integrity is the ability of a property to convey the reasons for its historic significance; it is defined by seven aspects or qualities: location, design, setting, materials, workmanship, feeling, and association. To retain integrity, it is not necessary for a property to retain all of these aspects, but it is essential that it possess those physical features that enable it to convey its historic identity.

| Integrity Aspect | Current | Adaptive Reuse Project Plans |
|---|---|---|
| Location | The current building has not been moved retains integrity of location. | The building would be preserved in place. Therefore, it would retain integrity of location. |
| Design | The building retains integrity of design. | The primary character-defining features of the Main Block and its Colonial Revival-style detailing would be retained and/or replaced in-kind to match existing in materials, detailing, finishes, and overall appearance. Therefore, Trinity Annex would retain integrity of design. |
| Setting | The current building retains integrity of setting. The physical environment of the surrounding area appears largely as it did throughout the operation of the structure. | The setting of Trinity Annex would be retained. The immediate setting, of a building with a deep setback and a T-shaped building footprint with amenities and parking areas in the rear elevation, would be retained. Therefore, Trinity Annex would retain integrity of setting. |
| Materials | The current building retains integrity of materials. | The primary contributors and character-defining features of Trinity Annex, in particular the 1944 Main Block, would be preserved and rehabilitated. Secondary contributors and character-defining features, including the 1948 Addition on the hospital's rear elevation, would be removed and replaced to meet the new programming use as a Childcare Center and Child Development Laboratory. Standards-compliant treatment of original features, including horizontal wood siding and detailing along the façade and at the entrance, would be carried out. Therefore, Trinity Annex would retain integrity of materials. |
| Workmanship | The current building retains integrity of workmanship. | The building would retain the physical aspects that convey its workmanship. |

| Integrity Aspect | Current | Adaptive Reuse Project Plans |
|---|---|---|
| Feeling | The current building retains integrity of feeling. It continues to express the aesthetic and sense from its historic period. | The whole of the historic building would be preserved in place, though secondary contributors and character-defining features on the rear elevation would be removed and replaced.<br>The building's integrity of feeling would be changed but not materially impaired through the new project, which would retain/rehabilitate primary character-defining features.<br>Aspects of materials, workmanship, and design would be retained as discussed above and collectively would contribute to the retention of the building's integrity of feeling. |
| Association | The current building retains integrity of association. It possesses those physical features that convey its historic character. | The building's integrity of association would be changed in some ways through the shift in use and removal of the secondary contributors and character-defining features that reflected its use as a hospital complex. However, the building would still retain most of the physical aspects that convey its historic character and the project would provide a new viable, long-term use for the presently underutilized building. Therefore, integrity of association would remain intact. |

### Conclusion

As noted above, Rincon's analysis of the adaptive reuse plans for Trinity Annex shows that the proposed project appears to be in conformance with the *Secretary's Standards for Rehabilitation* and the National Park Service guidance for exterior additions. The project would not be expected to have a substantial adverse impact on Trinity Annex.

## 6.3 Recommendations

### 6.3.1 Archaeological Resources

No archaeological resources were identified within the project site. However, two prehistoric resources are located nearby, one of which is located only 0.2 miles away and has been identified as a significant resource. Although no archaeological resources have been identified within the project site, there has never been an archaeological survey of the project site. Construction of the existing buildings on the project site have caused soil disturbance, though there remains a limited potential to encounter subsurface archaeological resources. Rincon recommends implementation of the following measures to reduce potential impacts to unanticipated archaeological resources, including human remains. Impacts to archaeological resources would be less than significant with adherence to these mitigation measures.

#### *CR-1 Worker Environmental Awareness Program (WEAP)*

A qualified archaeologist should be retained to conduct a WEAP training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural

material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

#### *CR-2 Unanticipated Discovery of Cultural Resources*

If cultural resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) (hereafter qualified archaeologist) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts to cultural resources.

#### *CR-3 Unanticipated Discovery of Tribal Cultural Resources*

In the event that a previously unidentified cultural resource is determined to be of Native American origin, the qualified archaeologist will consult with HSU to begin or continue Native American consultation procedures. If a discovery is determined to be a tribal cultural resource and thus significant under CEQA (after consultation with HSU), the resource should be avoided, if feasible. If avoidance is not feasible, a mitigation plan should be prepared and implemented in accordance with state guidelines and in consultation with Native American groups.

### 6.3.2 Human Remains

The discovery of human remains is always a possibility during ground disturbing activities; if human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. With adherence to existing regulations, impacts to human remains would be less than significant.

### 6.3.3 Built Environment/Historical Resources

As discussed above, the former Trinity Hospital complex is a historical resource for the purposes of CEQA. Rincon's analysis of the adaptive reuse plans for Trinity Annex shows that the proposed project appears to be in conformance with the *Secretary's Standards for Rehabilitation* and the National Park Service guidance for exterior additions. The project would not be expected to have a substantial adverse impact on Trinity Annex.

The following Continuing Best Practice (CBP) has been identified to facilitate ongoing compliance with the *Secretary's Standards* and to avoid/mitigate/lessen any potential impacts to historical resources.

#### *CR-CBP-1 Historic Preservation Input to Design Team*

As project plans evolve, the design team shall seek input from a qualified professional who meets the standards for architectural history or historic architecture as set forth by the Secretary of the

Interior's Professional Qualification Standards (36 CFR, Part 61). The qualified professional shall review project plans and provide input to HSU and the design team on plans for rehabilitation or in-kind replacement of character-defining features as well as construction activities that might affect adjacent character-defining features.

# 7 References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*Arcata Union*

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# Appendix A

Records Search Results Summary

# Previous Cultural Resources Studies

The NWIC identified 3 previous studies within a 0.5-mile radius of the project site (Table 1). None of these cover any portions of the project site.

**Table 1 Previous Cultural Resource Studies within 0.5-miles of the Project Site**

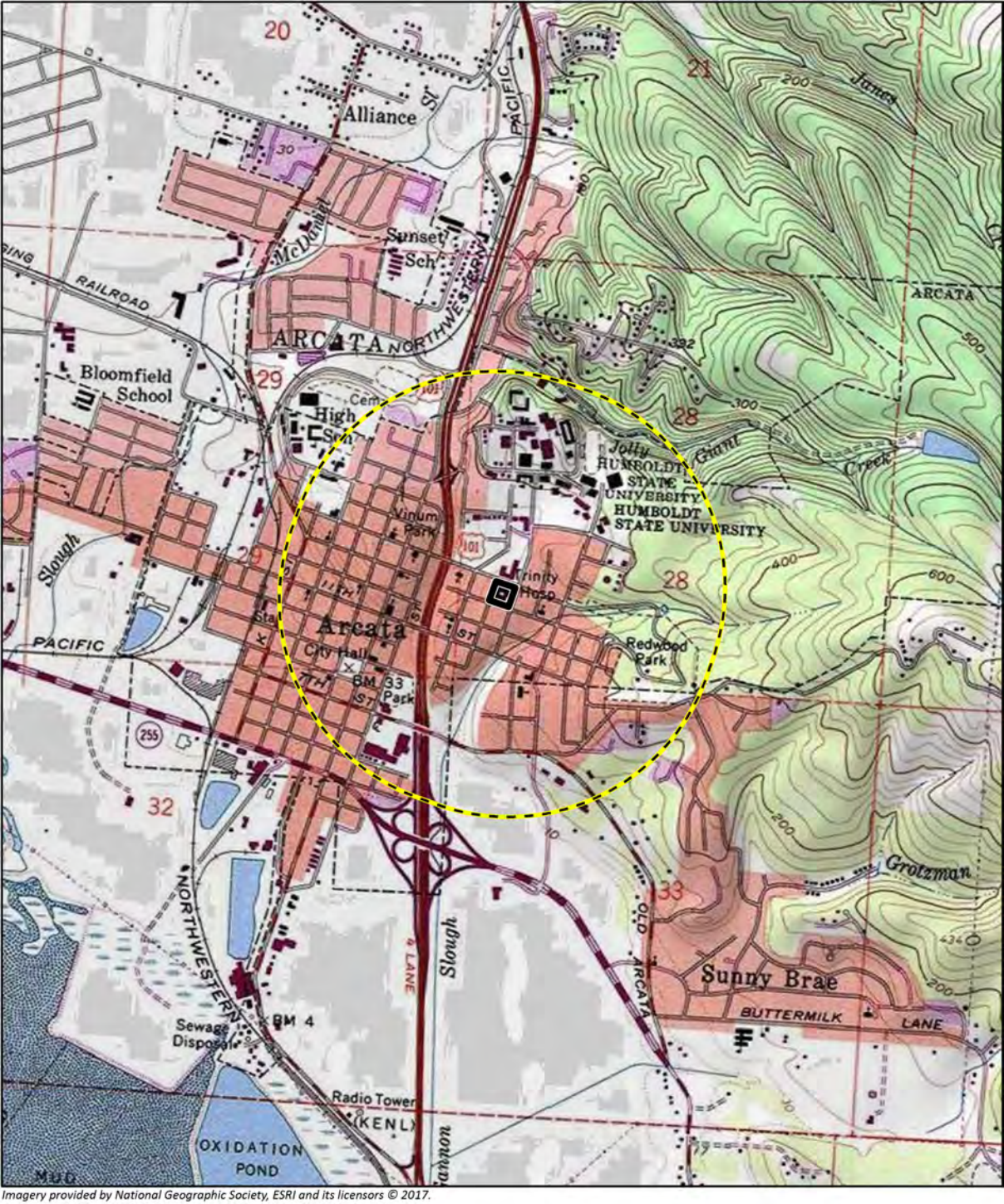
| Report Number | Author | Year | Title | Relationship to Project Site |
|---|---|---|---|---|
| S-000130 | Gary Berg | 1975 | Archaeological Impacts Evaluation: Seventh and Union, Arcata. City of Arcata Road Widening. | Outside |
| S-000205 | William G. Ropp and Katherine Flynn | 1975 | Archaeological Impact Evaluation: Results of Subsurface Sampling. City of Arcata Road Widening. | Outside |
| S-009097 | Darlena K. Blucher | 1975 | Report of an Archaeological Field Survey of the Old Arcata Road for the Department of Public Works, County of Humboldt | Outside |
| S-014104 | Brad A. Paula and James L. Able | 1992 | Archaeological and Historical Resources Survey and Impact Assessment McDowell Project: A Supplemental Report for a Timber Harvesting Plan | Outside |
| S-040129 | Mark Andre | 1999 | City of Arcata-NTMP: Archaeological Addendum for Timber Operations on Non-Federal Lands in California | Outside |
| S-046914 | Holly D. Moore | 2015 | Section 106 Review: Proposed AT&T Mobility LLC Telecommunications Tower AT&T Site CCL00921 – Humboldt State University | Outside |

# Previously Recorded Cultural Resources

The NWIC records search identified six (6) previously recorded cultural resources (Table 2). None of these are within the project site.

**Table 2 Previously Recorded Resources within 0.5-miles of the Project Site**

| Primary Number | Trinomial | Resource Type | Description | Recorder(s) and Year(s) | NRHP/ CRHR Status | Relationship to APE |
|---|---|---|---|---|---|---|
| P-12-000101 | CA-HUM-43 | Prehistoric site | None provided | Loud 1918 | Not evaluated | Outside |
| P-12-000363 | CA-HUM-351/H | Prehistoric/ historic site | Multicomponent prehistoric habitation site; historic domestic refuse and structural materials | Gary Berg 1975; Janet P. Eidsness 1988 | Eligible | Outside |
| P-12-001305 | N/A | Historic structure | Campbell Creek Dam | Mark Andre 1999 | Not evaluated | Outside |
| P-12-001306 | N/A | Historic | Campbell Creek Corduroy Road remains | Mark Andre 1999 | Not evaluated | Outside |
| P-12-002595 | N/A | Historic building | University Center, Humboldt State University | Britta F. Tonn 2013 | Ineligible | Outside |
| P-12-003526 | N/A | Historic building, element of district | Arcata Fire Station – Wyatt Building | William C. Rich 2014 | Eligible | Outside |




*Imagery provided by National Geographic Society, ESRI and its licensors © 2017. Arcata North Quadrangle & Arcata South Quadrangle. T06N R01E S29 & T06N R01E S28 &T06N R01E S32 & T06N R01E S33. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.*

Half-Mile Buffer

Project Area

N

0 1,000 2,000
Feet

0 250 500 Meters

# Appendix B

Native American Consultation Documentation

**NATIVE AMERICAN HERITAGE COMMISSION**
Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

November 6, 2017

Hannah Haas
Rincon Consultants, Inc.

Email to: hhaas@rinconconsultants.com

RE: Humboldt State University Trinity Annex Project, Humboldt County

Dear Ms. Haas,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at 916-573-1033 or frank.lienert@nahc.ca.gov.

Sincerely,

Frank Lienert
Associate Governmental Program Analyst

**Native American Heritage Commission**
**Native American Contacts**
**11/6/2017**

Big Lagoon Rancheria
Virgil Moorehead, Chairperson
P. O. Box 3060
Trinidad , CA 95570
vmoorehead@earthlink.net
(707) 826-2079

(707) 826-1737 - Fax

Yurok
Tolowa

Blue Lake Rancheria
Claudia Brundin, Chairperson
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Blue Lake , CA 95525
bmobbs@bluelakerancheria-nsn.gov
(707) 668-5101
(707) 668-4272 Fax

Wiyot
Yurok
Tolowa

Hoopa Valley Tribe
Ryan P. Jackson, Chairperson
P.O. Box 1348
Hoopa , CA 95546
(530) 625-4211
(530) 625-4594 Fax

Hoopa - Hupa

Karuk Tribe
Russell Attebery, Chairperson
P.O. Box 1016
Happy Camp , CA 96039
(530) 493-1600
(530) 493-5322 - Fax

Karuk / Karok

Bear River Band of the Rohnerville Rancheria
Barry Brenard, Chairperson
266 Keisner Road
Loleta , CA 95551
(707) 733-1900

(707) 733-1727 Fax

Wiyot
Mattole

Round Valley Indian Tribes of the Round Valley Reservation
James Russ, President
77826 Covelo Road
Covelo , CA 95428
tribalcouncil@rvit.org
(707) 983-6126

(707) 983-6128 Fax

Yuki ; Nomlaki
Pit River
Pomo
Concow
Wailaki: Wintun

Wiyot Tribe
Ted Hernandez, Chairperson
1000 Wiyot Drive
Loleta , CA 95551
ted@wiyot.us
(707) 733-5055

(707) 733-5601 Fax

Wiyot

Cher-Ae Heights Indian Community of the Trinidad Rancheria
Garth Sundberg Sr., Chairperson
P.O. Box 630
Trinidad , CA 95570
gsundberg@TrinidadRancheria.com
(707) 677-0211 Office

(707) 677-3921 Fax

Yurok
Karuk
Tolowa
Wiyot

Yurok Tribe of the Yurok Reservation
Thomas O'Rourke, Chairperson
PO Box 1027
Klamath , CA 95548
torouroke@yuroktribe.nsn.us
(707) 482-1350

(707) 482-1377

Yurok

Yurok Tribe of the Yurok Reservation
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Hoopa , CA 95546
rmcconnell@yuroktribe.nsn.us
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(707) 482-1377 Fax

Yurok

**This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.**

**Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.**

**This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the Humboldt State University Trinity Annex Project, Humboldt County**

**Native American Heritage Commission**
**Native American Contacts**
**11/6/2017**

Tsnungwe Council
Paul Ammon, Chairperson
P.O. Box 373 Southern Hoopa
Salyer , CA 95563
530-629-4758
(530) 629-3356 FAX

Blue Lake Rancheria
Janet Eidsness, Historic Preservation Officer
P.O. Box 428 Wiyot
Blue Lake , CA 95525 Yurok
jeidsness@bluelakerancheria-nsn.gov Tolowa
(707) 668-5101
(530) 623-0663 - Cell
707-668-4272 - Fax

Yurok Tribe of the Yurok Reservation
NAGPRA Coordinator
P.O. Box 1027 Yurok
Klamath , CA 95548
(707) 482-1350
(707) 954-5355
(707) 482-1377

**This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.**

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**This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the**
**Humboldt State University Trinity Annex Project, Humboldt County**

Rincon Consultants, Inc.
4825 J Street, Suite 200
Sacramento, California 95819

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info@rinconconsultants.com
www.rinconconsultants.com

November 8, 2017

Big Lagoon Rancheria
Virgil Moorehead, Chairperson
P.O. Box 3060
Trinidad, CA 95570

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Moorhead:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon received a response from the NAHC on November 7, 2017, which stated that the SLF search had been completed with negative results. The NAHC suggested we contact you to discuss this project further.

If you have knowledge of cultural resources that may exist within or near the project site, please contact me in writing at the above address or at hhaas@rinconconsultants.com, or by telephone at (916) 706-1374, extension 230. Thank you for your assistance.

Sincerely,

Hannah Haas

Hannah Haas
Archaeologist

Enclosure: Project Location Map

Rincon Consultants, Inc.
4825 J Street, Suite 200
Sacramento, California 95819

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November 8, 2017

Blue Lake Rancheria
Claudia Brundin, Chairperson
P.O. Box 428
Blue Lake, CA 95525

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Brundin:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Hannah Haas
Archaeologist

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November 8, 2017

Hoopa Valley Tribe
Ryan P. Jackson, Chairperson
P.O. Box 1348
Hoopa, CA 95546

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Jackson:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Sincerely,

Hannah Haas

Hannah Haas
Archaeologist

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November 8, 2017

Karuk Tribe
Russell Atteberry, Chairperson
P.O. Box 1016
Happy Camp, CA 96039

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Atteberry:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Archaeologist

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November 8, 2017

Bear River Band of Rohnerville Rancheria
Barry Brenard, Chairperson
266 Keisner Road
Loleta, CA 95551

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Brenard:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Hannah Haas

Hannah Haas
Archaeologist

Enclosure: Project Location Map

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November 8, 2017

Round Valley Indian Tribes of the Round Valley Reservation
James Russ, President
77826 Covelo Road
Covelo, CA 95428

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear President Russ:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Sincerely,

Hannah Haas

Hannah Haas
Archaeologist

Enclosure: Project Location Map

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4825 J Street, Suite 200
Sacramento, California 95819

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November 8, 2017

Wivot Tribe
Ted Hernandez, Chairpson
1000 Wivot Drive
Loleta, CA 95551

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Hernandez:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon received a response from the NAHC on November 7, 2017, which stated that the SLF search had been completed with negative results. The NAHC suggested we contact you to discuss this project further.

If you have knowledge of cultural resources that may exist within or near the project site, please contact me in writing at the above address or at hhaas@rinconconsultants.com, or by telephone at (916) 706-1374, extension 230. Thank you for your assistance.

Sincerely,

Hannah Haas

Hannah Haas
Archaeologist

Enclosure: Project Location Map

Rincon Consultants, Inc.
4825 J Street, Suite 200
Sacramento, California 95819

916 706 1374 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

November 8, 2017

Cher-Ae Heights Indian Community of the Trinidad Rancheria
Garth Sundberg Sr., Chairperson
P.O. Box 630
Trinidad, CA 95570

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Sundberg:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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November 8, 2017

Yurok Tribe of the Yurok Reservation
Thomas O'Rourke, Chairperson
P.O. Box 1027
Klamath, CA 95548

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson O'Rourke:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Archaeologist

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November 8, 2017

Yurok Tribe of the Yurok Reservation
Robert McConnell, THPO
HC 67 P.O. Box 196
23001 State Highway 96
Weitchpec, CA 95546

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Mr. McConnell:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Archaeologist

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November 8, 2017

Tsnungwe Council
Paul Ammon, Chairperson
P.O. box 373
Salver, CA 95563

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Chairperson Ammon:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Hannah Haas
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November 8, 2017

Blue Lake Rancheria
Janet Eidsness, Historic Preservation Officer
P.O. Box 428
Blue Lake, CA 95525

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

Dear Ms. Eidsness:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Sincerely,

Hannah Haas

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Archaeologist

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November 8, 2017

Yurok Tribe of the Yurok Reservation
NAGPRA Coordinator
P.O. Box 1027
Klamath, CA 95548

RE: Cultural Study for the HSU Trinity Annex Project, Arcata, Humboldt County, CA

To whom it may concern:

Rincon Consultants, Inc. (Rincon) was retained by Humboldt State University (HSU) to conduct a cultural resources study for the HSU Trinity Annex (project) located in Arcata in Humboldt County, California, depicted in the enclosed figure. The project proposes the demolition of the Trinity Hospital building and all adjacent structures on the project site, bounded by B and C Streets and 13th and 14th Streets, and the installation of portable buildings to provide surge space for displaced faculty, staff, academic functions due to other campus construction projects.

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Sincerely,

Hannah Haas

Hannah Haas
Archaeologist

Enclosure: Project Location Map

Cher-Ae Heights Indian Community of the Trinidad Rancheria

December 8th, 2017

Hannah Haas
Rincon Consultants
4825 J Street, Suite 200
Sacramento, CA 95819
hhaas@rinconconsultants.com

Re: HSU Trinity Annex Project

Dear Ms. Haas,

Thank you for contacting the Trinidad Rancheria and initiating consultation on this project. The project area is outside of the geographic area of concern for the Rancheria and therefore we have no interest in this project and no information to provide. However, I would be interested in a report after the project for our records.

With Respect,

Rachel Sundberg
Tribal Historic Preservation Officer
Cher-Ae Heights Indian Community of the Trinidad Rancheria

# Appendix C

Department of Parks and Recreation (DPR) 523 Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

# PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code___3S_____
Other Listings_____
Review Code_____ Reviewer_____ Date_____



**Resource name(s) or number** (assigned by recorder) *Trinity Annex*

**P1. Other Identifier:** *N/A*

***P2. Location:** ☐Not for Publication ■Unrestricted

***b. USGS 7.5' Quad:** *Arcata South*

*c. **Address:** *1350 C Street*

*e. **Other Locational Data:** *APN 021-061-001*

***a. County:** *Humboldt County*
**Date:** *1972*
**City:** *Arcata* **Zip:** *95521*

***P3a. Description:**

Originally built as Arcata's first hospital, Trinity Annex is located on the grounds of Humboldt State University on a 1.45-acre parcel. The property is bounded by B Street (east), C Street (west), 13th Street (south), and 14th Street (north). With its Colonial Revival architectural style, Trinity Annex consists of a complex of separate but interconnected, one- and two-story buildings, all serving the diverse functions and needs of the hospital. Constructed in 1943-1944, then expanded in 1948 and 1956, the hospital buildings display similar design elements and materials, but the focal point of the Colonial Revival design is limited to the façade. Overall, three components make up Trinity Annex: the 1944 Main Block, a small 1948 Addition (located on the rear elevation), and a 1956 Expansion (located on the south wing). The Main Block façade is the signature elevation of the hospital, with its central pavilion and flanking bays designed in the Colonial Revival style. The rear elevation, which lacks Colonial Revival styling and presents a more utilitarian design, contains all the functional spaces and wards of the facility, including the kitchen, laundry room, boiler room, and garage, as well as a Chapel and Sisters' Quarters, which were relocated to the rear elevation of the hospital at the time of its construction. Many of these facilities are stand-alone buildings, connected to the Main Block through covered breezeways and connection points. The Main Block occupies the western portion of the parcel. (*See Continuation Sheet page 4*)

***P3b. Resource Attributes:** HP41. Hospital; HP15. Educational Building

***P4. Resources Present:** ■Building ☐Structure ☐Object ☐Site ☐District ☐Other

**P5a. Photo:** *(See Continuation Sheets)*

**P5b. Photo:**
Main façade and entrance, November 6, 2017

***P6. Date Constructed/Age and Sources:** 1943-1944; 1948; 1956 (architectural drawings) ■historic

***P7. Owner and Address:**
*Humboldt State University*
*1 Harpst Street*
*Arcata, California 95521*

***P8. Recorded by:**
*Alexandra Madsen*
*Rincon Consultants, Inc.*
*250 East 1st Street Suite 1400*
*Los Angeles, CA 90012*

***P9. Date Recorded:**
*January 4, 2021*

***P10. Survey Type:** *Intensive Survey*

***P11. Report Citation:** (Cite survey report and other sources, or enter "none"):

Howell-Ardila, Debi, Steven Treffers, and Alexandra Madsen. 2021. *Cultural Resources Technical Report for the Humboldt State University Trinity Annex Project*. Rincon Consultants, Inc. Project No. 17-04856. Report on file at the Northwest Information Center, Sonoma State University.

***Attachments:** ☐None ■Location Map ■Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (list)

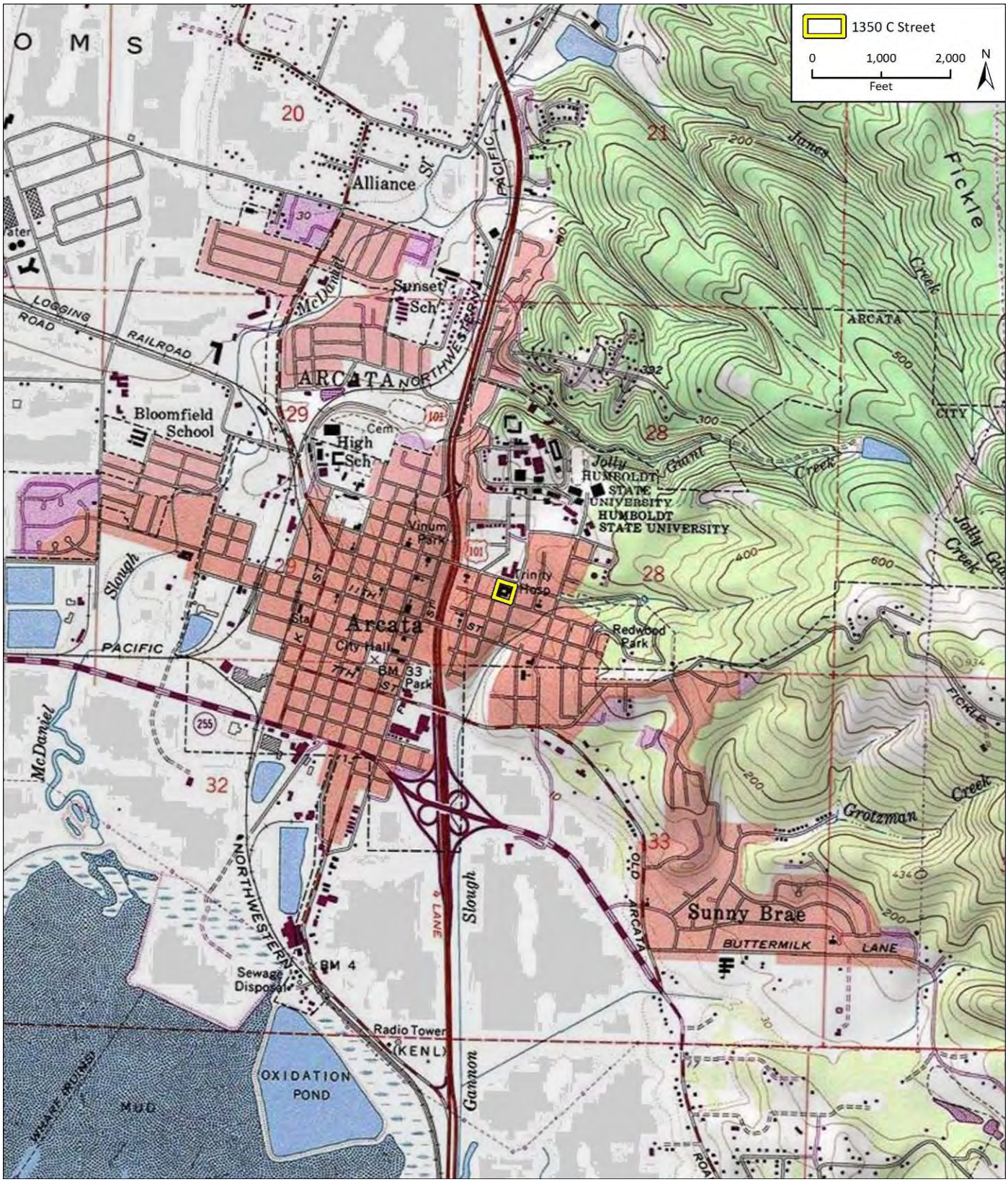
**State of California — The Resources Agency**
**DEPARTMENT OF PARKS AND RECREATION**

# LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____


***Recorded by** *Rincon Consultants, Inc.*

**Resource Name or #** (Assigned by recorder) *Trinity Annex*
***Date** *January 4, 2021* ☒ Continuation ☐ Update



B1. Historic Name: Trinity Hospital
B2. Common Name: Trinity Annex
B3. Original Use: Hospital B4. Present Use: University Annex, office space, storage

***B5. Architectural Style:** Colonial Revival style

***B6. Construction History:** (Construction date, alterations, and date of alterations)
The Main Block of the complex on the property was constructed between 1943 and 1944. A 14-bed ward addition was constructed in 1948, extending the south wing. In 1956, the south wing of the main block was extended. In 2004, a carport shelter was added.

***B7. Moved?** ☒**No** ☒**Yes** ☐ **Unknown** **Date: Ca 1944** **Original Location:** 13th/G Sts. (Chapel/Sisters' Quarters only)

***B8. Related Features:** None

B9a. Architect: Newton Ackerman/Gene Verge b. Builder: Unknown

***B10. Significance: Theme:** Institutional Development/Healthcare; Architecture and Engineering
**Area:** Arcata, Humboldt County
**Period of Significance:** 1943-1969 **Property Type:** Rural Hospital **Applicable Criteria:** A/1; C/3

Trinity Annex appears eligible for listing in the NRHP and the CRHR under two sets of criteria: under Criteria A/1, at the local level of significance, Trinity Annex is eligible as a significant exemplification of pre-World War II institutional development in Arcata. The original Trinity Hospital was constructed at the site between 1943 and 1944, with funds obtained through community efforts as well as an investment by the Sisters of St. Joseph of Orange. From its opening in 1944 through its closure in 1968, the property remained the only purpose-built hospital in Arcata.

In addition, Trinity Annex appears eligible Trinity Annex appears eligible for listing in the NRHP and CRHR under Criteria C/3 as a distinctive, intact example of the Colonial Revival-style, with Minimal Traditional influences, as applied to an institutional property. The original portion of Trinity Annex was designed by local Eureka architect Newton Ackerman. Information on the life and work of Ackerman is relatively limited; available sources suggest that Ackerman led a fairly active practice and was a noted local architect. His designs reflected the dominant styles of the era, such as Classical Revival, Colonial Revival, and Craftsman styles. Early plans and drawings drafted by Ackerman for Trinity Hospital show a more exuberant example of the Colonial Revival style, with a more prominent and elaborated central portico and larger, more ornate copulas above the central pavilion and at each end of the wings. Trinity Annex represents a distinctive, intact example of the Colonial Revival style as applied to an institutional property. The building displays some of the hallmark features of the Colonial Revival style, including the centered, elaborated front entrance, with fanlight, sidelights and ornamental entrance portico; symmetrical design composition; horizontal wood siding; use of grouped, multi-light, double-hung sashes, in a regular pattern across the façade; the prominent side-gabled roof with decorative tower; and the incorporation of a main central block flanked with lower side wings. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**
(See Continuation Sheet)

B13. Remarks: None.

***B14. Evaluator:** Rincon Consultants, Inc.

***Date of Evaluation:** January 4, 2021

(Sketch Map with north arrow required.)

(This space reserved for official comments.)

***P3a. Description (continued):**

As noted previously, Trinity Annex consists of a complex of separate but interconnected buildings, all serving the diverse functions and needs of the hospital. Purpose-built as Arcata's first hospital, the Trinity Annex complex was constructed, then expanded in phases, between 1943 and 1956. The complex buildings display similar design elements and materials, but the focal point of the Colonial Revival design is limited to the façade.

Overall, Trinity Annex consists of the three connected components: (1) Main Block, 1943-1944; (2) 1948 Addition; and (3) 1956 Expansion. The Main Block represents the hospital's signature elevation along the façade, with its Colonial Revival-style architecture. The rear elevation, which lacks the Colonial Revival styling and presents a more utilitarian design, contains all the functional spaces of the facility, including the kitchen, laundry room, boiler room, and garage, as well as a Chapel and Sisters' Quarters, which were relocated to the rear elevation of the hospital at the time of its construction. Many of these facilities are stand-alone buildings, connected to the Main Block through covered breezeways and connection points. The Main Block occupies the western portion of the parcel. The figure below provides a visual overview of the complex.

**Trinity Annex, Overview of Construction Chronology and Components**

***P3a. Description (continued):**

**Trinity Annex, Main Block, 1944**

As noted previously, the Main Block of Trinity Annex consists of a collection of buildings, expanded over time and joined through a series of sheltered breezeways on the rear elevation of the hospital. The façade of this one-story, wood-frame complex represents a distinctive, intact example of the Colonial Revival style as applied to an institutional property. Irregular in plan, the Main Block rests on a concrete slab foundation and raised basement. The building is capped with a combination gable and hip roof, sheathed in asphalt shingles. The main building faces C Street (west) and is set back on a deep grass lawn with mature trees and shrubs, which presently obscure most of the façade. The horizontality of the façade is expressed by a two-story central pavilion flanked by nested, adjoining wings.

Main Block, Trinity Hospital, current and historic views of Façade

The height of the central pavilion, as well as the decorative cupola with an oculus atop the ridge of its roof, distinguishes it from the rest of the façade. It is divided into three bays and is reached by a short flight of wide concrete steps set from the sidewalk and a set of Mexican paver steps topped by metal railing. The center bay containing the entrance is recessed and features two full-height columns of wood posts supporting the extended eave and simple cornice at the roof, which shelters the pavilion. The main entrance is a wood-frame, double-hinged door with multi-pane glazing, and a fan light above, flanked by large wood-frame, multi-pane, fixed windows. Smaller fixed decorative and jalousie windows are at the clerestory level. A drop light hangs from the pavilion ceiling. Pilasters similar to the post columns cap the edges of the flanking wood bays of the central pavilion. The pavilion walls are sheathed in vertical flush board siding.

Elsewhere the building is sheathed in rustic, wood shiplap siding. Fenestration consists of a variety of wood-framed windows, single and paired, double- and single-hung sashes. This includes three-over-three, three-over-one, and one-over-one lights with simple wood surrounds. Along the rear elevation of the Main Block, the original 1944 building extends east forming a T-shape. This T-shape extending from the rear elevation includes many of the spaces for the everyday functioning of the hospital, including the kitchen and connection point to the Chapel and Sister's Quarters, both of which were relocated to the site upon its construction in 1944.

The Chapel and Sisters' Quarters are adjacent to the kitchen, facing the complex's central courtyard. Both segments of the building display the same wood siding and fenestration patterns/materials observed elsewhere in the complex. The Chapel displays a single diamond-paned, wood-framed window on its east wall. A flat-roof segment with multi-pane, wood-hung windows connects the Chapel and Sisters' Quarters. The Chapel and Sisters' Quarters are accessed via single-entry doors sheltered beneath an unadorned pent roof resting on curved brackets. Located adjacent to the 1948 Addition, the Sisters' Quarters displays one-over-one, wood-frame windows and a shed roof extension with a single-entry door.

***P3a. Description (continued):**

Main Block, Chapel (left), with Flat-roof Segment Connecting to Sisters' Quarters (right); Both Buildings were Relocated to the Site in 1944 and Incorporated into Trinity Hospital Footprint

Main Block, Sisters' Quarters

***P3a. Description (continued):**

The eastern portion of the complex at the corner of 14th and B Streets includes the boiler room, laundry, and garage buildings. This segment is not depicted on the original 1943 plans but it appears on plans for the 1948 Addition. Therefore, it is assumed this portion of the building, which includes utilitarian spaces needed for everyday operations of the hospital, was constructed concurrently with the original hospital, in circa 1944. A paved parking lot is located adjacent to this corner of the building. This section of the complex exhibits shiplap wood siding, single and paired six-over-one, wood-frame windows and single-entry doors with glazing. A flat roof garage extension was added in 2004, which fronts the original attached garage, at the southeast corner.

The west elevation facing the parking lot displays two replacement doors and a wheelchair-access ramp extending from the replacement door at the center of the elevation. A sheltered breezeway connects this building to the Main Block's Chapel, Sisters' Quarters, and Kitchen. The east elevation of the former boiler room/laundry/garage building contains various service entries, including a wood porch, a replacement wood door with raised wood steps, and a concrete ramp which leads to the basement.

Main Block, Boiler Room and Laundry (left); West Elevation, Laundry/Boiler Room (right)

**1956 Extension**

In 1956, the Main Block was extended at the southern edge. This 1956 Extension displays the same wood siding, and double and triple set multi-pane, wood-hung windows seen throughout the complex. A small utility shed capped with a shed roof projects from the south façade. The 1948 Addition and 1956 Extension are set back and separated from the street by a parking lot.

**1948 Addition**
The wing extending east was added in 1948 to accommodate 14 additional hospital beds. The addition mirrors the mass/scale, roof form and features, and wall cladding and general window patterns seen on the Main Block. In a departure from the Main Block, the 1948 Addition has single-pane, double-hung windows (whereas the Main Block on this elevation exhibits grouped six-over-one sashes). The north elevation faces a landscaped central courtyard; the east elevation features a central entry accessed from a gravel parking lot. The entry contains a simple wood door with the glazing painted, sheltered beneath a small gable roof.

1956 Extension, South Wing (left); 1948 Addition (Right)

***B10. Significance (continued):**

**Historic Context: Sisters of St. Joseph of Orange in Humboldt County**

The congregation known as the Sisters of St. Joseph of Orange was founded by a Jesuit priest in 1648, in Le Puy, France. Forced to disband during the French Revolution, the Sisters of St. Joseph of Orange reorganized in the early 1800s and continued to grow in subsequent decades. In 1836, a group of six sisters traveled to the United States as missionaries, establishing a so-called Motherhouse, or residential and social center, in Carondelet, Missouri. The first group of sisters arrived in Northern California, in Eureka, in 1912, when a group of eight sisters arrived from La Grange, Illinois. They had been persuaded to come to Eureka by Sacramento Bishop Thomas Grace, who noted the need for Catholic schools in Humboldt County (Foster 1978).

The following year, they established a school and a Motherhouse, from which they expanded their efforts across the region. In 1918, Humboldt County was significantly affected by the severe influenza pandemic that spread across the United States and much of the world. The other two hospitals in the area, the Union Labor Hospital (now the Eureka General Hospital), founded in 1906 by the Union Labor Health Association, and Sequoia Labor Hospital were ill-equipped to handle the epidemic. In response, the Sisters of St. Joseph closed their school for use as an infirmary, eventually also taking patients at their Motherhouse as the need continued. With a new mission of providing healthcare to the community, they purchased an abandoned hospital in 1920 at Trinity and F streets in Eureka from two brothers known as the Doctors Falk and renamed it St. Joseph's Hospital.

Due to lack of reliable and fast transportation to the region and a relatively small population compared to Southern California, the congregation decided to move their Motherhouse from Eureka to Orange, California, in 1922, henceforth called the Sisters of St. Joseph of Orange (Schwegerl 1967). Although, the Sisters of St. Joseph relocated their Motherhouse, they continued to maintain an active presence both in Eureka and across northern California. In 1927, they took over the Trinity Hospital at 13th and G Streets in Arcata, which was later lost to a fire and rebuilt as the subject property as discussed in greater detail below.

**Development of Trinity Hospital**

Health care in Humboldt County largely followed pace with the development of the greater region. Early services in the 1850s were offered by county physicians, who typically traveled long distances to serve patients. The area's earliest hospitals emerged in the 1860s, commonly housed in residences or commercial buildings. One of Arcata's first hospitals was founded in 1893 by Drs. Francis Horel and John Leveringhouse. Initially located at 12th and "I" streets, the facility was soon moved to a residential building at 980 13th Street, where it also offer services for alcohol and drug abuse (Irvine 2004). Four years later in 1897, Dr. George W. McKinnon established a medical practice in Arcata.

Operating his own practice through the first decade of the 1900s, McKinnon eventually opened a hospital in 1911 in the former Italianate-style residence at 13th and G streets. He named the facility Trinity Hospital and, with his wife, converted the house into a hospital with a 25-bed capacity. They operated the hospital for 12 years, after which they sold it to a Dr. Purlenky, who ran the hospital for two years. The Arcata Chamber of Commerce subsequently purchased the property by raising $5,000 through local efforts and with the help of citizens and local doctors, successfully petitioned the Sisters of St. Joseph from Eureka to administer the hospital beginning on August 28, 1927 (Schwegerl 1967).

The Sisters ran the hospital at the old site until a fire razed the building on February 3, 1943. The Arcata Chamber of Commerce purchased the Emerson Block at the subject project site on March 25, 1943, for $2,000. Raising money for the purchase was a combined local effort. The Arcata Fire Department and the Chamber of Commerce held a dance benefit to raise money, netting $1,500. The Sisters sent an application to the War Production Board in Washington for permission to build due to the wartime restrictions on building permits.

In July 1943, at the ground-breaking ceremony, the new hospital's construction commenced with great fanfare. Chamber of Commerce President, Howard Frakes presented Sister Bertrand, then administrator, with the deed for the land. An open house for the public was held on May 7, 1944, which was attended by 2,000 people (Arcata Union 1943c, 1944; Schwegerl 1967). The hospital's early years were characterized by adaptation to new conditions and continued growth. The Sisters experienced a nursing shortage in 1945. Concrete emergency ramps were installed in January and sprinklers in March of 1946. By February 1948, they had commissioned a new wing consisting of 14 beds and two isolation rooms and one soundproof room. In 1956-1957, the south wing was expanded with a pediatric unit of 12 additional beds (Schwegerl 1967).

***B10. Significance (continued):**

**Historic Context: Development of Trinity Hospital (continued)**

In 1968, the Sisters of St. Joseph of Orange decided to leave the Trinity Hospital by June 1969, citing "a lack of Sister-power to maintain operations."(The Times-Standard 1968a) This news of closure caused considerable tension within the Arcata community, as it was the only hospital in Arcata. Newspaper articles show that local residents were concerned about traveling to Eureka for their needs. Civic leaders, concerned citizens and doctors met on May of 1968 to discuss the creation of an "action committee," with the primary goal being the creation of another local Arcata hospital before the looming closure of Trinity Hospital (The Times-Standard 1968b). A new site was purchased for the hospital near the Pacific Union School in May 1969 for construction by 1971.

A dedication ceremony for the purchase of the new site, which included an appreciation ceremony to the Sisters of St. Joseph of Orange for their 40 years of service to Arcata, was held on May 25, 1969 at St. Mary's School Hall (The Times-Standard 1969). HSU made plans to purchase the site during the 1969-1970 fiscal year (Schwegerl 1967). The University drafted plans for the conversion of the interior of the main building for school uses as early as March of 1968, drawn by architect Ernest Fredrick Winkler (Winkler 1968). The HSU Auxiliary operated the converted Trinity Hospital from 1969 through 1970 as office space (Kaplan Chan Kaplan 2005). Plans indicate that the interior continued to be remodeled during the 1980s and 1990s by HSU (HSU 1982, 1986, 1992).

Lobby of Newly Opened Trinity Hospital in 1944 (left) and later as "University Annex" (1983)

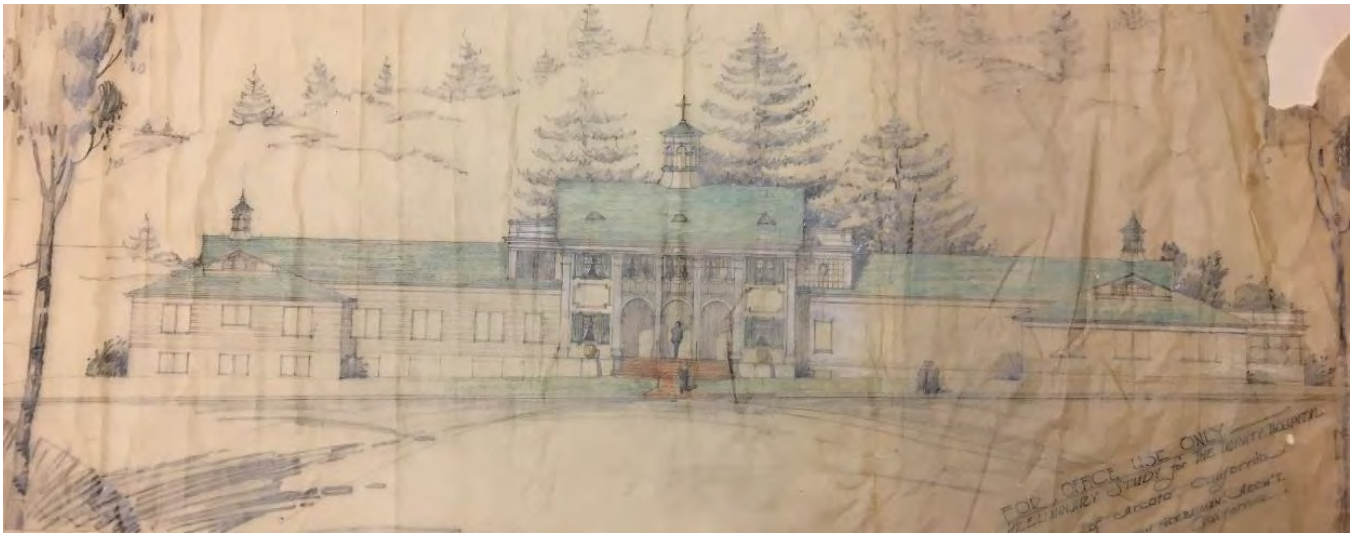
**Newton Ackerman, Architect**

The plans for the new hospital were drafted by local Eureka architect, Newton Ackerman in July 1943. These early plans show the footprint of the complex largely in its current form except for the boiler room/laundry/garage building at the rear of the complex. The west and east elevation plans were revised by architect Gene Verge of Los Angeles in 1944, prior to the building's construction. The early drawings also show that Ackerman envisioned a more ornate building with additional decorative cupolas at each wing of the main building and a grand two-story central pavilion (Figure 21) (Ackerman 1943a, 1943b; Verge c.1944).

Ackerman was born Oliver Newton Ackerman (1875-1955) in Petaluma, California. He graduated from Eureka High School in 1894, and married Ivy Ackerman (ne: Monette). His occupation was listed as "Artist," in the 1910 census, and "Architect," by the 1920 census (Ancestry.com). Ackerman first became a partner in the firm of Jacobs, Ackerman and Crozier. He then joined George C. Jacobs to form the firm of Jacobs and Ackerman. He designed many hospital buildings including the former hospital for the Sisters of St. Joseph of Orange in Eureka. Other properties which he designed include the Humboldt County Community Hospital, the Veterans Memorial building in Eureka, Arcata and Fortuna, St. Luke's hospital in Altadena and many school properties in Humboldt County. He also designed a number of residences, one of which is a local landmark in Eureka, at 2333 E Street (The Times-Standard 1955, 2011).

***B10. Significance (continued):**

Drawing by Ackerman of Trinity Hospital Primary View, 1943




**Summary of Findings**

Trinity Annex is NRHP and CRHR eligible under Criteria A/1, for its association with broad patterns of development, as the first purpose-built hospital constructed in Arcata, and under Criteria C/3, as a distinctive, intact expression of the Colonial Revival style applied to an institutional property.

The period of significance for Criteria A/1 is 1944 to 1969, marking the beginning and ending of the Sisters' operation of the hospital. The period of significance for Criteria C/3 is 1944, the year of completion of the hospital. The property does not meet the criteria as a California Historical Landmark.

Presently in poor condition, the property nevertheless retains integrity of materials, design, and workmanship, as well as its integrity of location. The setting of the property remains largely unchanged from that of a rural residential community. Although it no longer retains its association as a former hospital complex administered by the Sisters of St. Joseph of Orange, the subject property conveys an association as an institutional complex constructed during the mid-century.

***B12. References (continued):**

Ackerman, Newton

1943a "Plans of the Arcata Trinity Hospital for the Sisters of St. Joseph, Owners, Orange, Orange County, California," January 24. Available at the Humboldt State University Archives, Arcata, Ca.

1943b "Drawing of Primary Elevation," August. Available at the Humboldt State University Archives, Arcata, Ca.

Ancestry.com

1910 and 1920 United State Census: Ackerman.

*Arcata Union*

1943a "Emerson Block Purchased for Hospital; Sisters Await Material Priority," March 25. Microfiche available at the Eureka Public Library, Eureka, Ca.

1943b "Gigantic Ticket Drive for May 15 Benefit Dance Opens Here Next Monday," April 30. Microfiche available at the Eureka Public Library, Eureka, Ca.

1943c "Construction Starts on $50,000 Trinity Hospital; Sub-Contracts to be let," July 9. Microfiche available at the Eureka Public Library, Eureka, Ca.

***B12. References (continued):**

City of Arcata

2015 *Arcata's Architectural Styles and Eras: Through the Settlement, Victorian, Craftsman and Modern Periods.* Prepared by the City of Arcata's Historic Landmark Commission, Arcata, CA.

California State Office of Historic Preservation

n.d. California Office of Historic Preservation Technical Assistance Series #13 How to Nominate a Property as a California Historical Landmark or California Point of Historical Interest.

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1978 "Catholic Education in Ferndale," in Church of the Assumption of the Blessed Virgin Mary, Ferndale. On file at the Humboldt County Historical Society Archives, Eureka, California

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2005 Humboldt State University Arcata, California: Historic Resources Evaluation. December. Prepared for Winzler & Kelly Consulting Engineers. Santa Monica, Ca.

Humboldt State University (HSU)

1982, 1986, 1992 Various plans for the HSU Annex. Available at the Humboldt State University Archives, Arcata, Ca.

Irvine, Jack

2004 "History of Hospitals in Humboldt County." Paper on file with Humboldt County Historical Society, Eureka, California.

Schwegerl, Carolyn

1967 The Sisters of St. Joseph of Orange and Trinity Hospital. December. Thesis prepared in partial fulfillment of course offered by Dr. H. Palais. Humboldt State University. Arcata, Ca.

Sisters of St. Joseph of Orange

2018 "Our History." Electronic document accessed January 15, 2018. Online at http://csjorange.org/about-us/our-history.

*The Times Standard*

1955 "Veteran Eureka Architect Dies," May 20. Available from Newspapers.com, accessed January 29, 2018.

1968a "Sisters to Withdrawal at Trinity Hospital," Spring. Humboldt Co. Collection: Hospitals - Trinity Hospital. Available at the Humboldt State University Archives, Arcata, Ca.

1968b "Future of Trinity Hospital Aired at Arcata Talks," May 29. Humboldt Co. Collection: Hospitals - Trinity Hospital. Available at the Humboldt State University Archives, Arcata, Ca.

1969 "Trinity Hospital is Bought for $250,000," May 24. Humboldt Co. Collection: Hospitals - Trinity Hospital. Available at the Humboldt State University Archives, Arcata, Ca.

2011 "Heritage Homes: Annual tour opens the doors to Eureka's history," September 29. Available online at www.times-standard.com, accessed January 29, 2018.

Verge, Gene

ca. 1944 "Revised Plans, Trinity Hospital Arcata, Calif.," Available at the Humboldt State University Archives, Arcata, Ca.

# Appendix D

Set of 50% Preliminary Design Drawings and 3D Renderings

# Appendix EN

Fuel Consumption Calculations

# Trinity Child Center Project

Last Updated: 6/3/2021

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

| | | | |
|---|---|---|---|
| HP: 0 to 100 | 0.0588 | HP: Greater than 100 | 0.0529 |

*Values above are expressed in gallons per horsepower-hour/BSFC.*

**CONSTRUCTION EQUIPMENT**

| Construction Equipment | # | Hours per Day | Horsepower | Load Factor | Construction Phase | Fuel Used (gallons) |
|---|---|---|---|---|---|---|
| Rubber Tired Dozers | 1 | 8 | 247 | 0.40 | Demolition Phase | 919.15 |
| Tractors/Loaders/Backhoes | 3 | 8 | 97 | 0.37 | Demolition Phase | 1,113.58 |
| Concrete/Industrial Saws | 1 | 8 | 81 | 0.73 | Demolition Phase | 611.55 |
| Graders | 1 | 8 | 187 | 0.41 | Site Preparation Phase | 162.11 |
| Tractors/Loaders/Backhoes | 1 | 8 | 97 | 0.37 | Site Preparation Phase | 84.36 |
| Rubber Tired Dozers | 1 | 7 | 247 | 0.40 | Site Preparation Phase | 182.79 |
| Graders | 1 | 6 | 187 | 0.41 | Grading Phase | 364.74 |
| Rubber Tired Dozers | 1 | 6 | 247 | 0.40 | Grading Phase | 470.02 |
| Tractors/Loaders/Backhoes | 1 | 7 | 97 | 0.37 | Grading Phase | 221.45 |
| Cranes | 1 | 6 | 231 | 0.29 | Building Construction Phase | 4,461.69 |
| Forklifts | 1 | 6 | 89 | 0.20 | Building Construction Phase | 1,317.96 |
| Generator Sets | 1 | 8 | 84 | 0.74 | Building Construction Phase | 6,136.68 |
| Tractors/Loaders/Backhoes | 1 | 6 | 97 | 0.37 | Building Construction Phase | 2,657.40 |
| Welders | 3 | 8 | 46 | 0.45 | Building Construction Phase | 6,130.75 |
| Air Compressors | 1 | 6 | 78 | 0.48 | Architectural Coating Phase | 1,386.08 |
| Pavers | 1 | 6 | 130 | 0.42 | Paving Phase | 173.17 |
| Cement and Mortar Mixers | 1 | 6 | 9 | 0.56 | Paving Phase | 17.77 |
| Paving Equipment | 1 | 8 | 132 | 0.36 | Paving Phase | 200.95 |
| Rollers | 1 | 7 | 80 | 0.38 | Paving Phase | 125.05 |
| Tractors/Loaders/Backhoes | 1 | 8 | 97 | 0.37 | Paving Phase | 168.72 |
| | | | | | **Total Fuel Used** | **26,905.98** |
| | | | | | | **(Gallons)** |

| Construction Phase | Days of Operation |
|---|---|
| Demolition Phase | 22 |
| Site Preparation Phase | 5 |
| Grading Phase | 15 |
| Building Construction Phase | 210 |
| Paving Phase | 10 |
| Architectural Coating Phase | 105 |
| Total Days | 367 |

## WORKER TRIPS

| Constuction Phase | MPG [2] | Trips | Trip Length (miles) | Fuel Used (gallons) |
|---|---|---|---|---|
| Demolition Phase | 24.4 | 13 | 10.8 | 126.59 |
| Site Preparation Phase | 24.4 | 8 | 10.8 | 17.70 |
| Grading Phase | 24.4 | 8 | 10.8 | 53.11 |
| Building Construction Phase | 24.4 | 22 | 10.8 | 2,044.92 |
| Paving Phase | 24.4 | 13 | 10.8 | 57.54 |
| Architectural Coating Phase | 24.4 | 4 | 10.8 | 185.90 |
| | | | **Total** | **2,485.77** |

## HAULING AND VENDOR TRIPS

| Trip Class | MPG [2] | Trips | Trip Length (miles) | Fuel Used (gallons) |
|---|---|---|---|---|
| **HAULING TRIPS** | | | | |
| Demolition Phase | 7.5 | 37 | 20.0 | 98.67 |
| Site Preparation Phase | 7.5 | 0 | 20.0 | - |
| Grading Phase | 7.5 | 0 | 20.0 | - |
| Building Construction Phase | 7.5 | 0 | 20.0 | - |
| Paving Phase | 7.5 | 0 | 20.0 | - |
| Architectural Coating Phase | 7.5 | 0 | 20.0 | - |
| | | | **Total** | **98.67** |
| **VENDOR TRIPS** | | | | |
| Demolition Phase | 7.5 | 0 | 7.3 | - |
| Site Preparation Phase | 7.5 | 0 | 7.3 | - |
| Grading Phase | 7.5 | 0 | 7.3 | - |
| Building Construction Phase | 7.5 | 9 | 7.3 | 1,839.60 |
| Paving Phase | 7.5 | 0 | 7.3 | - |
| Architectural Coating Phase | 7.5 | 0 | 7.3 | - |
| | | | **Total** | **1,839.60** |

| | |
|---|---|
| **Total Gasoline Consumption (gallons)** | **2,485.77** |
| **Total Diesel Consumption (gallons)** | **28,844.25** |

**Sources:**

**[1]** United States Environmental Protection Agency. 2018. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES2014b* . July 2018. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100UXEN.pdf.

**[2]** United States Department of Transportation, Bureau of Transportation Statistics. 2019. *National Transportation Statistics 2019* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

# Trinity Child Center Project

Last Updated: 6/3/2021

**Populate one of the following tables (Leave the other blank):**

| Annual VMT | | OR | Daily Vehicle Trips | |
|---|---|---|---|---|
| Annual VMT: | 0 | | Daily Vehicle Trips: | |
| | | | Average Trip Distance: | |

| Fleet Class | Fleet Mix |
|---|---|
| Light Duty Auto (LDA) | 0.492202 |
| Light Duty Truck 1 (LDT1) | 0.044480 |
| Light Duty Truck 2 (LDT2) | 0.207604 |
| Medium Duty Vehicle (MDV) | 0.135310 |
| Light Heavy Duty 1 (LHD1) | 0.040374 |
| Light Heavy Duty 2 (LHD2) | 0.006490 |
| Medium Heavy Duty (MHD) | 0.012772 |
| Heavy Heavy Duty (HHD) | 0.047881 |
| Other Bus (OBUS) | 0.003361 |
| Urban Bus (UBUS) | 0.001607 |
| Motorcycle (MCY) | 0.005537 |
| School Bus (SBUS) | 0.001401 |
| Motorhome (MH) | 0.000981 |

| Fuel Economy (MPG) [1] | |
|---|---|
| Passenger Vehicles | 24.4 |
| Light-Med Duty Trucks | 17.9 |
| Heavy Trucks/Other | 7.5 |
| Motorcycles | 44 |

**Fleet Mix**

| Vehicle Type | Percent | Fuel Type | Annual VMT: VMT | Vehicle Trips: VMT | Fuel Consumption (Gallons) |
|---|---|---|---|---|---|
| Passenger Vehicles | *49.22%* | *Gasoline* | 0 | 0.00 | 0.00 |
| Light-Medium Duty Trucks | *38.74%* | *Gasoline* | 0 | 0.00 | 0.00 |
| Heavy Trucks/Other | *11.49%* | *Diesel* | 0 | 0.00 | 0.00 |
| Motorcycle | *0.55%* | *Gasoline* | 0 | 0.00 | 0.00 |

| | |
|---|---|
| **Total Gasoline Consumption (gallons)** | **0.00** |
| **Total Diesel Consumption (gallons)** | **0.00** |

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2019. National Transportation Statistics 2019. Available at: https://www.bts.gov/topics/national-transportation-statistics.

# Appendix HAZ

Hazardous Materials Reports

# Asbestos and Lead-Based Paint and Lead-Glazed Ceramic Tile Survey Report

**MASEK CONSULTING SERVICES, INC.**
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# Asbestos and Lead-Based Paint and Lead-Glazed Ceramic Tile Survey Report

# Trinity Annex at Humboldt State University in Arcata, CA

## Prepared For Humboldt State University

## April 26, 2016

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Our inspection was performed on April 19, 2016.

Anyone reading this report should read the entire report, including attachments, which are part of this report. We use “we” throughout, rather than the awkward repeating of our name.

## Project-Specific Limitations

None. This was not a limited survey. The general limitations at the end of this report apply to all projects. We understand that the building may be demolished, or parts may be demolished and one part kept.

## Company Background

Since 1991 we have provided services at many thousands of properties of all types. Our goals have always been to produce superior reports, offer superior value, and provide superior service. Significantly, about 33% of our revenue has been from sub-consulting work for medium and large consulting companies who demand top quality and choose to trust us to do work for their clients. Our clients include investors, architects, lenders, attorneys, government organizations, property management firms and other consulting firms. We provide a wide range of services needed for pre-acquisition due diligence of commercial properties and for management and correction of identified hazards or deficiencies. Please visit our web site for more information: http://www.masekconsulting.net

## Asbestos Survey Findings

A Friable material can be broken, crumbled, pulverized or reduced to powder by hand pressure when dry (e.g. structural fireproofing, pipe insulation, ceiling tile, ceiling texture). Non-Friable materials include items such as vinyl floor tile, mastics, plastic roof cement, stucco, drywall joint compound & texture, roofing, and sheet vinyl flooring (when in place and in good condition, friable once disturbed). A non-friable material may become friable when disturbed or deteriorated.

### Drywall With Asbestos Joint Compound

Many years ago US EPA correctly stated that drywall and joint compound can never be separated, so ***for disposal only***, a composite of the two is used to determine if it is or is not ACM (a material containing over 1% asbestos by weight). However, you don't need laboratory analysis when mathematical analysis tells you it is impossible for the composite to be over 1%.

Our experience and research indicates that drywall joint compound containing asbestos was typically manufactured with several percent asbestos, and the asbestos type is usually reported to contain between less than one percent and five percent asbestos. Drywall joint compound which contains 5% asbestos would have to make up over 20% of the composite with the non-asbestos drywall for the composite material to be over 1% asbestos by weight. If it has a lower percentage asbestos content, it would have to make up a greater percentage of the composite. Anyone who has seen drywall after the drywall joint compound has been applied to the joints and fastener locations, and who considers the thickness and weight of the drywall in comparison to he thickness and weight of the drywall joint compound, knows that it is impossible for the

drywall joint compound to make up over 20% of the composite weight. This is also the case if the joint compound has also been used to apply a thin texture. The only exception is a situation in which joint compound has been applied in a thick layer over the entire surface of the drywall to produce some sort of skim coat, often with a decorative trowel pattern.

The US EPA regulates disposal, so drywall with asbestos joint compound may be disposed as construction debris, although some landfills have their own rules which impact the disposal of such materials. OSHA regulates employee exposures, so the materials must be handled properly to comply with their regulations.

Homogeneous Areas and Samples

To make the following table and this report readily readable, we utilize 12 point or larger type for all but the page footers and attachments. People also do not like having to turn pages to read them, especially if they are reading a screen. For the convenience of readers, we minimize the number of columns by using convenient codes for condition, disturbance potential, friability, removal, and waste handling.

Damage may be physical, due to deterioration, or due to water. Significant Damage means 10% or more evenly distributed, or 25% or greater localized damage. Damage means less than 10% damage (e.g. abraded, gouged, blistered, peeling, crumbling). Good means no or very little damage or deterioration.

Materials may be disturbed by contact, vibration, or air erosion, and all of those possible sources of disturbance are considered in determining if there is potential for significant damage, potential for damage, or low potential for damage.

Taking all of those factors into consideration, materials which contain asbestos (those containing over 1% asbestos are Asbestos Containing Materials) are categorized according to the following Hazard Rank scale:

| | | |
|---|---|---|
| worst | 7 - | Friable with significant damage |
| | 6a - | Friable with damage and potential for significant damage |
| | 6b - | Non-Friable with significant damage and potential for more significant damage |
| | 5a - | Friable with damage and potential for damage |
| | 5b - | Non-Friable with significant damage and potential for additional damage |
| | 5c - | Non-Friable with damage and potential for significant damage |
| | 5d - | Friable in good condition and potential for significant damage |
| | 4a - | Non-Friable with significant damage and low potential for disturbance |
| | 4b - | Friable with damage and low potential for disturbance |
| | 3a - | Friable in good condition and potential for damage |
| | 3b - | Non-Friable with damage and potential for damage |
| | 3c - | Non-Friable in good condition and potential for significant damage |
| | 2a - | Friable in good condition and low potential for disturbance |
| | 2b - | Non-Friable with damage and low potential for disturbance |
| | 2c - | Non-Friable in good condition and potential for damage |
| best | 1 - | Non-Friable in good condition and low potential for disturbance |

Category I non-friable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than one percent (1%) asbestos as determined using polarized light microscopy (PLM) according to the method specified in Appendix A, Subpart F, 40 CFR Part 763. (Sec. 61.141), or assumed to be such.

Category II non-friable ACM is any material, excluding Category I non-friable ACM, containing more than one percent (1%) asbestos as determined using polarized light microscopy according to the methods specified in Appendix A, Subpart F, 40 CFR Part 763 that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (Sec. 61.141), or assumed to be such.

If all or portions of materials which contain asbestos are removed (using typical methods and equipment), the following Waste codes indicate how the waste should be disposed:

F - Friable, hazardous asbestos waste;

NF - Non-Friable, non-hazardous asbestos waste; or

O - OSHA regulations regarding materials containing greater than zero, but less than 1% asbestos apply. Dispose as construction debris or non-friable asbestos waste, depending on the requirements of the landfill where the waste is disposed.

Suspect materials which are not sampled must be assumed to contain asbestos. Materials are typically assumed to contain asbestos due to the material being readily identifiable (e.g. asbestos-cement items), lack of access, or to avoid the cost of laboratory analysis for materials which commonly contain asbestos (e.g. plastic roof cement).

We generally omit the prefix of the sample numbers from the sketch(es) or drawings for clarity. Such prefixes are used solely to prevent the laboratory from accidentally mixing samples from different batches.

Please see the Scope of Services section below for information on our sampling protocols.

We use the words “roughly” or “approximately” with quantities to prevent contractor change orders for minor variations in quantity. *Contractors should verify the site conditions, material location(s), and quantities to their satisfaction prior to committing to a price and schedule for removal work.*

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| window putty | TA-1 | near the main door on the basement window | ND | | |
| | TA-125 | on the first floor window on the building side facing the parking lot | ND | | |
| | TA-128 | in the courtyard | ND | | |
| **Various patterns and colors of 9" x 9" and 12" x 12" vinyl floor tile, totaling roughly 16,000 square feet** | | | | **3c** | **NF** |
| **green with streaks 9x9 vinyl floor tile in the lobby, Rooms 112A, 129, 114A, 114, Photo 36** | **TA-2** | **in the main lobby** | **ND** | | |
| | **TA-14** | **in Room 112A, center** | **10** | | |
| | **TA-48** | **In Room 129, center** | **8** | | |
| **black 9x9 vinyl floor tile, as in Room 112A** | **TA-17** | **in Room 112A, in the corner** | **6** | | |
| **tan 9x9 vinyl floor tile in Room 116** | **TA-28** | **in Room 116 over linoleum** | **2** | | |
| **tan with streaks 9x9 vinyl floor tile in Rooms 123A, Room 127, Room 100, Photo 25** | **TA-31** | **in Room 123A, center** | **3** | | |
| | **TA-46** | **in Room 127, near the door** | **5** | | |
| **speckled tan 9x9 vinyl floor tile in Room 118** | **TA-34** | **in Room 118, center** | **3** | | |
| **greenish with streaks 9x9 vinyl floor tile in Room 107, Photo 20** | **TA-67** | **in Room 107, center** | **4** | | |
| **black 9x9 vinyl floor tile installed around the room edges, Photo 20** | **TA-69** | **in Room 107** | **4** | | |
| **whitish with sparkles 9x9 vinyl floor tile in Room 101, Photo 24,** | **TA-73** | **Room 101, corner** | **2** | | |
| **whitish with smears 9x9 vinyl floor tile in Room 102, Photo 49** | **TA-76** | **Room 102, center** | **2** | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **cream 9x9 vinyl floor tile in Room 100** | **TA-78** | **Room 100, center** | **3** | | |
| **marbled pattern brown/tan 9x9 vinyl floor tile in the basement corridor, Rooms 4, 7, 6, 9, 11 and 13 and on the stairway, Photos 27, 33** | **TA-86** | **basement stairway** | **3** | | |
| **tan 9x9 vinyl floor tile in the southeast addition wing** | **TA-106** | **Room 126, center** | **3** | | |
| **tan 9x9 vinyl floor tile in Rooms 160 & 162, Photo 12** | **TA-118** | **in Room 160, center** | **2** | | |
| **dark brown 12x12 vinyl floor tile in Room 110** | **TA-66** | **over linoleum in Room 110** | **2** | | |
| **patch of floor tile in Room 135** | **TA-83** | **patched section in Room 135** | **3** | | |
| **tan 12x12 vinyl floor tile in Room 121** | **TA-25** | **Room 121** | **2** | | |
| **peel & stick type strip of floor tile, Roughly 8 Sq. Ft., in Room 157** | **TA-123** | **in Room 157** | **2** | | |
| Areas of vinyl floor tile found not to contain asbestos | | | | | |
| gray streaked pattern 12x12 vinyl floor tile in Room 121 | TA-26 | | ND | | |
| gray speckled 9x9 vinyl floor tile, as in Room 131 | TA-49 | in Room 131 near the door | ND | | |
| tan 12x12 vinyl floor tile in the restroom, Room 112A | TA-12 | Room 112A | ND | | |
| bottom layer of vinyl floor tile over plywood in Room 112A | TA-13 | Room 112A | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| beige streaked pattern 12x12 vinyl floor tile, as in Room 115 | TA-18 | Room 115 | ND | | |
| whitish main pattern 12x12 vinyl floor tile in Room 135 | TA-85 | Room 135 center | ND | | |
| whitish with brown splotches 12x12 vinyl floor tile | TA-99 | Room 137 | ND | | |
| tan with brown wide splotches 12x12 vinyl floor tile | TA-109 | in Room 154A | ND | | |
| floor tile mastic adhering 12x12 vinyl floor tile | TA-19 | Room 115 | ND | | |
| | TA-84 | Room 135, under the patched tile | ND | | |
| mastic adhering 9x9 vinyl floor tile | TA-3 | Room 113 | ND | | |
| | TA-15 | Room 112A | ND | | |
| | TA-32 | in Room 123A | ND | | |
| | TA-35 | in Room 118 | ND | | |
| | TA-47 | in Room 127 | ND | | |
| | TA-63 | in Room 135 | ND | | |
| | TA-68 | in Room 107 | ND | | |
| | TA-70 | in Room 107 | ND | | |
| | TA-74 | in Room 101 | ND | | |
| | TA-77 | in Room 102 | ND | | |
| | TA-79 | in Room 100 | ND | | |
| | TA-87 | on the stairway to the basement | ND | | |
| | TA-106b | in Room 126 | ND | | |
| | TA-119 | in Room 160 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| stone chip pattern sheet vinyl flooring throughout the corridors on the first floor | TA-6 | at Room 114 | ND | | |
| marbled pattern linoleum in first floor rooms and some basement rooms | TA-10 | in Room 112 | ND | | |
| black linoleum around the room edges | TA-11 | Room 112 | ND | | |
| linoleum in Room 117 | TA-23 | on the counter top in Room 117 | ND | | |
| sheet vinyl flooring with gold specs in Rooms 123 and 125 | TA-43 | under the carpet in Room 123 | ND | | |
| brown linoleum in Room 150 | TA-64 | over green marbled linoleum in Room 150 | ND | | |
| multi-speckled pattern linoleum | TA-65 | in Room 111 | ND | | |
| green fissured pattern sheet vinyl flooring in the attic | TA-80 | laying in the attic main room | ND | | |
| brown linoleum sheet | TA-81 | laying loose in the attic | ND | | |
| orange linoleum sheet | TA-82 | | ND | | |
| cream/tan with brown specks linoleum in the chapel | TA-97 | under the carpet in Room 151 | ND | | |
| **tan sheet vinyl flooring in Room 124, roughly 100 square feet** | **TA-104** | **under the carpet in Room 124** | **8** | **3c** | **F** |
| **gray/tan sheet vinyl flooring in Room 159, roughly 200 square feet** | **TA-122** | **in Room 159 under the carpet** | **2** | **3c** | **NF** |
| hexagonal pattern sheet vinyl flooring | TA-113 | in Room 156A | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| tar paper under the 9x9 vinyl floor tile | TA-4 | in Room 113 | ND | | |
| | TA-16 | in the first floor restroom lobby | ND | | |
| | TA-33 | in Room 123A | ND | | |
| tar paper under the plywood | TA-7 | in the corridor at Room 114 | ND | | |
| tar paper under wood siding | TA-95 | in the courtyard | ND | | |
| **drywall joint compound & texture throughout, except for the northeast wing, roughly 35,000 square feet** | **TA-5** | **on wood panels in Room 113** | **ND** | **3c** | **NF** |
| | **TA-20** | **in Room 115 on the wall common with the lobby** | **ND** | | |
| | **TA-27** | **on the corner in Room 121** | **3** | | |
| | **TA-39** | **in Room 123** | **2** | | |
| | **TA-55** | **at Room 133 on the corridor corner** | **3** | | |
| | **TA-62** | **in the corridor at Room 135** | **3** | | |
| | **TA-75** | **in the janitors's closet (Room 104A)** | **3** | | |
| | **TA-88** | **in the corridor at the door to Room 5** | **2** | | |
| | **TA-89** | **on the basement corridor wall** | **2** | | |
| drywall joint compound & texture in the northeast wing (appears to have been remodeled) | TA-110 | on the corner in Room 154A | ND | | |
| | TA-111 | in the file room off Room 158 | ND | | |
| | TA-112 | in the storage room in Room 158 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **drywall texture on the plywood ceiling in Room 11, roughly 200 square feet** | **TA-91** | **center of Room 11** | **2** | **3c** | **NF** |
| drywall | TA-40 | in Room 123 | ND | | |
| top (color coat) of plaster in the additions | TA-44 | in Room 131 | ND | | |
| | TA-50 | in Room 129 | ND | | |
| | TA-102 | in Room 124 | ND | | |
| | TA-107 | in Room 126 | ND | | |
| bottom layer of plaster | TA-45 | in Room 131 | ND | | |
| | TA-51 | in Room 129 | ND | | |
| | TA-103 | in Room 124 | ND | | |
| | TA-108 | in Room 126 | ND | | |
| **textured plaster ceiling in the southwest addition, roughly 1,100 square feet** | **TA-52** | **in the addition corridor** | **4** | **3c** | **NF** |
| | **TA-53** | **in Room 129** | **4** | | |
| | **TA-54** | **in Room 127** | **4** | | |
| one layer of plaster on the incinerator | TA-93 | on the incinerator in the basement | ND | | |
| common pattern (fissured) 1x1 ceiling tile in the rooms on the first floor | TA-8 | Room 112 | ND | | |
| | TA-41 | Room 123 | ND | | |
| | TA-100 | in Room 137 | ND | | |
| small hole pattern 1x1 ceiling tile | TA-21 | Room 115 | ND | | |
| | TA-57 | on the section of the wall in Room 120A | ND | | |
| | TA-124 | in Room 157 | ND | | |
| | TA-58 | in Room 120 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **mastic adhering the fissured or hole patterns of 1' x 1' ceiling tile in the rooms of the main building, not in the additions and with the fiberglass ceiling tile in the corridors, roughly 10,000 square feet** | **TA-9** | **in Room 112** | **ND** | **1** | **NF** |
| | **TA-22** | **Room 115** | **<1** | | |
| | **TA-42** | **Room 123** | **ND** | | |
| | **TA-59** | **Room 120** | **2** | | |
| | **TA-101** | **in Room 137** | **ND** | | |
| coating on fiberglass based ceiling tile in the corridor on the first floor | TA-126 | corridor at Room 133 | ND | | |
| | TA-127 | corridor at room 141 | ND | | |
| mastic adhering the fiberglass based ceiling tile in the first floor corridors | TA-24 | corridor at room 121 | ND | | |
| | TA-56 | corridor at Room 133 | ND | | |
| bluish 1x1 ceiling tile above the boiler | TA-94 | basement boiler room | ND | | |
| 1x2 ceiling tile on drywall ceiling in the addition | TA-114 | in Room 156A | ND | | |
| | TA-116 | in Room 160 | ND | | |
| **mastic adhering the 1x2 ceiling tile in Rooms 156A and 160, Photo 12, roughly 250 square feet** | **TA-115** | **in Room 156A** | **2** | **1** | **NF** |
| | **TA-117** | **in Room 160** | **2** | | |
| large hole pattern 1x1 ceiling tile | TA-120 | in Room 161 | ND | | |
| | TA-121 | in Room 159 | ND | | |
| cove base | TA-29 | in Room 116 | ND | | |
| | TA-36 | in Room 118 | ND | | |
| | TA-60 | in Room 135 | ND | | |
| | TA-105 | in Room 139 | ND | | |
| cove base mastic | TA-30 | in Room 116 | ND | | |
| | TA-37 | in Room 118 | ND | | |
| | TA-61 | in Room 135 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| redwood insulation | TA-38 | in the wall in Room 118 | ND | | |
| **light fixture insulator in Room 105B, Photo 22, less than 1 square foot** | **TA-71** | **in Room 105 B, center** | **80** | **5d** | **F** |
| **insulation inside the metal cabinet of the sterilizer in Room 103A, roughly 40 square feet** | **TA-72** | **in Room 103A** | **80** | **3c** | **F** |
| **asbestos cement sheet on the door to Room 3, Photo 56, roughly 12 square feet** | **TA-90** | **on the door to Room 3** | **20** | **3c** | **NF** |
| **laboratory table top, roughly 50 square feet** | **TA-92** | **in Room 11** | **20** | | |
| wood fiber ceiling boards | TA-98 | Room 151 ceiling | ND | | |
| **two approximately 8" diameter asbestos cement flue pipes from the water heater room, roughly 50 linear feet, Photo 51** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **3c** | **NF** |
| **two approximately 6" diameter asbestos cement flue pipes above Room 150, roughly 15 linear feet** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **1** | **NF** |
| **The boiler flue pipe insulation, Photo 30, roughly 200 square feet** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **5d** | **F** |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **assumed asbestos pipe insulation, mainly air cell, observed in the basement, crawl space and Room 100, roughly 2,000 linear feet, some laying on or mixed into soil in the crawl space, so the upper four inches of soil in the crawl space are contaminated, Photos 25, 26, 31, 32, roughly 8,000 square feet of contaminated soil to be removed** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **7** | **F** |
| **The approximately 2.5" diameter asbestos-cement conduit observed in Room 12 and in Room 156, roughly 120 linear feet, Photo 58** | **n/a** | **n/a -assumed, identified visually** | **n/a** | **3c** | **NF** |
| **Two pieces of asbestos-cement sheet material in Room, 156, roughly 3 square feet total, Photos 62, 63** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **6b** | **NF** |
| the main pattern of fiberglass composition shingles | 149 | rear slope of main roof above Room 110 | ND | | |
| tar paper under the fiberglass composition shingles | 129 | above the south end of Room 154D | ND | | |
| | 132 | above Room 155 | ND | | |
| | 150 | rear slope of main roof above Room 110 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| roll roofing on the small flat roof above the Room 156 addition | 130 | center of the on the small flat roof above the Room 156 addition | ND | | |
| tar paper on the small flat roof above the Room 156 addition | 131 | center of the on the small flat roof above the Room 156 addition | ND | | |
| gray plastic roof cement spots at the ventilator above Room 156, roughly 1 square foot | 133 | above Room 156 | ND | | |
| **plastic roof cement spots at skylight, Roughly 3 Sq. Ft.** | **134** | **above Room 162** | **6** | **1** | **NF** |
| gray plastic roof cement spots, strips, on roll roofing above Room 153, roughly 50 square feet | 135 | above the east end of Room 153 | ND | | |
| roll roofing above Room 153 | 136 | above the east end of Room 153 | ND | | |
| upper tar paper above Room 153 | 137 | above the east end of Room 153 | ND | | |
| 3 layers of older tar paper above Room 153 | 138 | above the east end of Room 153 | ND | | |
| tar paper under pea gravel, 3 layers, above Room 153 | 139 | above the east end of Room 153 | ND | | |
| old thin bottom tar paper above Room 153 | 140 | above the east end of Room 153 | ND | | |
| old shingles, partly under roll roofing, gray, above Rooms 151 and 151A | 141 | the southeast portion of the roof above Rooms 151 and 151a | ND | | |
| second from the top layer of shingles, green, above Rooms 151 and 151A | 142 | | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| third from the top layer of shingles, red, above Rooms 151 and 151A | 143 | | ND | | |
| tar paper, above Rooms 151 and 151A | 144 | | ND | | |
| top layer of tar paper layers under tar and rocks above Rooms 150 and 152 and the adjoining corridor | 145 | east end of the roof above Room 150, all of the layers are over 1" thick | ND | | |
| next tar paper layers under tar and rocks above Rooms 150 and 152 and the adjoining corridor | 146 | | ND | | |
| bottom tar paper layers above Rooms 150 and 152 and the adjoining corridor | 147 | | ND | | |
| **gray plastic roof cement spots on the tar and rocks roof above Rooms 150 and 152 and the adjoining corridor, roughly 50 square feet** | **148** | **at the vent above Room 150** | **4** | **1** | **NF** |
| roll roofing on the flat roof at the dormer of Room 200 | 151 | north end, center of the flat roof at the Dormer of Room 200 | ND | | |
| lower layer of roofing on the flat roof at the dormer of Room 200 | 152 | | ND | | |
| tar paper under the roofing on the flat roof at the dormer of Room 200 | 153 | | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| gray plastic roof cement spots, joint between wood wall and roof of main building, roughly 50 square feet | 154 | above Room 114 | ND | | |
| shingles on the southeast addition | 155 | northeast corner of the addition, above Room 130A | ND | | |
| tar paper on the southeast addition | 156 | | ND | | |
| tar-like coating on two water pipes originating in the southwest crawl space and going into the basement corridor and Room 15 | 157 | In the basement corridor just outside of the crawl space entry door | ND | | |

**Lead-Based Paint and Lead-Glazed Ceramic Tile Survey Findings**

The lead-based paint (XRF readings greater than or equal to 1.0 mg/cm$^2$ in most places) identified is:

- All of the exterior painted wood surfaces (including the former exterior surfaces in Room 154A), except for different siding on the former chapel, paint is in poor condition in may locations;
- The metal down spouts;
- The interior wood window components;
- The wood cabinet in Room 109A;
- Most of the interior door frames;
- The cabinet in Rooms 103B and 109A;
- The laundry chute in Room 148;
- The plywood over the bathtubs in Rooms 164 ands 166;

- The dumbwaiter;
- The radiator alcove moldings;
- Wood cabinets in the restrooms, as in Room 118, 125; and,
- The paint on the concrete front entry area steps.

The lead-glazed ceramic tile (XRF readings greater than or equal to 1.0 mg/cm$^2$) is:

- The counter top in Room 109A ;
- The accent yellow wall tile in the restroom 105B;
- The shower ceramic tile in Room 101;
- Wall tile in Room 118; 125;
- The green wall tile in Room 133;

Solid sheet lead lining the X Ray room walls in Room 120, Photo 46 .

Lead Survey Samples

A room equivalent is an identifiable part of a building (e.g., room, exterior, corridor, stairway, foyer, Etc.). Closets or other similar areas adjoining rooms are not considered as separate room equivalents unless they are obviously dissimilar from the adjoining room equivalent.

Each testing combination may be composed of more than one building component (such as two similar windows within a room equivalent).

Surfaces covered with wallpaper are assumed to be painted.

For varnished, stained, or similar clear-coated floors, measurements in only one room equivalent are permissible if it appears that the floors in the other room equivalents have the same coating.

Some testing combinations have multiple parts. For example:

- All of the parts of an interior window sash;
- All of the parts of the window frame and trim (casings, stops, jambs, aprons, Etc.);
- All of the parts of baseboard assembly (main board, quarter round, and so forth);
- All of the parts of a door (stiles, rails, panels, mullions, panels, Etc.); and,
- All of the parts of a door frame assembly (jambs, stops, transoms, casings, Etc.).

Because it is highly unlikely that all the parts would have different painting histories, they are not considered separate testing combinations, unless we have substantial evidence that different parts have separate, distinct painting histories.

When the plus or minus indication on the XRF instrument is such that adding the amount indicated to the reading would cause it to be equal to or over the positive level, we add it and report that amount.

In the Title 17, California Code Of Regulations, Division 1, Chapter 8:

> "Industrial building" means a structure that is used primarily for industrial activity, which is generally not open to the public, including but not limited to, warehouses, factories, and storage facilities. "Industrial building" does not include any structure which fits the definition of a public building or a residential building.
>
> "Public building" means a structure, or part of a structure, and its land, which is generally accessible to the public, including but not limited to, schools, daycare centers, museums, airports, hospitals, stores, convention centers, government facilities, office buildings and any other building which is not an industrial building or a residential building.
>
> "Residential building" means a structure, or part of a structure, and its land, which is used or occupied, or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons.

A vacant building such as this slated for demolition is obviously an "industrial building" as it clearly is not a "residential building," since nobody is allowed to live in it, nor a "public building," since it is not open to the public, no matter its former use.

| Testing Combinations - condition is good unless noted | | | Lead $mg/cm^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| | calibration 1.04 | | 1.0 |
| | calibration 0.31 | | 0.3 |
| | calibration 0.71 | | 0.7 |
| Exterior | walkway ceiling | wood | 1.2 |
| Exterior | wall | wood | 6.4 |
| exterior | window frame | wood | 6.1 |
| Exterior | wall | wood | 3.3 |
| exterior | window sash | wood | 4.6 |
| Exterior | down spout | metal | 2.9 |
| Exterior | window frame | wood | 4.0 |
| Exterior | window sash | wood | 6.9 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| Exterior | walkway post | wood | 1.4 |
| Exterior | walkway railing | wood | 0.5 |
| Exterior | walkway ceiling | wood | 1.0 |
| Shed | wall | wood | 3.6 |
| shed | wall | wood | 3.6 |
| Exterior | wall | wood | 4.8 |
| exterior | window frame | wood | 4.0 |
| Exterior | window sash | wood | 5.3 |
| Exterior | wall | wood | 3.9 |
| exterior | down spout | metal | 4.0 |
| Exterior | gutter | wood | 1.7 |
| 154A | exterior door | wood | 0.23 |
| 154A | door frame | wood | 0.3 |
| 154A | window frame | wood | 0.01 |
| 154A | window sash | wood | 1.9 |
| 154A | wall | drywall | 0.00 |
| 154A | wall (used to be outdoors) | wood | 5.9 |
| 158 | door | wood | 0.2 |
| 158 | door frame | wood | 0.02 |
| 158 | ceiling | drywall | 0.02 |
| 158 | cabinet | wood | 0.01 |
| 158 | wall | wood | 0.03 |
| 158 | window frame | wood | 1.8 |
| 158 | window sash | wood | 1.7 |
| 158 | wall | drywall | 0.08 |
| 158 | door frame | wood | 0.25 |
| 158 | door | wood | 0.23 |
| 158 | door to corridor | wood | 0.16 |
| 158 | base molding | wood | 0.02 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 158 | radiator | metal | 0.06 |
| 160 | door fame | wood | 0.00 |
| 160 | wall | drywall | 0.00 |
| 155 | door frame | wood | 0.21 |
| 155 | door | wood | 0.06 |
| 155 | wall | drywall | 0.05 |
| 153 | wall | drywall | 0.11 |
| 162 | door frame | wood | 0.06 |
| 162 | door | wood | 0.03 |
| 162 | base molding | wood | 0.07 |
| 162 | window frame | wood | 0.8 |
| 162 | window sash | wood | 1.2 |
| 162 | radiator | metal | 0.01 |
| 159 | wall | drywall | 0.1 |
| 159 | window frame | wood | 1.0 |
| 164 | wall | drywall | 0.04 |
| 164 | door frame | wood | 0.08 |
| 164 | door | wood | 0.02 |
| 166 | door frame | wood | 0.07 |
| 166 | door | wood | 0.11 |
| 166 | wall | wood | 0.11 |
| 166 | tub cover | wood | 1.6 |
| 157 | wall | wood | 0.00 |
| 158 | door frame | wood | 0.09 |
| 158 | door | wood | 0.05 |
| 158 | wall | drywall | 0.02 |
| Exterior | door frame | wood | 1.0 |
| Exterior | window frame | wood | 3.8 |
| Exterior | window sash | wood | 4.4 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| Exterior | wall | wood | 5.6 |
| exterior | down spout | metal | 3.6 |
| Exterior | railing | metal | 0.16 |
| exterior | steps | ceramic | 0.05 |
| exterior | steps edge marking | concrete | 1.5 |
| Exterior | front porch post | wood | 4.7 |
| 113 | wall | wood | 0.00 |
| 113 | steam pipe | metal | 0.07 |
| 113 | radiator | metal | 0.04 |
| Corridor | wall | drywall | 0.2 |
| 111 | door frame | wood | 0.6 |
| 111 | wall | drywall | 0.3 |
| 111A | window frame | wood | 0.8 |
| Corridor | door frame | wood | 0.7 |
| 109A | counter top | ceramic | 6.8 |
| 109A | cabinet | wood | 1.7 |
| 109A | wall | drywall | 0.00 |
| Corridor | storage room door frame | wood | 0.05 |
| 110 | door frame | wood | 1.6 |
| 110 | door | wood | 0.01 |
| 110 | wall | drywall | 0.00 |
| 110 | window frame | wood | 1.8 |
| 110 | window sash | wood | 1.0 |
| 109 | door frame | wood | 0.02 |
| Corridor | ceiling | fiberglass tile | 0.00 |
| 109 | wall | drywall | 0.09 |
| 107 | door frame | wood | 1.5 |
| 107 | door frame | wood | 1.3 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 106 | closet door frame | wood | 0.00 |
| 106 | restroom door frame | wood | 0.3 |
| 106 | restroom wall | drywall | 0.06 |
| 105 | door frame | wood | 0.24 |
| 104 | door frame | wood | 1.0 |
| 105B | door frame | wood | 0.27 |
| 105B | wall | ceramic | 0.17 |
| 105B | accent wall tile | ceramic | 15.1 |
| 105B | wall | drywall | 0.16 |
| 105B | sterilizer | metal | 0.00 |
| 105 | door frame | wood | 0.11 |
| 105 | window frame | wood | 1.3 |
| 103A | door frame | wood | 1.5 |
| 103B | door frame | wood | 0.24 |
| 103B | cabinet | wood | 2.4 |
| 101 | shower wall | ceramic | 8.7 |
| 101 | wall | drywall | 0.17 |
| Corridor | janitor’s closet dumbwaiter | metal | 1.5 |
| Corridor | wall | drywall | 0.1 |
| corridor | janitor’s closet door frame | wood | 1.3 |
| 102 | door frame | wood | 1.3 |
| 9 | door | wood | 0.12 |
| 9 | door frame | wood | 3.0 |
| 9 | wall | wood | 0.17 |
| 9 | window frame | wood | 1.5 |
| 7 | cabinet | wood | 0.17 |
| 7 | wall | wood | 0.04 |
| 7 | pipe | metal | 0.02 |
| 7 | door frame | wood | 0.6 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 7 | door | wood | 0.3 |
| 7 | cabinet | wood | 0.06 |
| 5 | wall | wood | 0.15 |
| 5 | ceiling | wood | 0.6 |
| 1 | ceiling | wood | 0.6 |
| 1 | beam | wood | 0.4 |
| 1 | window sash | wood | 0.8 |
| Basement corridor | door to exterior | wood | 1.0 |
| Corridor | beam | wood | 0.5 |
| corridor | ceiling | wood | 0.7 |
| 10 | pipe | metal | 0.02 |
| 10 | door to exterior | wood | 7.7 |
| 10 | wall | concrete | 0.00 |
| 10 | ceiling | concrete | 0.01 |
| 10 | tank | metal | 0.4 |
| 10 | tank | metal | 0.01 |
| 10 | electrical panel | metal | 0.04 |
| Crawl space | doors | wood | 0.7 |
| 112 | door frame | wood | 0.6 |
| 112 | window frame | wood | 1.5 |
| 112 | window sash | wood | 1.5 |
| 112 | door frame to the restroom | wood | 0.7 |
| 112 | restroom wall | drywall | 0.05 |
| 115 | door frame | wood | 0.2 |
| 114A | door frame | wood | 1.5 |
| 114A | radiator molding | wood | 1.5 |
| 117 | door frame | wood | 1.9 |
| 119 | door frame | wood | 1.6 |
| 119 | metal radiator wall | metal | 0.3 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 119 | radiator | metal | 0.21 |
| 119 | restroom door frame | wood | 1.0 |
| 119 | restroom wall | drywall | 0.06 |
| 116 | door frame | wood | 2.2 |
| 118 | wall | ceramic | 5.4 |
| 118 | cabinet | wood | 1.9 |
| 125 | wall | ceramic | 2.6 |
| 125 | cabinet | wood | 1.6 |
| 127 | door frame | wood | 0.01 |
| 127 | wall | drywall | 0.13 |
| 129 | door frame | wood | 0.08 |
| 129 | wall | drywall | 0.09 |
| 129 | radiator cover | metal | 0.23 |
| 129 | windowash | wood | 0.8 |
| 129 | closet door | wood | 0.16 |
| 129 | restroom door frame | wood | 0.3 |
| 129 | restroom wall | drywall | 0.04 |
| Corridor | electrical panel | metal | 0.09 |
| Corridor | ceiling | plaster | 0.00 |
| 133 | door frame | wood | 0.4 |
| 133 | cabinet | wood | 0.4 |
| 133 | wall | ceramic | 4.6 |
| 133 | closet wall | wood | 0.5 |
| Corridor | door to exterior | wood | 0.6 |
| Corridor | door frame | wood | 0.04 |
| Corridor | restroom door frame | wood | 1.4 |
| Corridor | restroom wall | drywall | 0.00 |
| 130 | wall | plaster | 0.04 |
| 130A | wall | plaster | 0.06 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 135 | door frame | wood | 1.4 |
| 120 | door frame | wood | 0.6 |
| 120 | window frame | wood | 1.7 |
| 120 | window sash | wood | 1.0 |
| 135 | door frame | wood | 1.4 |
| Corridor | fire door | metal | 0.18 |
| 124 | door frame | wood | 0.01 |
| 137 | door frame | wood | 1.1 |
| 137 | window sash | wood | 1.4 |
| 137 | window frame | wood | 1.0 |
| 137 | radiator enclosure | metal | 0.2 |
| 126 | door frame | wood | 1.0 |
| Corridor | wall | drywall | 0.08 |
| corridor | double door to exterior | wood | 0.09 |
| Corridor | fire hose cabinet | wood | 0.12 |
| Corridor | door frame to exterior | wood | 1.0 |
| 148 | laundry chute | wood | 2.3 |
| 148 | wall | dryrall | 0.6 |
| Corridor | door frame | wood | 1.0 |
| Corridor | door frame to exterior | wood | 1.3 |
| Corridor | door to exterior | wood | 0.3 |
| Exterior | door frame | wood | 2.5 |
| Exterior | door | wood | 3.7 |
| exterior | railing | metal | 0.16 |
| exterior | wall | wood | 3.2 |
| Exterior | chapel siding | wood | 0.16 |
| Exterior | chapel siding | wood | 0.15 |
| Exterior | window frame | wood | 4.8 |
| Exterior | window sash | wood | 5.1 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| Corridor | window frame | wood | 1.4 |
| Corridor | water cooler | metal | 0.00 |
| Restroom | door frame | wood | 0.9 |
| Chapel | door frame | wood | 2.8 |
| Chapel | wall | drywall | 0.00 |
| chapel | ceiling | wood fiber board | 0.01 |
| Corridor | wall | drywall | 0.03 |
| 2nd floor | stairway wall | drywall | 0.02 |
| 2nd floor | window sash | wood | 2.0 |
| 2nd floor | wall | wood | 0.04 |
| 2nd floor | restroom door | wood | 0.00 |
| | calibration 1.04 | | 1.0 |

**Building Description and Photographs**

The photographs are important parts of the descriptive information.

The subject property contains a former hospital building. An article dated September 26, 2012 in The Lumberkjack newspaper title “Trinity Hospital: The forgotten Annex” states that a permit to build the structure is dated July 2, 1943. The article is here: http://thelumberjack.org/2012/09/26/trinity-hospital-the-forgotten-annex/

The building is an unusual structure. The exterior walls and load-bearing interior walls are solid wood, with studs placed touching each other, not spaced 16" on center. The floor is also solid lumber, with the floor joists touching.

There is a partial concrete basement and a crawl space.

There are two additions, one in the south west finished with plaster, and one in the southeast, also finished with plaster.

The walls of the main building are finished with drywall. A wing in the northeast appears to have been remodeled. The ceilings are finished with drywall, ceiling tile, wood and suspended ceiling panels. The floors are finished with vinyl floor tile, linoleum, carpet and sheet vinyl flooring. The exterior is covered with wood boards. The roofs are covered with composition shingles, roll roofing, and tar and rocks over layers of tar paper. The building insulation is a wood product,

apparently ground or crushed redwood bark. We observed newer HVAC ducts insulated with fiberglass and several newer gas furnaces, but the original heating system is a boiler with asbestos insulation on the pipes and flue. We observed one asbestos-cement electrical conduit, as well as a small quantity of asbestos-cement sheets. The boiler is insulated with fiberglass.

Photo 1: The back of the left front wing, and the center wing

Photo 2: The rear-most wing

Photo 3: The main entrance

Photo 4: The front portion of the right  side

Photo 5: The gas cylinder storage shed

Photo 6: Room 154A

Photo 7: Room 154C

Photo 8:Room 154D

Photo 9: Room 156

Photo 10: Room 156A

Photo 11: Room 158

Photo 12: Room 160 with asbestos floor tile and 1' x 2' ceiling tile adhered with asbestos mastic

Photo 13: Room 155

Photo 14: The corridor outside Room 157

Photo 15: Room 153

Photo 16: A typical original radiator, this one in Room 158, a corridor

Photo 17:The backs of Room 151m the former chapel, and Room 153

Photo 18: Room 113, the main entry lobby

Photo 19: Room 106

Photo 20: Various flooring in Room107, black and greenish floor tile are asbestos

Photo 21: The corridor outside of Room 105

Photo 22: The light fixture asbestos insulator in Room 105B

Photo 23: Room 105B

Photo 24: Room 101 with asbestos 9x9 vinyl floor tile

Photo 25: Room 100, with air-cell pipe insulation and asbestos floor tile

Photo 26: The incinerator and new coverings over pipes with old asbestos insulation

Photo 27: The portion of the basement corridor with asbestos 9" x 9" vinyl floor tile

Photo 28: Room 15

Photo 29: The boiler

Photo 30:Old asbestos insulation under a newer covering on the boiler flue

Photo 31: The old asbestos insulation on the pipes in the crawl space have not been covered with newer materials and there are pieces of pipe insulation on the soil, with some mixed into the soil

Photo 32: Pipe insulation in poor condition in the crawl space

Photo 33: Room 7 with asbestos floor tile

Photo 34: Room 2

Photo 35: The corridor outside of Room 148 and 149, with a partial ceiling collapse due to water intrusion

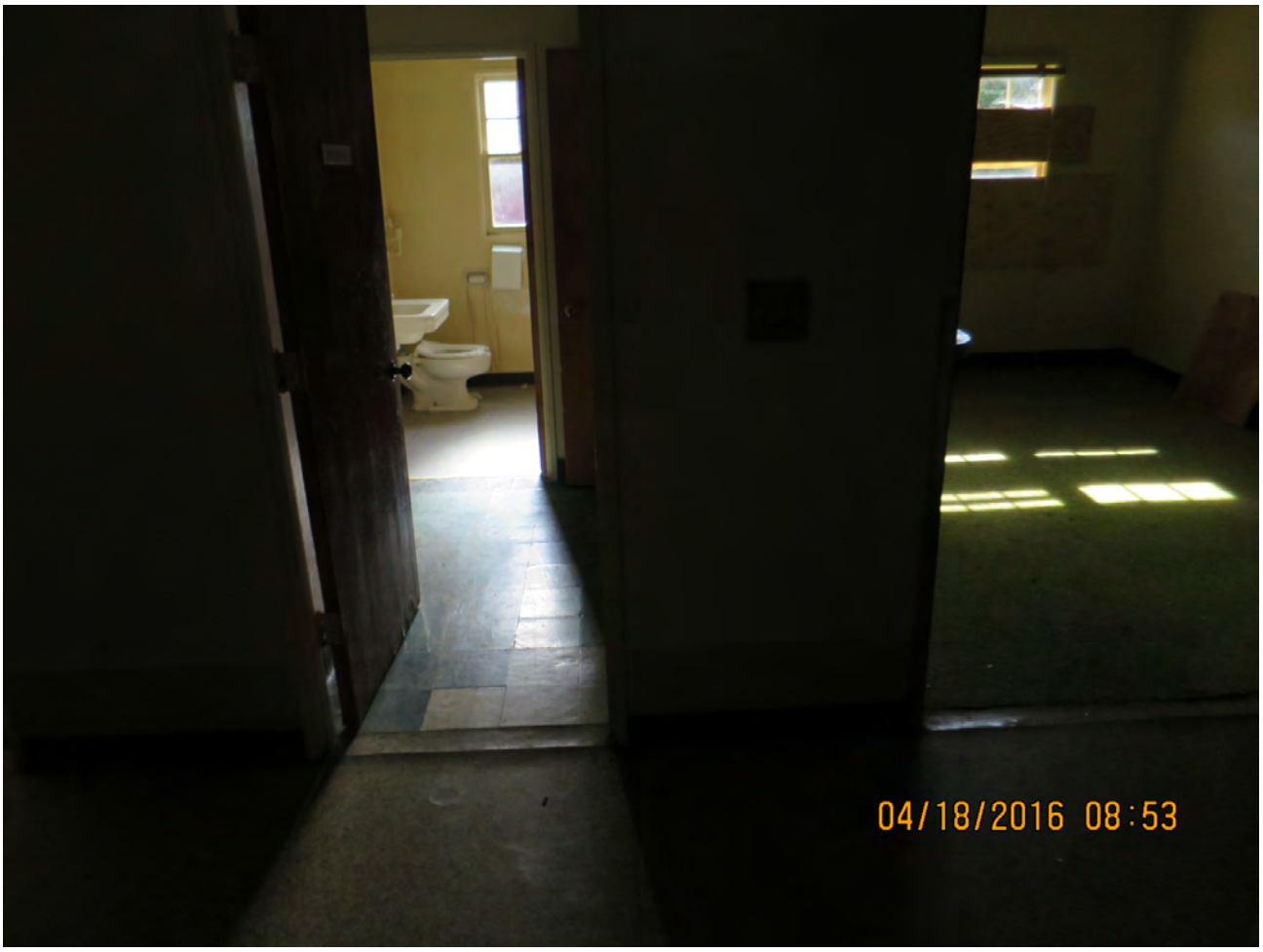



Photo 36: Looking into Rooms 114 with asbestos floor tile

Photo 37: Room 125

Photo 38: The corridor outside of Room 125, showing the different finishes in this addition

Photo 39: The addition starting at Rooms 124 and 137, with metal ceiling tile in the corridor

Photo 40: Room 137A and Room 137

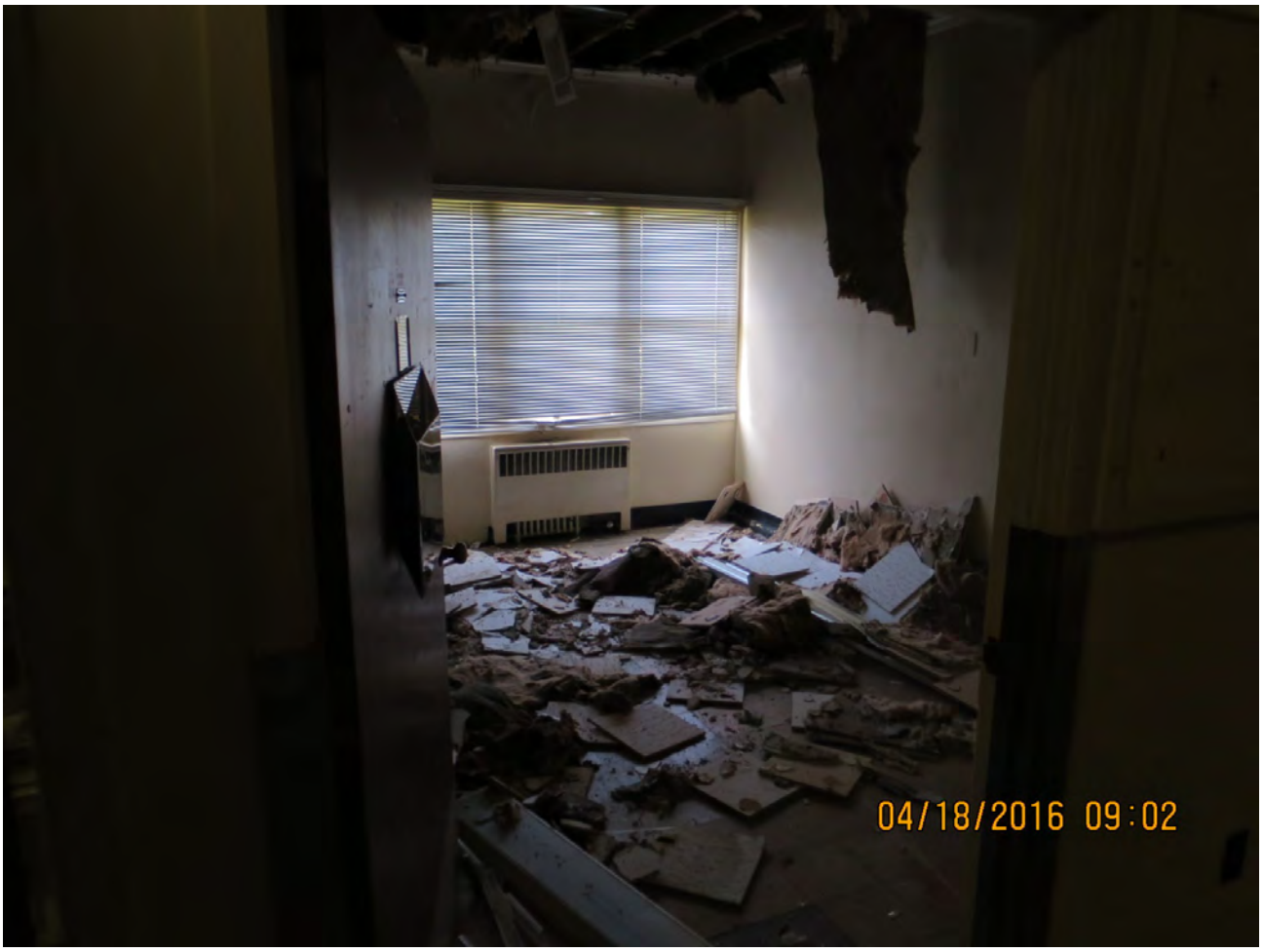



Photo 41: The collapsed ceiling in Room 141

Photo 42: The attic, Room 200

Photo 43: The attic insulation is a fibrous wood product, probably shredded redwood bark

Photo 44: The attic of the right front addition connected to the original building attic

Photo 45: The exterior walls are solid wood, with 2x2 studs touching

Photo 46: Sheet lead lining walls at the former X-Ray area in Room 120

Photo 47: Vinyl floor tile in Room 135

Photo 48: Brown burlap-backed linoleum and vinyl floor tiles in Room 150

Photo 49: Asbestos Vinyl floor tile in Room 102

Photo 50: The exposed front wall studs in the attic

Photo 51: Two approximately 8" diameter asbestos-cement flue pipes

Photo 52: A wall in the attic is made of studs which touch, and an ornate old radiator

Photo 53: One of many typical new furnaces, here in the attic, all with fiberglass-insulated ducts

Photo 54: A typical door, made of solid wood

Photo 55: The basement ceiling is sold wood, as the floor joists touch

Photo 56: An asbestos-cement panel on the door to Room 3

Photo 57: An un-insulated tank in the hot water heater room, and another of the newer furnaces

Photo 58: The approximately 2.5" diameter asbestos-cement conduit observed in Room 12 and in Room 156

Photo 59: The former chapel, Rooms151 and 151A has different siding than the rest of the building and it is not coated with lead-based paint

Photo 60: Linoleum in Room 152

Photo 61: The former chapel, Room 151

Photo 62: A piece of asbestos-cement sheet material laying on the floor in Room 156

Photo 63: Another piece of asbestos-cement sheet material laying on the floor in Room 156

Photo 64: The 1' x 1' ceiling tile in Room 157

Photo 65: Looking towards the roofs of Rooms 156 and 154

Photo 66: Looking towards the roofs of Rooms 153 and 151

Photo 67: Looking at the roofs of Rooms 152 and 150 and the roof over the corridor outside of those rooms

Photo 68: The small area of flat roofing outside of the Room 200 dormer, and the roof of the front portion of he building

Photo 69: The roof of the larger addition on the right side

Photo 70: Lead-based paint in poor condition on the main entry steps

Photo 71: water pipes in the crawl space and basement coated with a tar-like material

## Recommendations

All persons who read and use this report should read the entire report and all of the attachments.

Information on laws and regulations is provided as a convenience, not as a substitute for proper legal advice and review of the entire text of the applicable laws and regulations.

It is routine for us to be hired to oversee, monitor, and document abatement work on large projects and school projects. All clients should consider reducing their liability from claims which could arise during or after abatement work by retaining us to oversee, monitor, and document that work.

### Limitations of Polarized Light Microscopy (PLM) Analytical Methods

It is possible that materials reported to contain less than 1% asbestos by Polarized Light Microscopy (PLM) analysis may or may not actually contain asbestos. Non-friable Organically Bound (NOB) such as floor tiles (vinyl and asphalt), roofing materials, mastics, and caulking may contain asbestos which is tightly bound to the matrix material and therefore not easily isolated and detected by microscopy. PLM many not detect asbestos fibers less than 0.2 microns in diameter. Because asbestos fibers found in NOB materials may be less than 0.1 microns in diameter, this method can sometimes yield low estimates or even false negative results. In New York, both PLM and TEM analysis is required in order to declare that samples of NOB materials do not contain asbestos. Clients in other areas may wish to have samples of non-friable organically bound materials reported as “none detected” under PLM analysis re-analyzed by TEM.

### Advance Notification Is Required Prior To Asbestos Abatement Work:

California has many Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs): Amador, Antelope Valley, Bay Area, Butte, Calaveras, Colusa, Eastern Kern, El Dorado, Feather River, Glenn, Great Basin, Imperial, Lake Lassen, Mariposa, Mendocino, Modoc, Mojave Desert, Monterey Bay, North Coast, Northern Sierra, Northern Sonoma, Placer, Sacramento, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Siskiyou, South Coast, Tehama, Tuolumne, Ventura, and Yolo-Solano. In most of them, the federal asbestos NESHAP (National Emission Standard for Hazardous Air Pollutant) provisions requiring a two week advance notification for removal of more than 160 square feet or 260 linear feet of asbestos containing materials apply. In the South Coast Air Quality Management District (SCAQMD) which encompasses Los Angeles, Orange, Riverside, and parts of San Bernardino Counties, a ten ***working day*** advance notification must be given for work on more than 100 square feet of asbestos containing material. SCAQMD has an agreement with US EPA to administer the asbestos NESHAP. Rule 1403 is their asbestos regulation regarding notification and asbestos removal and demolition work. Their Rule 222 governs use of negative air machines and HEPA vacuums for asbestos work. Before starting work, the current notification requirements should be verified. Notification is also required prior to demolition. The company or organization actually doing the work is responsible for notification.

Asbestos abatement contractors must display a posting board at each work location, and it should contain copies of their notification, license, OSHA temporary job site notification, and other information such as the location of emergency medical facilities. Copies of the AHERA training, annual asbestos worker medical exam, and latest respirator fit test report for each worker and supervisor must be on site.

Notifications to Employees, Contractors, Tenants, and the Public:

1) Building owners must notify their employees and other owners (e.g of tenant companies) within 15 days of their knowledge of the presence of asbestos containing materials (Connelly Act, AB 3713, California Health and Safety Code, Section 25915), and annually thereafter.

2) Federal OSHA construction asbestos regulations, 29CFR1926.1101 (k), and the corresponding California regulations, apply to communication of hazards during construction activities.

3) Federal OSHA general industry asbestos regulations, 29CFR1910.1001(j)(2)(i), and the corresponding California regulations, require that building owners determine the presence, location, and quantity of materials which contain asbestos at the work site, and inform employees about the presence and location of those materials. Again, tenants are not employees. While this aspect of the regulation is widely ignored, as most commercial building have either not been inspected for asbestos, or only partially inspected, we suggest that all building owners implement an asbestos management (O&M) program based on at least a walkthrough asbestos survey. Asbestos was used in many common building materials up to the late 1980s, so having an asbestos management program in place minimizes liability and costs.

4) Federal OSHA general industry asbestos regulations, 29CFR1910.1001(j)(2)(iii) requires that building owners inform employers of employees, and employers inform employees who will perform housekeeping activities in areas which contain asbestos (actual or presumed) of the presence and location of those materials which may be contacted during such activities.

5) Federal OSHA general industry asbestos regulations, 29CFR1910.1001(j)(4)(i), and the corresponding California regulations, require that building owners or employers affix or post labels or signs so that employees will be notified of what materials contain, or are presumed to contain, asbestos. The labels are to be attached in such areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. The labels must comply with the requirements of 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard, and must include the following information:

DANGER

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST

CANCER AND LUNG DISEASE HAZARD

6) There is a slight variation in wording of the warnings in California's Connelly Act, AB 3713, California Health and Safety Code, Section 25915:

CAUTION.

ASBESTOS.

CANCER AND LUNG DISEASE HAZARD.

DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT

so we usually develop signs and labels which are a combination of the California and OSHA wording.

7) In a January 24, 1996 letter to Ms. Lisa K. Rushton interpreting their 29CFR1910.1101 and 29CFR1926.1101 regulations, OSHA stated: "Signs and labels are required to be posted on or near the product. However, it is generally not feasible to put labels on walls and floors. If it is not feasible, alternatives may be used. For example, if asbestos containing floors are being serviced by employees using a common equipment room day after day, then a sign or label for the asbestos flooring can be posted in that room."

8) California's Connelly Act, AB 3713, California Health and Safety Code, Section 25915, Sub-Section 25915.5 states: "An owner required to give notice to employees pursuant to this chapter, in addition to notifying his or her employees, shall mail, in accordance with this subdivision, a copy of that notice to all other persons who are owners of the building or part of the building, with whom the owner has privity of contract. Receipt of a notice pursuant to this section by an owner, lessee or operator shall constitute knowledge that the building contains asbestos-containing construction materials for purposes of this chapter. Notice to an owner shall be delivered by first-class mail addressed to the person and at the address designated for the receipt of notices under the lease, rental agreement, or contract with the owner. "

9) The California Proposition 65 notification signs which building owners (excepting many or most government buildings) should have posted on your buildings cover many materials and substances, but they are not sufficient for notifying employees or contractors working on the building.

Contractor / Employer Registration / Licensing

An employer who will be engaging in asbestos-related work involving 100 square feet or more of surface area of asbestos-containing construction material must be registered with DOSH. Asbestos abatement contractors must have this registration in addition to a contractor's license, so they are typically used to perform such work. The square footage of ACCM to be disturbed is computed by adding up the surface area of all ACCMs which will be handled during the course of the work being performed by the employer, even if it is in noncontiguous locations in

all of the buildings, structures, premises, fixtures, machinery or other areas which will be handled during the course of the work for which the employer has contracted, whether pursuant to single or multiple contracts with the same hirer. This generally means that a licensed asbestos abatement contractor must be utilized, unless a particular employer feels that they will have enough asbestos work that training and equipping some of their staff and becoming registered is cost effective.

If the work involves less than 100 sq. ft. of ACCM, the employer must send a simple "report of use" to Cal/OSHA. All other occupational health and safety work rule requirements apply-especially those from Title 8 of the California Code of Regulations, 1529. For more information about "reports of use" and the database of carcinogen use reports, call 415-703-5190. Also, see 8 CCR 5203, the Carcinogen Report of Use Requirements.

More information may be found on the DOSH web site.

OSHA Asbestos Regulations:

The federal OSHA asbestos regulations for the construction industry are contained in 29CFR1926.1101. The corresponding California regulations are at California Code of Regulations, Title 8 - Industrial Relations, Division 1- Industrial Relations, Chapter 4 - Division of Industrial Safety, Sub-chapter 4 - Construction Safety Orders, Article 4 - Dusts, Mists, Fumes, Vapors, and Gases, §§1529. Asbestos.

All of these OSHA regulations use the following definitions:

> ACM is Asbestos Containing Material (also ACBM, which is Asbestos Containing Building material)
>
> PACM is Presumed Asbestos Containing Material;
>
> Surfacing Material is material that is sprayed, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members; and,
>
> TSI is Thermal System Insulation (e.g. pipe and boiler insulation).

The California regulations mirror the federal OSHA regulations, and defines four classes of work on asbestos containing materials:

> "Class I asbestos work" means activities involving the removal of TSI and surfacing ACM and PACM.
>
> "Class II asbestos work" means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
>
> "Class III asbestos work" means repair and maintenance operations, where

"ACM", including TSI and surfacing ACM and PACM, is likely to be disturbed. "Disturbance" means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

"Class IV asbestos work" means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II, and III activities.

The regulations require that all Class I, II and III asbestos work shall be conducted within regulated areas, with all of the related requirements for demarcation, signs, respirators, and so forth.

All asbestos work performed within regulated areas must be supervised by a competent person. A competent person for Class I and Class II work must be trained as an asbestos supervisor, as originally defined in the US EPA Asbestos Hazard Emergency Response Act (AHERA), 40 CFR 763 - available on the US EPA web site.

For Class III work, the competent person need only have the 16 hour training required for maintenance and custodial staff who disturb ACMs (also known as Operations & Maintenance or O&M training).

The OSHA regulations at 29CFR1926.1101(k)(9)(iii) require that training of workers for Class I operations and for Class II operations that require the use of critical barriers (or equivalent isolation methods) and/or negative pressure enclosures be the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement workers training (40 CFR Part 763, subpart E, appendix C). However, 1926.1101(k)(9)(iv)(A) covering work with asbestos containing roofing materials, flooring materials, siding materials, ceiling tiles, or asbestos cement panels, allows a much shorter 8 hour training class for workers. That shorter class must include "hands-on" training and all the elements included in paragraph (k)(9)(viii) of that section, plus the specific work practices and engineering controls set forth in paragraph (g) of that section which specifically relate to the category of work to be performed.

Many private training facilities provide the asbestos supervisor and worker initial and annual refresher training classes, as well as the O&M training classes. Unless it is reasonably certain that the supervisor and workers will never need to disturb more than the small amount of ACM allowed under Class III, they need the normal AHERA supervisor and worker classes.

Despite the small size of Class III projects, they must be conducted using engineering and work practice controls which minimize the exposure to employees performing the asbestos work and to bystander employees:

(A) The work shall be performed using wet methods.

(B) To the extent feasible, the work shall be performed using local exhaust ventilation.

(C) Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of thermal system insulation or surfacing material, the employer shall use impermeable drop cloths, and shall isolate the operation using mini-enclosures or glove bag systems or another isolation method.

(D) Where the employer does not produce a "negative exposure assessment" for a job, or where monitoring results show the PEL (Permissible Exposure Limit) has been exceeded, the employer shall contain the area using impermeable drop cloths and plastic barriers or their equivalent, or shall isolate the operation using another listed and compliant control system.

(E) Employees performing Class III jobs, which involve the disturbance of thermal system insulation or surfacing material, or where the employer does not produce a "negative exposure assessment" or where monitoring results show a PEL has been exceeded, shall wear respirators which are selected, used and fitted according to the applicable regulations.

Federal OSHA published a nice informal summary of their asbestos regulations for the construction industry, publication OSHA3096, Revised in 2002. It is available online.

Lead Regulations

Three federal agencies regulate lead paint under Title X of the Housing and Community Development Act of 1992: The Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD), and the Occupational Safety and Health Administration (OSHA). The federal lead regulations for *construction work* are contained in 29CFR1926.62 and the corresponding California regulations in CCR 8 Section 1532.1 have some additions or revisions which are not in the federal regulations.

In California, accreditation, certification, and work practices for lead-based paint and lead hazards are regulated by Title 17, California Code Of Regulations, Division 1, Chapter 8. California Senate Bill 460 amended H&SC 17920.10 by adding "lead hazards" as a violation, amended H&SC 17961 to allow local agencies to enforce 17920.10 when lead hazards are present, and amended H&SC 105251-56 making it illegal for contractors to create lead hazards and to allow local enforcement agencies to perform enforcement. In California, lead abatement work must be performed by California CDPH (formerly DHS) accredited supervisors and workers.

The action level for employee exposure to airborne lead is 30 ì g/$m^3$ averaged over an 8-hour day. The Permissible Exposure Limit (PEL) is 50 ì g/$m^3$ averaged over an 8-hour day.

If lead is present in a *construction workplace* in *any* quantity, the *construction employer* is required to make an initial determination of whether any employee's exposure to airborne lead exceeds the action level. This initial determination requires that the employer perform an exposure assessment to monitor the construction workers' exposures unless they have objective data from similar operations performed within the previous 12 months, or data from outside

sources such as trade associations and suppliers. In a letter to Mr. William F. Alcarese dated September 10, 2008, federal OSHA stated that an employer working with paint which contains any amount of lead in such as way that would generate airborne levels to which employees may be exposed, must conduct exposure monitoring (or use objective or historical data to demonstrate that the action level is not exceeded.

Monitoring for an initial exposure assessment may be limited to a representative number of employees who are reasonably expected to have the highest exposure levels. Such monitoring is typically done by clipping small battery-powered air pumps to the employees' belts, with hoses running to filter cassettes clipped to the lapel of their shirts.

Some people mistakenly assume that work on materials found to contain any lead, even a low reading such as 0.18 $mg/cm^2$, requires use of a lead abatement contractor. That is incorrect, as abatement personnel are mainly trained to remove lead paint and ceramic tile, not to perform normal construction tasks.

There are four categories of tasks with different requirements for performing exposure assessments when lead is present and when the amount of lead is unknown:

1) For common miscellaneous construction tasks such as demolition using machinery, drilling holes through walls to run pipes or conduits, driving fasteners into surfaces, the regulations do not list any special requirements for performing exposure assessments. However, if an employer of an employee performing such a task has any reason to believe that an employee may be exposed to lead in excess of the PEL, they are required to implement the same personal protective measures as for category 2 below. It is obvious that many employers assume that employees performing such work, especially with paint containing less than 1.0 $mg/cm^2$ of lead, will not be exposed above the PEL.

   In California, Title 8, Section 1532.1 states that exposure assessment for such tasks is not required if data showing that the paint contains less than 600ppm of lead is available. However, that is a lesser standard than in the federal regulations, and federal OSHA, in a letter to Mr. William F. Alcarese dated September 10, 2008, states "Accordingly, for all tasks governed by OSHA's Lead in Construction standard (29 CFR 1926.62) involving paints having any level of lead, employers must comply with the assessment measures and any applicable protections of that standard." Also, data showing if the paint is above or below 600ppm of lead is usually not available, as the X-Ray Fluorescence (XRF) machines which are the normal and preferred method of testing produce results in units of milligrams per square centimeter, not ppm, and no conversion between the two units is possible.

2) For the tasks listed below, performing an exposure assessment requires that the workers involved be provided with personal protective clothing and equipment, change areas, hand washing facilities, biological monitoring (blood tests), training, and tight fitting air purifying half-face or better respirators as specified in the regulations :

Manual demolition of structures (e.g., dry wall)

Manual scraping;

Manual sanding;

Heat gun applications;

Power tool cleaning with dust collection systems; and,

Spray painting with lead paint;

3) For the tasks listed below, performing an exposure assessment requires that the workers involved be provided with personal protective clothing and equipment, change areas, hand washing facilities, biological monitoring (blood tests), training, and tight fitting air purifying full-face or better respiratory protection as specified in the regulations :

Using lead containing mortar;

Lead burning;

Rivet busting;

Power tool cleaning without dust collection systems;

Cleanup activities where dry expendable abrasives are used;

Abrasive blasting enclosure movement and removal;

4) For the tasks listed below, performing an exposure assessment requires that the workers involved be provided with personal protective clothing and equipment, change areas, hand washing facilities, biological monitoring (blood tests), training, and tight fitting full-face PAPR or better respiratory protection as specified in the regulations:

Abrasive blasting; and,

Welding, cutting, and torch burning.

Lead Waste Disposal

To determine if lead waste, including soil, demolition debris, and waste from lead abatement projects, is hazardous waste:

1) Sample the waste and have a laboratory perform a Total Threshold Limit Concentration (TTLC) test (preparation EPA 3050B, test method EPA 6010B). If that test indicates 1,000 parts per million (ppm) or more lead, the waste is

hazardous waste.

2) If the test results indicate that the waste contains 50ppm or less of lead, it is not a hazardous waste.

3) If the waste contains 50 or more ppm of lead, but less than 1,000ppm of lead, then a California California Waste Extraction Test (WET - preparation method CAC 66261.126, test method EPA 6010B) should be performed on the waste sample.

4) If the waste exceeds the Soluble Threshold Limit Concentration (STLC) for lead of 5 ppm, it is a California hazardous waste.

Hazardous wastes must be disposed of at a hazardous waste landfill and must be hauled under a proper manifest by a licensed hazardous waste transporter.

In an E-mail message sent 5/27/2004, Mr. Charles Corcoran (Ccorcora@dtsc.ca.gov or 916-327-4499), Chief of the Waste Identification and Recycling Section of the California Department of Toxic Substances Control stated that "The waste must be classified as it will be generated. If the entire building is to be demolished, then that is the waste to be classified. In the event the whole building is demolished, if the entire waste does not exceed the 350 ppm limit [note - his E-mail was written before the 350ppm requirement expired, therefore reverting back to the 1,000 ppm TTLC and 5 ppm STLC limits] or exhibit any hazardous waste characteristic, it may be disposed to a C&D landfill. If any individual components are first removed from the building, then DTSC would consider those wastes to be separately generated and would expect the generator to characterize them as a distinct waste."

To perform the profile testing, a representative sample of the waste needs to be collected. If a whole building is to be disposed, then the sample would be of the entire debris (we would take care to avoid over or under sampling any particular building components). If the waste is a window, then some of the wood, some of the glass, and some of the putty should be included. If the waste is ceramic tile (as during a school bathroom remodeling project), then some tile, some grout, and some of the mortar needs to be included. If the waste is wood trim, then a chunk of the wood needs to be cut out. If the waste is painted concrete, then a core or chunk of the concrete needs to be collected. In all cases, the sample should approximate the proportion of lead paint / lead ceramic tile and other materials actually present in the waste. The laboratory will require that the sample they receive be pulverized.

<u>All Field Personnel Should Have Basic Asbestos and Lead Training</u>

All contractors working on existing buildings should see that all of their field personnel have at least the two hour asbestos awareness training, and that any of their employees who will be performing work involving spot disturbances / removal of materials which contain asbestos have the 16 hour training needed for performing OSHA Class III asbestos work. They should also see that all field personnel also have the basic training on respiratory protection needed for work with lead (they would receive this during the 16 hour asbestos training).

<u>Exposure Assessment Programs Are Mandatory</u>

All contractors should have well organized asbestos and lead exposure assessment programs and exposure assessment databases. Exposure assessment is mandatory, and until exposure assessment data is obtained, contractors must provide respiratory protection and other measures which could be very inconvenient, cumbersome, and expensive. Exposure assessment data is generally only good for one year, so ongoing collection of data avoids having out of date exposure assessment data. It also builds up a nice database of information to show that the contractor is in compliance with the applicable laws and regulations and that workers are not being improperly exposed.

Exposure assessment data is collected for workers with similar experience and training performing similar tasks. It is important to organize the exposure assessment data in the contractor's database by tasks and experience.

The actual data collection involves placing personal air pumps on the belts of the workers being monitored, with a filter cassette hanging over their shoulder and clipped to their collar so that it is in their "breathing zone." Asbestos exposure assessments require both 30-minute "excursion" (highest exposure) sample and 8 hour samples. Lead exposure assessments require 8 hour samples (a typical work shift. It is important to record the sample information - flow rate, work task being monitored, and worker experience. The filter cassettes should be properly labeled and are submitted to a laboratory for analysis of the lead or asbestos content.

Once initial exposure assessment data is obtained, the Contractor need only provide the respiratory protection and other measures indicated by the exposure assessment data for each task-experience combination.

The federal Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard is 29 CFR 1910.134. Employees who are required to wear respirators must be provided with training on the use of the respirator, and a physical examination by a doctor to show that they are fit to wear a respirator. They must be offered a selection of respirators or different brands and sizes to find one that fits well, and must be fit tested (once per year) to see that the respirator seals well when they are wearing it.

<u>Asbestos - The Significance, Or Not, Of The Year 1980:</u>

There is occasionally some confusion regarding the significance of the year 1980. It is common knowledge in the asbestos consulting and abatement (removal) industries that many common asbestos containing materials (e.g. drywall joint compound, stucco, flooring materials, ducts) were used well into or throughout the1980s. Federal OSHA regulations, 29CFR1926.1101(k)(1), state:

> Employers and building owners shall identify TSI and sprayed or troweled on surfacing materials in buildings as asbestos-containing, unless they determine in compliance with paragraph (k)(5) of this section that the material is not asbestos-containing. Asphalt and vinyl flooring material installed no later than 1980 must also be considered as asbestos containing unless the employer, pursuant to paragraph (g)(8)(i)(I) of this section determines that it is not asbestos-containing.

However, the regulation then immediately goes on to state (emphasis added):

***If the employer/building owner has actual knowledge, or should have known through the exercise of due diligence, that other materials are asbestos-containing, they too must be treated as such. When communicating information to employees pursuant to this standard, owners and employers shall identify "PACM" as ACM.***

The exercise of due diligence would include obtaining information from knowledgeable persons, such as asbestos consultants, and/or obtaining an asbestos survey/inspection by a California Certified Asbestos Consultant.

## Scope of Services

We performed a visual examination of those areas to determine the overall construction and usage of the building(s) and to plan and coordinate the survey work, taking into account any information provided on the age and construction of the building(s). We examined any plans and documents supplied to us determine if any ACMs were specified and to provide information on remodeling or renovation work. Areas of potential ACM were identified using the available information on the age of the building, construction materials present and the consultant's expertise.

### Asbestos Containing Materials (ACMs) Which Are Banned

It is important not to view the dates of the laws / regulations which banned the materials listed below as absolute cut-off dates. In many cases, the laws / regulations allowed suppliers to sell their existing supplies, and the manufacturers may not have immediately been aware of the new laws / regulations. For example, we have spoken with a large manufacturer of drywall joint compound in southern California and learned that they were still manufacturing drywall joint compound with asbestos in the middle 1980s. Our experience inspecting thousands of buildings of all types also confirms that asbestos containing drywall joint compound was used in many buildings constructed in the middle 1980s.

- Spray applied fireproofing was banned by the 1973 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Wet-applied and pre-formed (molded) asbestos pipe insulation and pre-formed (molded) asbestos block insulation on boilers and hot water tanks were banned by the 1975 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Spray applied decorative ACM (e.g. acoustic ceiling texture) was banned by the 1978 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Patching compounds which are used to cover, seal or mask cracks, joints, holes and similar openings in the trim, walls, ceiling, etc. of building interiors (also used to create textured effects) which a consumer can purchase (those where the sale or use of the product by consumers is facilitated, and those containing respirable free form asbestos which are used in residences, schools, hospitals, public buildings or other areas where consumers have customary access) were banned

by the US Consumer Product Safety Commission (CPSC) in 1978 - see 16 CFR 1304;

- Artificial emberizing materials (ash and embers) containing respirable freeform asbestos (generally packaged in an emberizing kit for use in fireplaces, and designed for use in such a manner that the asbestos fibers can become airborne under reasonably foreseeable conditions of use were banned by the US Consumer Product Safety Commission (CPSC) in 1978 - see 16 CFR 1305;

- Spray-on application of materials containing more than 1% asbestos to buildings, structures, pipes, and conduits unless the material is encapsulated with a bituminous or resinous binder during spraying and the materials are not friable after drying was banned by the 1990 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Asbestos paper products (flooring felt, roll board, and corrugated, commercial, or specialty paper) were banned by the Toxic Substances Control Act (TSCA) - On July 12, 1989, the US EPA issued a final rule banning most asbestos-containing products. While most of that regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans in 1991, the bans on these materials were affirmed; and,

- Products that have not historically contained asbestos, otherwise referred to as "new uses" of asbestos were banned by the Toxic Substances Control Act (TSCA) - On July 12, 1989, the US EPA issued a final rule banning most asbestos-containing products. While most of that regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans in 1991, the bans on these materials were affirmed.

Various asbestos containing materials were specifically listed as NOT banned by the US EPA's guidance document of May 18, 1999, but this list is far from comprehensive, as many other common materials which are not banned are not listed:

Troweled-on Surfacing Materials (e.g. cement stucco and gypsum plaster);

Asbestos-cement corrugated sheet, shingles, flat sheet, millboard, and pipe;

Asbestos clothing for adults;

Pipeline wrap;

Roofing felt;

Vinyl-asbestos floor tile;

Automatic transmission components;

Clutch facings;

Friction materials;

Brake pads, linings, and blocks;

Gaskets;

Non-roofing coatings; and,

Roof coatings.

Which Materials Commonly Contain Asbestos?

The list in the table below was developed based on US EPA publications and our experience performing asbestos surveys / inspections of thousands of buildings of all types.

While the production and usage of some have been banned, and most others are simply no longer produced or installed, many are still legal and new products containing asbestos could appear on the market, so this list may become out of date.

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Acoustic Ceiling Texture | Yes | Through the mid to late 1970s |
| Acoustic Plaster | No | Through the mid 1970s |
| Adhesives / Mastics (flooring, mirror, pipe insulation, etc.) | No | Through the 1980s |
| Asphalt Floor Tile | No | Through the 1960s |
| Asphalt pavement (the gravel used to make it) | No | There are substantial areas of naturally-occurring asbestos in the USA, and in recent years more has been discovered |
| Blown-in Insulation | Yes | Prior to the mid 1970s |
| Boiler and Vessel Insulation | Yes | Through the mid-1970s |
| Breeching / Flue Insulation | Yes | Through the mid 1970s |
| Caulking and Sealants | No | Through the mid-1980s |
| Ceiling Tiles and Lay-in or Suspended Ceiling Panels | Yes | Prior to the early 1970s, often are heavy and have a “layered” internal appearance. Newer non-suspect types are readily identified. |

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Concrete (especially the gravel used to make it) | No | There are substantial areas of naturally-occurring asbestos in the USA, and in recent years more has been discovered |
| Concrete block filler (used to smooth the rough surface) | No | Through the 1970s and into the 1980s |
| Drywall (also known as Gypsum Wallboard or the brand name Sheetrock). Due to imprecise use of English, and confusion between composite and discrete layer sampling, some people may mistakenly believe that drywall itself is a suspect material. Some have loosely used the term "wallboard" to refer to asbestos-cement panels used as wall covering. Indeed, for quite a few years we sampled drywall. Finally tiring of wasting time and money sampling a material which was never, ever positive, we investigated. We discovered these problems, and a situation in which mistakes in one document (e.g. the sloppy use of the imprecise term "wallboard") repeated in other documents. All the times we have asked, people stating that drywall might contain asbestos have not been able to produce an example of it. The drywall system is suspect, but not the gypsum board itself. | | |
| Drywall Joint Compound, Also Known As Mud, May Also Be Used as a Skim or Texture Coat | No | Manufactured and applied through the mid-1980s. Naturally occurring asbestos in raw materials is allowed, but manufacturers avoid liability by screening raw materials. |
| Ducts (Made of Corrugated *Asbestos* Covered with Aluminum on the Inside and Outside, one common brand is Alumabestos) | Yes | Through the mid 1980s |
| Duct Insulation (corrugated or paper) | Yes | Sometimes found on register boots and ducts through the mid-1980s |
| Electric Wiring Insulation | Yes | Prior to the 1970s in some cables and wires, through the 1980s in some heating appliances and machinery |
| Electrical Panel Partitions and/or Arc Chutes | No | Used through the 1970's |
| Elevator Equipment Panels | No | Through the 1970's |
| Elevator Brake Shoes | No | Many still in use |
| Fiber-Cement Conduits | No | Through the 1980's |
| Fiber-Cement Ducts (one common brand is Transite) | No | Common for underground HVAC ducts through the 1980s |

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Fiber-Cement Flues (one common brand is Transite) | No | Used through the 1980s, although usage tapered off sharply after the 1970's |
| Fiber-Cement Sheets - Interior, Exterior, or in Freezers/Chillers, (some made with wood paterns, one common brand is Transite) | No | Used through the 1970s, with some usage in the 1980s |
| Fiber-Cement Pipes (one common brand is Transite) | No | Through the 1980's and some may still be in use |
| Fiber-Cement Cooling Tower Slats and Other Components (one common brand is Transite) | No | Through the 1980s |
| Fire Blankets | Yes | Prior to the 1980s |
| Fire Curtains | Yes | Prior to the 1980s |
| Fire Door Interior Insulation | No (covered) | Through the 1970s |
| Fireproofing Materials (as on structural steel) | Yes | Through the mid to late 1970s |
| Flexible Duct Connectors (also known as vibration cloths) | Yes | Soft woven cloth, easy to differentiate from fiberglass or rubber |
| Gaskets | No | Still in use |
| Gravel | No | There are substantial areas of naturally-occurring asbestos in the USA, and in recent years more has been discovered |
| Electrical Ducts | No | Through the 1970s |
| Laboratory Hoods/Table Tops | No | Trough the 1980s |
| Mastics (floor tile, mirror, ceiling tile, etc.) | No | Through te 1980s |
| Paint - textured or elastomeric / coatings | No | Through the mid to late 1970's |
| Packing Materials (for valves or for wall/floor penetrations) | No | Through the 1980s |

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Pipe Insulation (corrugated air-cell, block, etc.) | Yes | Through the 1970s |
| Plaster (interior gypsum plaster, which typically consists of two or more layers | No | Rare, used prior to the mid 1970's |
| Plastic Roof Cement (typically applied at flashings, joints, and penetrations, may brands are still manufactured with asbestos) | No | Very common, still legally manufactured, sold and applied |
| Roofing Felt / Tar paper | No | Through the 1970's and into the 1980s |
| Roofing Shingles or Roll Roofing | No | Through the 1970s and into the 1980s |
| Sheet Vinyl Flooring | No | Through the 1980s |
| Silver Roof Paint | No | Through the 1970s and into the 1980s |
| Spackling Compounds | No | Through the 1970s |
| Spray-Applied Insulation | Yes | Through the mid to late 1970s |
| Stucco, or Cement Plaster, which typically consists of two or more layers | No | Generally, used through the 1980s, but in early 2006 an Arizona regulator told us that a wholesaler in the Phoenix area imports asbestos and sells it to contractors who mix it into stucco |
| Tank and Vessel Insulation | Yes | Through the mid to late 1970s |
| Taping Compounds (drywall joint compound) | No | Through the mid 1980s |
| Textured Paints / Coatings (paints made with texture, not texture applied before painting) | No | Through the 1970s |
| Thermal Paper Products | Yes | Through the 1970s |
| Vinyl Floor Tile | No | Through the mid 1980s |
| Window Putty | No | Though the 1970s |

Asbestos Sampling

Representative samples of potential / suspect ACM were collected after identification of homogeneous sampling areas (these are areas in which the materials are uniform in color, texture, construction or application date and general appearance) of potential ACM. Each homogeneous area of potential ACM was observed for material type, location, condition, and friability. Representative samples were collected from each area of potential ACM, excepting areas which were inaccessible, or areas of assumed ACM. The building(s) was examined for the presence of previous or multiple layers of materials, if applicable. If no suspect materials were identified, or if only materials assumed to contain asbestos were identified, no samples were collected.

Most of the laws and regulations regarding asbestos sampling reference the AHERA section on sampling (40CFR763.86). We used that protocol, with additions to be more conservative, but not to overly increase the cost of asbestos surveys. Given the lack of detailed guidance in AHERA regarding miscellaneous materials, our judgement and extensive experience were important factors in determining the appropriate number of samples. For example, we know that drywall joint compound is difficult for the laboratories to analyze due to the presence of binders and such and the relatively low asbestos content, so we collect more samples from an area of it than we would from a similar area of a material such as sheet vinyl flooring which is very easy to analyze and which typically was made with a relatively high asbestos content. Of course, we do not sample non-suspect materials (see the table of suspect materials above).

Suspect materials were assumed to contain asbestos or were sampled as follows:

*Friable Surfacing Material*, which is a friable suspect material sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes:

- At least three bulk samples from each homogeneous area that is 1,000 ft $^2$ or less;
- At least five bulk samples from each homogeneous area that is greater than 1,000 ft $^2$ but less than or equal to 5,000 ft $^2$; and,
- At least seven bulk samples from each homogeneous area that is greater than 5,000 ft $^{2.}$

*Friable Thermal System Insulation*, which is a friable suspect material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes:

- At least three bulk samples from each homogeneous area;
- At least one bulk sample from each homogeneous area of patched thermal system insulation if the patched section is less than 6 linear or square feet; and,
- In a manner sufficient to determine whether the material is ACM or not

ACM, bulk samples from each insulated mechanical system where cement or plaster is used on fittings such as tees, elbows, or valves.

*Friable Miscellaneous Materials*, which are interior building materials on structural components, structural members or fixtures, such as ceiling tiles:

- Bulk samples from each homogeneous area in a manner sufficient to determine whether the material is ACM or not ACM.

*Nonfriable Materials* which are interior building materials on structural components, structural members or fixtures, such as floor tiles:

- In a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from each homogeneous area.

Sampling was done based on the friability of the material at the time of the asbestos survey.

Reasonable care was taken to reduce accidental fiber release into the building environments. In order to reduce the potential for fiber release while collecting samples of suspect materials, the test areas were sprayed with a water-containing surfactant. The tools used for collection of samples were cleaned with soapy water-soaked cloths between samples in order to avoid cross-contamination of samples. The samples were placed into heavy plastic sample bags which were then sealed and labeled. The location, type, and other information on each sample were recorded.

Asbestos Laboratory Analysis

A chain-of-custody form accompanied the samples to the laboratory. The samples were analyzed by an NVLAP accredited laboratory using the Polarized Light Method (PLM, EPA 600/R-93/116 and/or EPA 600/M4-82-020600M4). The PLM method is, by far, the most commonly used method to analyze bulk materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and approximate percentage of asbestos in a given sample. The detection limit of the PLM method for asbestos identification is about one percent by volume.

Lead Survey

Suspect areas of lead (paint and ceramic tile glaze) were analyzed using non-destructive In place testing using a portable Thermo Niton 700-703ALXp portable XRF (X-Ray Fluorescence) instrument.

## General Limitations

The conclusions presented in this report are professional opinions based on the indicated data described in this report. Opinions and recommendations presented herein apply to site conditions existing at the time of the site visit(s). Changes in the conditions of the property may occur with time due to natural processes or various activities on the subject property. Changes

in applicable codes and standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, this report may become invalid. This report is intended only for the client, purpose, location, and project indicated. The only persons or companies which may rely on it are our client, an abatement contractor hired by our client, and the client of our client when we are sub-consultants. All others may not rely upon this report without having a contract in place with us. We do not warrant that the information supplied to us by others is accurate.

Reports such as this prepared by any consultant are never intended to be definitive studies of the presence of asbestos and/or lead at the subject properties. Other locations of asbestos and/or lead may exist at the subject property, and the levels may vary from those stated in this report. There may be variations in the composition of materials which appear similar. Materials may be hidden from view and not accessible. This is especially so for occupied structures or structures where damage and invasive sampling need to be minimized (such as structures not owned by our client).

For pre-demolition surveys of vacant buildings, we do not hesitate to examine the structure in several areas, looking for multiple layers of materials and materials which are under other materials. We very, very rarely miss anything. However, we are performing surveys, not demolition work, so may not see things such as a patch of floor tile hidden under carpeting, and not detected by our typical examination of the area under the carpet at a corner(s) or existing hole(s). We examine the structure(s) in several locations, but do not pull up all of the carpet, or cut numerous holes in floors and walls. That would constitute demolition work, not survey work, and could also create contamination due to excessive disturbances of suspect materials.

Location and sampling of underground items, such as asbestos-cement pipes, would have been outside of the scope of services for this project.

## Regulatory Compliance

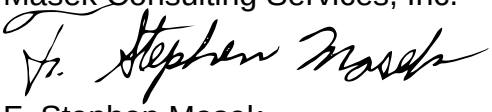
The report meets and exceeds the requirements of all applicable laws and regulations. If someone unfamiliar with our reports, after reading this entire report and all of the attachments, has any questions regarding where specific information is found, they should contact us by phone or E-mail, and we will direct them to the appropriate places in this report.

## Consultant Background

The inspection and sampling portions of the survey and professional aspects of the report preparation were performed by Mr. F. Stephen Masek. Mr. Masek has performed thousands of environmental inspections in a wide variety of commercial and government buildings, including airports, military bases, high-rise buildings, apartment buildings, shopping centers, schools, office buildings, hospitals, retail buildings, factories, recreation facilities, warehouses, residences and R&D buildings. Mr. Masek has been a California Certified Asbestos Consultant since the certification program started in 1992, and has been an asbestos consultant since 1990. Mr. Masek has been a California certified lead Inspector / Risk Assessor since 1993. He has extensive experience in related environmental services. He obtained a B.S.B.A. degree from Washington University in St. Louis (1980). He is a member of Mensa, the high IQ society. As an active member of ASTM, he has contributed to the revisions to the ASTM Phase I Environmental Site Assessment Standard, was chairman of an asbestos survey task group,

and helped write portions of the ASTM Property Condition Assessment standard. He has written numerous magazine articles and has spoken at local, state, and national conventions. He also provides expert witness services.

Sincerely,
Masek Consulting Services, Inc.



F. Stephen Masek
President
California Certified Asbestos Consultant #92-0822
California Certified Lead Inspector / Risk Assessor / Project Monitor #751
Indoor Air Quality Association member
Association of Environmental Professionals member
ASTM International member, Committees D-22 & E-50
E-Mail: stephenmasek@masekconsulting.net

**Sketch and Laboratory Report Attachments**

The attachments are important parts of this report.

The chain of custody form(s) is/are part of the laboratory report(s), and is/are one of the pages counted in the report(s).

Avoiding laboratory bias is done by minimizing the information provided to the laboratory. Therefore, we do not give information to the laboratory about which samples are or are not homogeneous, where they were collected, the full address of the building, and the name of the owner, as such information could be the cause of laboratory bias.

Three pages of sketches follow. We generally omit the prefix of the sample numbers from the sketch(es) or drawings for clarity. Such prefixes are used solely to prevent the laboratory from accidentally mixing samples from different batches.

The 10 page asbestos laboratory report, number 121601911, prepared by EMSL Analytical, Inc. follows.

OrderID: 121601911

121601911

**Chain Of Custody To:**

- ☐ EMSL Analytical, Inc. at 200 Route 130 North, Cinnaminson, NJ 08077 Ph. 856-858-4800
- ☐ LA Testing 520 Mission St. ; S. Pasadena, CA 91030; Phone 323-254-9960
- ☐ LA Testing 11652 Knott Avenue, Unit F5 Garden Grove, CA 92841 *Phone 714-828-4999*
- ☒ EMSL Analytical, Inc. 3356 W. Catalina, Phoenix, AZ 85017 Phone 602-276-4344
- ☒ EMSL Analytical, Inc. 7916 Convoy Ct, San Diego, CA 92111 Phone (858) 499-1303

**From: Masek Consulting Services, Inc. (customer number 32MASE50)**
**23478 Sandstone St. Mission Viejo, CA 92692**
**Phone: (949) 581-8503 ● http://www.masekconsulting.net**

EMSL's Federal Express Account 2148-0319-4

Project Name: TA

Enclosed are 157 samples numbered TA-1 to TA-157

First positive Stop on the following samples:

no #63

☒ PLM ☐ TEM(AHERA / LEVEL II / bulk) ☐ Lead (1 ⌀ wipe) ☐ Other: _____

Turnaround (from the day & hour the samples are received at the lab to the day and hour we receive the complete ***final*** report with ***all*** signatures): ☒ 3 Day ☐ 48 Hour ☐ 24 Hour ☐ 6 hour ☐ 3 hour

*Only analyze the numbered materials listed on the sample bags.*

**E-mail the results *with the countersigned chain of custody* to**
**stephenmasek@masekconsulting.net**

Samples collected and relinquished by F. Stephen Masek:

Date: 4/19/16 Signature: F. Stephen Masek

Lab - Received:

Date: 4/21/16 Name: Veronica Loza Signature: Veronica Loza

930 Emsl fed ex (8094 1730 9218)

# EMSL Analytical, Inc.

**3356 West Catalina Drive Phoenix, AZ 85017**
Tel/Fax: (602) 276-4344 / (602) 276-4053
http://www.EMSL.com / phoenixlab@emsl.com


**EMSL Order:** 121601911
**Customer ID:** 32MASE50
**Customer PO:**
**Project ID:**

**Attention:** Stephen Masek
Masek Consulting Services, Inc.
23478 Sandstone
Mission Viejo, CA 92692

**Project:** TA

**Phone:** (714) 878-5284
**Fax:**
**Received Date:** 04/21/2016 9:30 AM
**Analysis Date:** 04/22/2016
**Collected Date:** 04/19/2016

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-1 | | Beige<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0001* | | | | | |
| TA-2 | | Green<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0002* | | | | | |
| TA-3 | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| *121601911-0003* | | | | | |
| TA-4 | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0004* | | | | | |
| TA-5 | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0005* | | | | | |
| TA-6 | | Various<br>Fibrous<br>Heterogeneous | 15% Cellulose<br>3% Synthetic<br>2% Glass | 80% Non-fibrous (Other) | None Detected |
| *121601911-0006* | | | | | |
| TA-7 | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| *121601911-0007* | | | | | |
| TA-8 | | Tan/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| *121601911-0008* | | | | | |
| TA-9 | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0009* | | | | | |
| TA-10 | | Various<br>Fibrous<br>Heterogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| *121601911-0010* | | | | | |
| TA-11 | | Brown/Black<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| *121601911-0011* | | | | | |
| TA-12 | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0012* | | | | | |
| TA-13 | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0013* | | | | | |
| TA-14 | | Green<br>Non-Fibrous<br>Homogeneous | | 90% Non-fibrous (Other) | 10% Chrysotile |
| *121601911-0014* | | | | | |
| TA-15 | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0015* | | | | | |
| TA-16 | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| *121601911-0016* | | | | | |

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**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-17<br>*121601911-0017* | | White/Black<br>Non-Fibrous<br>Heterogeneous | | 94% Non-fibrous (Other) | 6% Chrysotile |
| TA-18<br>*121601911-0018* | | Beige<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-19<br>*121601911-0019* | | Tan<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-20<br>*121601911-0020* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-21<br>*121601911-0021* | | Gray/White<br>Fibrous<br>Heterogeneous | 40% Cellulose<br>40% Glass | 20% Non-fibrous (Other) | None Detected |
| TA-22<br>*121601911-0022* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | <1% Chrysotile |
| TA-23<br>*121601911-0023* | | Black/Beige<br>Fibrous<br>Heterogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| TA-24<br>*121601911-0024* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-25<br>*121601911-0025* | | Beige<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-26<br>*121601911-0026* | | Gray<br>Non-Fibrous<br>Homogeneous | 2% Cellulose | 98% Non-fibrous (Other) | None Detected |
| TA-27<br>*121601911-0027* | | White<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-28<br>*121601911-0028* | | Tan<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-29<br>*121601911-0029* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-30<br>*121601911-0030* | | Tan<br>Non-Fibrous<br>Homogeneous | 2% Wollastonite | 98% Non-fibrous (Other) | None Detected |
| TA-31<br>*121601911-0031* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-32<br>*121601911-0032* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-33<br>*121601911-0033* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-34<br>*121601911-0034* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-35<br>*121601911-0035* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-36<br>*121601911-0036* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-37<br>*121601911-0037* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-38<br>*121601911-0038* | | Brown<br>Fibrous<br>Homogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-39<br>*121601911-0039* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-40<br>*121601911-0040* | | Brown/White<br>Fibrous<br>Heterogeneous | 10% Cellulose | 85% Gypsum<br>5% Non-fibrous (Other) | None Detected |
| TA-41<br>*121601911-0041* | | Brown/White<br>Fibrous<br>Heterogeneous | 99% Cellulose | 1% Non-fibrous (Other) | None Detected |
| TA-42<br>*121601911-0042* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-43<br>*121601911-0043* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>3% Synthetic | 77% Non-fibrous (Other) | None Detected |
| TA-44<br>*121601911-0044* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-45<br>*121601911-0045* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-46<br>*121601911-0046* | | Tan<br>Non-Fibrous<br>Heterogeneous | | 95% Non-fibrous (Other) | 5% Chrysotile |
| TA-47<br>*121601911-0047* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-48<br>*121601911-0048* | | Green<br>Non-Fibrous<br>Homogeneous | | 92% Non-fibrous (Other) | 8% Chrysotile |
| TA-49<br>*121601911-0049* | | Gray/Black<br>Non-Fibrous<br>Heterogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-50<br>*121601911-0050* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-51<br>*121601911-0051* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-52<br>*121601911-0052* | | White<br>Non-Fibrous<br>Heterogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-53<br>*121601911-0053* | | White<br>Non-Fibrous<br>Heterogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-54<br>*121601911-0054* | | White<br>Non-Fibrous<br>Heterogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-55<br>*121601911-0055* | | Beige<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-56<br>*121601911-0056* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-57<br>*121601911-0057* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-58<br>*121601911-0058* | | Gray/White<br>Fibrous<br>Heterogeneous | 40% Cellulose<br>40% Min. Wool | 10% Perlite<br>10% Non-fibrous (Other) | None Detected |
| TA-59<br>*121601911-0059* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-60<br>*121601911-0060* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-61<br>*121601911-0061* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-62<br>*121601911-0062* | | Tan/White<br>Non-Fibrous<br>Heterogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-64<br>*121601911-0063* | | Brown/Tan<br>Non-Fibrous<br>Heterogeneous | 5% Cellulose | 95% Non-fibrous (Other) | None Detected |
| TA-65<br>*121601911-0064* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-66<br>*121601911-0065* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-67<br>*121601911-0066* | | Tan<br>Non-Fibrous<br>Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-68<br>*121601911-0067* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-69<br>*121601911-0068* | | Tan/Black<br>Non-Fibrous<br>Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-70<br>*121601911-0069* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-71<br>*121601911-0070* | | Gray<br>Fibrous<br>Homogeneous | | 20% Non-fibrous (Other) | 80% Chrysotile |
| TA-72<br>*121601911-0071* | | Gray<br>Fibrous<br>Homogeneous | | 20% Non-fibrous (Other) | 80% Chrysotile |
| TA-73<br>*121601911-0072* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-74<br>*121601911-0073* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-75<br>*121601911-0074* | | Tan/White<br>Non-Fibrous<br>Heterogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-76<br>*121601911-0075* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-77<br>*121601911-0076* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-78<br>*121601911-0077* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-79<br>*121601911-0078* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-80<br>*121601911-0079* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-81<br>*121601911-0080* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-82<br>*121601911-0081* | | Various<br>Fibrous<br>Homogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-83<br>*121601911-0082* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-84<br>*121601911-0083* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-85<br>*121601911-0084* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-86<br>*121601911-0085* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-87<br>*121601911-0086* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-88<br>*121601911-0087* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-89<br>*121601911-0088* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-90<br>*121601911-0089* | | Gray<br>Fibrous<br>Homogeneous | | 80% Non-fibrous (Other) | 20% Chrysotile |
| TA-91<br>*121601911-0090* | | Beige<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-92<br>*121601911-0091* | | Black<br>Fibrous<br>Homogeneous | | 80% Non-fibrous (Other) | 20% Chrysotile |
| TA-93<br>*121601911-0092* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-94<br>*121601911-0093* | | Tan/Blue<br>Fibrous<br>Heterogeneous | 95% Min. Wool | 5% Non-fibrous (Other) | None Detected |
| TA-95<br>*121601911-0094* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-96<br>*121601911-0095* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-97<br>*121601911-0096* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-98<br>*121601911-0097* | | Brown<br>Fibrous<br>Homogeneous | 99% Cellulose | 1% Non-fibrous (Other) | None Detected |
| TA-99<br>*121601911-0098* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-100<br>*121601911-0099* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-101<br>*121601911-0100* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-102<br>*121601911-0101* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-103<br>*121601911-0102* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-104<br>*121601911-0103* | | Tan<br>Non-Fibrous<br>Homogeneous | | 92% Non-fibrous (Other) | 8% Chrysotile |
| TA-105<br>*121601911-0104* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-106A<br>*121601911-0105* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-106B<br>*121601911-0106* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-107<br>*121601911-0107* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-108<br>*121601911-0108* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-109<br>*121601911-0109* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-110<br>*121601911-0110* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-111<br>*121601911-0111* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-112<br>*121601911-0112* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-113<br>*121601911-0113* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-114<br>*121601911-0114* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-115<br>*121601911-0115* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-116<br>*121601911-0116* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-117<br>*121601911-0117* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-118<br>*121601911-0118* | | Gray<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-119<br>*121601911-0119* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-120<br>*121601911-0120* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-121<br>*121601911-0121* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-122-Flooring 1<br>*121601911-0122* | | Gray<br>Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-122-Flooring 2<br>*121601911-0122A* | | Various<br>Fibrous<br>Heterogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| TA-123<br>*121601911-0123* | | Tan<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-124<br>*121601911-0124* | | Brown<br>Fibrous<br>Homogeneous | 99% Cellulose | 1% Non-fibrous (Other) | None Detected |
| TA-125<br>*121601911-0125* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-126<br>*121601911-0126* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-127<br>*121601911-0127* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-128<br>*121601911-0128* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-129<br>*121601911-0129* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-130<br>*121601911-0130* | | Gray/Black<br>Fibrous<br>Heterogeneous | 10% Synthetic | 90% Non-fibrous (Other) | None Detected |
| TA-131<br>*121601911-0131* | | Black<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-132<br>*121601911-0132* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-133<br>*121601911-0133* | | Gray/Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-134<br>*121601911-0134* | | Gray/Black<br>Fibrous<br>Homogeneous | | 94% Non-fibrous (Other) | 6% Chrysotile |
| TA-135<br>*121601911-0135* | | Gray/Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-136<br>*121601911-0136* | | Black<br>Fibrous<br>Heterogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-137<br>*121601911-0137* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-138<br>*121601911-0138* | | Black<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-139<br>*121601911-0139* | | Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-140<br>*121601911-0140* | | Black<br>Fibrous<br>Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| TA-141<br>*121601911-0141* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-142<br>*121601911-0142* | | Black/Green<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-143<br>*121601911-0143* | | Red/Black<br>Fibrous<br>Heterogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-144<br>*121601911-0144* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-145<br>*121601911-0145* | | Black<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-146<br>*121601911-0146* | | Black<br>Fibrous<br>Homogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| TA-147<br>*121601911-0147* | | Black<br>Fibrous<br>Heterogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-148<br>*121601911-0148* | | Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 86% Non-fibrous (Other) | 4% Chrysotile |

Initial Report From: 04/26/2016 12:21:53

**EMSL Analytical, Inc.**
**3356 West Catalina Drive Phoenix, AZ 85017**
Tel/Fax: (602) 276-4344 / (602) 276-4053
http://www.EMSL.com / phoenixlab@emsl.com

**EMSL Order:** 121601911
**Customer ID:** 32MASE50
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-149<br>*121601911-0149* | | Black<br>Fibrous<br>Heterogeneous | 20% Glass | 80% Non-fibrous (Other) | None Detected |
| TA-150<br>*121601911-0150* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-151<br>*121601911-0151* | | Gray/Black<br>Fibrous<br>Heterogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-152<br>*121601911-0152* | | Black<br>Fibrous<br>Heterogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-153<br>*121601911-0153* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-154<br>*121601911-0154* | | Gray/Black<br>Fibrous<br>Homogeneous | | 90% Non-fibrous (Other) | 10% Chrysotile |
| TA-155<br>*121601911-0155* | | Black/Green<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-156<br>*121601911-0156* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-157<br>*121601911-0157* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Analyst(s)
*Jillian Chesson (63)*
*Peter Donato (95)*

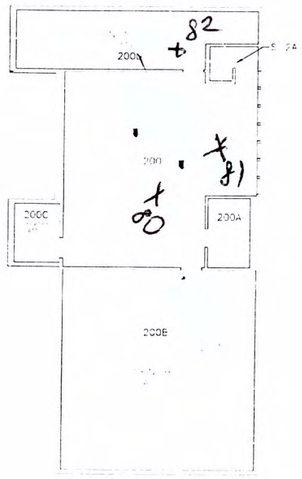
Michelle Wilson
Michelle Wilson, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Phoenix, AZ NVLAP Lab Code 200811-0, AZ0937

Initial Report From: 04/26/2016 12:21:53

Attachment 6



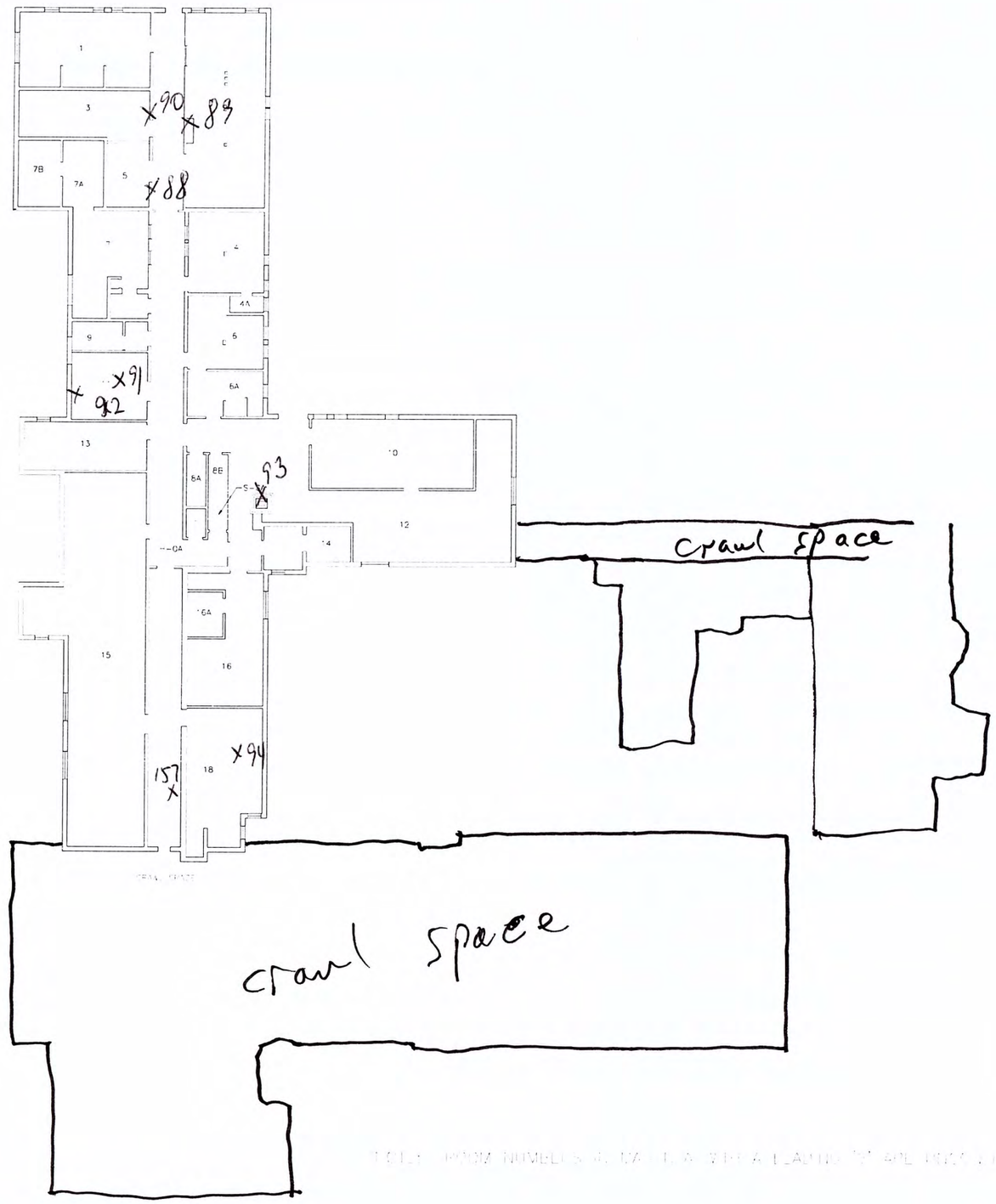
Trinity Annex

SECOND FLOOR

NOT TO SCALE

A2

Attachment 6




roughly
1" = 2'

TITLE FROM NUMBERS 3, 7A, 7B, 9, 13, & 15 ARE NOT ENABLED AND SUBJECT TO CHANGE

humboldt architecture
https://humboldtarchitecture.com/

PUBLISHED BY
Administration

01/22/2013

CAMPUS: HC
CODE:
ASSET #: 170

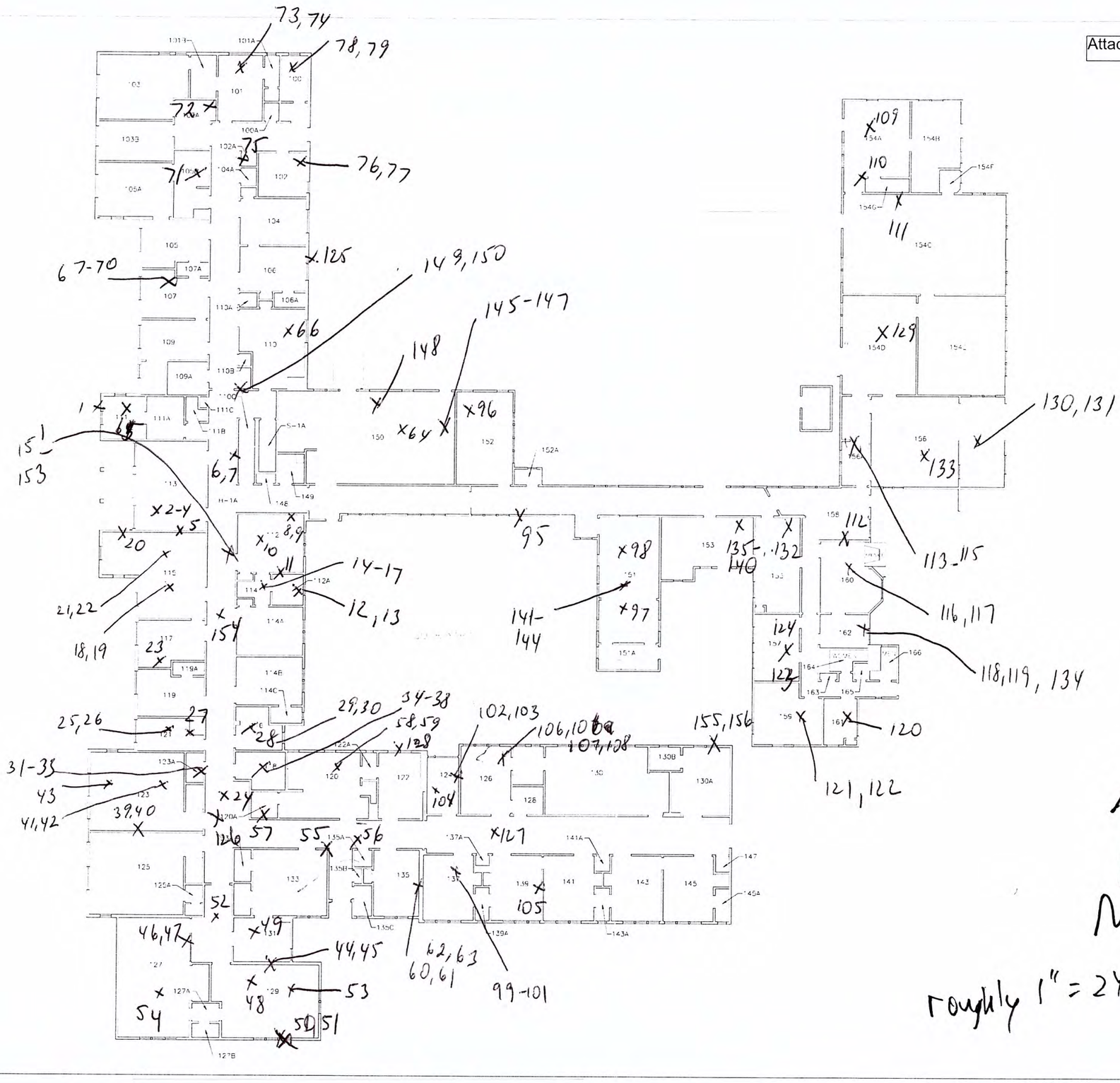
NOT TO SCALE
DIGITAL PLOT

Trinity Annex

BASEMENT

A0

Attachment 6




Trinity Annex

FIRST FLOOR

NOT TO SCALE
DIGITAL PLOT

CAMPUS: [illegible]
ASSET #: [illegible]

Plan Set By: AY
Approved by: [illegible]

01/27/2014

Homeplot Facilities Inc

https://homeplot.digcampus.com/

Phase I Environmental Site Assessment

# Phase I Environmental Site Assessment

## Humboldt State University – Trinity Annex

1350 C Street, Arcata, California

*prepared for*
Humboldt State University

*prepared by*
**Rincon Consultants, Inc.**

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Environmental Scientists Planners Engineers
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February 21, 2018
Project 18-04579

Michael Fisher
Associate Director Planning & Design
Humboldt State University
Facilities Management
Via email: mdf15@humboldt.edu

**Subject:** **Phase I Environmental Site Assessment**
**Humboldt State University -Trinity Annex**
**1350 C Street, Arcata, California 95521**

Dear Mr. Fisher:

This report presents the findings of a Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for the Humboldt State University -Trinity Annex property located at 1350 C Street in Arcata, California (subject property). The Phase I ESA was performed in accordance with our proposal dated January 10, 2018.

The accompanying report presents our findings and provides an opinion regarding the presence of recognized environmental conditions at the subject property. Our work program for this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E-1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,

**Rincon Consultants, Inc.**

Meghan Hearne, GIT
Environmental Scientist

Walt Hamann, PG, CEG
Vice President

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# Executive Summary

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the Humboldt State University – Trinity Annex property located at 1530 C Street in Arcata, California (subject property - Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. (Rincon) for Humboldt State University. Humboldt State University (HSU) Real Estate Holdings of the HSU Advancement Foundation has requested this assessment and will use the information for the purpose of transferring the property to the Trustees of the California State University.

The subject property is located on the property of Humboldt State University and comprises a 1.44-acre block located between B Street and C Street and 13th Street and 14th Street. The subject property is identified by Assessor's Parcel Number (APN) 021061001. The subject property is currently developed with the former Trinity Hospital building which was constructed in 1947. According to the HSU Architect, Mr. McSorely, the former hospital building and property is used for storage and the building has not been actively occupied for the past six years. The subject property is currently an active parking area with three separate lots totaling 42 stalls. Properties in the vicinity of the subject property include the Humboldt State University Main Campus and single-family residential homes.

Rincon Consultants performed a reconnaissance of the subject property on January 30, 2018 accompanied by Garrett McSorley, Architect for Humboldt State University. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property. Small quantities (5 to 10 gallon containers) of various hazardous substances and petroleum products observed during the site reconnaissance are as follows: paints, household cleaning products, chemicals used for boiler, motor oil, fuel cans, pesticide containers, and propane tanks. With the exception of spilled paint, Rincon did not observe indications of releases from these containers. Additionally, Mr. McSorely indicated that the hospital used to generate medical waste but that ceased with hospital operations. No USTs were observed on the subject property during the site reconnaissance. There is an above ground water tank associated with the boiler, located in the basement. During the site reconnaissance, Rincon noticed significant water staining and corroded pipes, as well as strong mildew odors in the basement areas, likely the result of active and historical water leaks. During the site reconnaissance, 55-gallon industrial drums were observed in the boiler room. According to Mr. McSorely, the drums contained chemical related to the operation of the boiler. Two of the drums had contents that could not be determined (the labels were faded and illegible). However leaks, releases, or stains near the drums were not observed. A transformer was observed in the basement by the furnace. Whether the transformer contains PCBs is unknown; however, there was no indication of a release in the vicinity of the transformer. No other hydraulic equipment was observed on the subject property. An old incinerator was observed in the basement of the hospital. Significant peeling and chipping paint was observed on surfaces throughout the subject property building. Lastly, multiple hydrogen cylinders were located in an onsite hydrogen shack. Mr. McSorely indicated that the east wing of the former hospital building was used as a hydrogen fuel research laboratory until approximately 2008.

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data

from surrounding sites within a specified radius of the property. The subject property was not listed on databases searched by EDR. One adjacent property (to the north) was listed on a leaking underground storage tank (LUST) database as follows: HSU Plant Operations, Humboldt State University – Plant Ops – 14th and B Streets**.** According to GeoTracker, site cleanup status is listed as "Open – Site Assessment as of 5/15/2015." However, based on our review of the documents, the contaminated groundwater associated with the HSU Plant Operations site is located roughly 150 feet to the north-northwest of the subject property and flows towards the Creek to the west of the HSU property and northwest of the subject property. Although the northern adjacent release case remains open at this time, based on the results of the recent groundwater monitoring event and the recorded groundwater flow direction in the vicinity of the former release (to the west and not towards the subject property), the Humboldt State Plant Operations Yard release is not expected to impact the subject property.

Historical sources reviewed as part of the Phase I ESA include Sanborn Maps, aerial photographs, topographic maps, and city directories. Based on the review of these documents, it appears that the subject property was a vacant city block from at least 1919 through approximately 1941. By 1947, the Trinity Hospital had been constructed (property owner provided information). According to the 1951 Sanborn Map, the Trinity Hospital occupies the subject property by that time. Sanborn Maps indicate that laundry operations were located in the northeast wing of the former Trinity Hospital from at least 1951 through at least 1961. The nature of the onsite laundry operations is unknown (water wash versus dry cleaning). Dry cleaning operations are often associated with the use of hydrocarbons and solvents. Based on aerial photographs, the subject property remains occupied by the Trinity Hospital and generally resembles its present-day configuration since the facility was constructed in 1943. City directories indicate that 1350 C Street was Trinity Hospital of Arcata in 1958, 1964, 1968, and 1972 and was an Administration Building in 1982.

Based on the findings of this Phase I ESA, it is our opinion that there are two potential Recognized Environmental Conditions in connection with the subject property as follows.

1. Potential presence of elevated concentrations of lead (from deteriorated lead-based paint) in soil adjacent to the perimeter of the former hospital building
2. Onsite "laundry" operations as indicated on historical Sanborn Maps (1951 through at least 1961)

To evaluate the presence of lead in soil (from deteriorated lead-based paint) adjacent to the former hospital building, we recommend collecting soil samples from areas of exposed soil along the perimeter of the onsite structure and analyzing the samples for total lead.

To evaluate impacts related to potential onsite dry cleaning operations, we recommend performing a soil vapor survey within the northeast wing of the former hospital building.

As stated in the 2016 asbestos containing building material (ACM) and lead-based paint (LBP) survey conducted for the former Trinity Hospital by Masek, we recommend that all onsite workers be properly trained to handle ACM and LBP during the demolition of the onsite building.

Additionally, if any of the materials generated during demolition are considered hazardous waste, it must be disposed of at a hazardous waste landfill and must be hauled under a proper manifest by a licensed hazardous waste transporter.

# Introduction

This report presents the findings of a Phase I ESA conducted for the Humboldt State University – Trinity Annex property located at 1530 C Street in Arcata, California (subject property - Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. (Rincon) for Humboldt State University in general conformance with ASTM E 1527-13 and our contract dated January 10, 2018. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions at the subject property.

## Purpose

Humboldt State University (HSU) Real Estate Holdings of the HSU Advancement Foundation has requested this assessment and will use the information for the purpose of transferring the property to the Trustees of the California State University. The purpose of this Phase I ESA was to determine if there are recognized environmental conditions on the subject property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 as,

> "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; 3) under conditions that pose a material threat of a future release to the environment".

A Controlled REC is defined pursuant to ASTM E 1527-13 as,

> "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report".

A Historical REC is defined pursuant to ASTM E 1527-13 as,

> "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the

> Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition".

A *de minimis* condition is defined pursuant to ASTM E 1527-13 as,

> "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions".

# Scope of Services

The scope of services conducted during this study is outlined below:

- Performed a reconnaissance of the subject property to identify obvious indicators of the existence of hazardous materials.
- Observed adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtained and reviewed an environmental records database search to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Reviewed files for the subject property and immediately adjacent properties as identified in the database report, as applicable.
- Reviewed the current U.S. Geological Survey (USGS) topographic map to obtain information about the subject property and regional topography and uses of the subject property and surrounding sites.
- Reviewed additional pertinent record sources (e.g., California Division of Oil and Gas records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Reviewed reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provided a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Provided a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Conducted interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Reviewed available client-provided information (e.g., previous environmental reports, title documentation).

# Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce the client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E 1527-13 practice, our scope of services did not include any inquiries with respect to asbestos containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high voltage power lines.

# User Reliance

It is our understanding that the subject property is owned by the HSU Real Estate Holdings of the HSU Advancement Foundation, a dedicated auxiliary of the California State University and a California nonprofit corporation. At the conclusion of the project, the ownership is planned to be transferred to the Trustees of the California State University. This Phase I ESA has been prepared for use solely and exclusively by HSU, HSU Real Estate Holdings Axillary and the Trustees of the California State University. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety and no other person or entity may rely upon the report without the express written consent of Rincon.

# Site Description

## Location

The HSU Trinity Annex property is located at 1350 C Street in Arcata, California (Figure 2, Site Map). The subject property is located on the property of Humboldt State University and comprises a 1.44-

acre block located between B Street and C Street and 13th Street and 14th Street. The subject property is identified by Assessor's Parcel Number (APN) 021061001.

## Subject Property and Vicinity General Characteristics

The subject property is currently developed with the former Trinity Hospital facilities, public parking, minimal landscaping around the building and site perimeter, and a bus shelter along 14th Street.

Properties in the vicinity of the subject property include the Humboldt State University Main Campus and single-family residential homes. The current adjacent land uses are described in Table 1 and depicted on Figure 3, Adjacent Land Use Map.

**Table 1 Current Uses of Adjacent Properties**

| Area | Use |
|---|---|
| Northern Properties | 14th Street, followed by Humboldt State University Facility Management building |
| Eastern Properties | B Street, followed by single-family residential homes and a Mormon Church |
| Southern Properties | 13th Street, followed by single-family residential homes |
| Western Properties | C Street, followed by single-family residential homes |

## Descriptions of Structures, Roads, Other Improvements on the Site

The subject property is currently developed with the former Trinity Hospital building which was constructed in 1947. According to the HSU Architect, Mr. McSorely, the former hospital building and property is used for storage and the building has not been actively occupied for the past six years. The subject property is currently an active parking area with three separate lots totaling 42 stalls.

Access to the subject property is available from driveways along the subject property perimeters.

The following utility providers service the subject property:

- Electrical Service – PG&E
- Natural Gas – PG&E
- Water Service – City of Arcata
- Sewer – City of Arcata

# User-Provided Information

As described in ASTM E 1527-13 Section 6, Humboldt State University was interviewed for actual knowledge pertaining to the subject property to help identify recognized environmental conditions. On behalf of HSU, Michael Fisher, Associate Director of Planning, Design, and Construction for HSU completed the User Questionnaire as provided by ASTM Appendix X3 prior to completion of the site reconnaissance. A copy of the completed questionnaire is included as Appendix A.

Mr. Fisher indicated the following:

The Phase I ESA is being completed as part of the California Sate University/HSU due diligence requirements when transferring a property.

The type of property transaction is a sale between the HSU Axillary Foundation and the University State Side.

Based on our review of the completed questionnaire, the user reviewed the following sources of information:

- Recorded land title records (or judicial records, where appropriate) that would identify any environmental liens filed or recorded against the subject property. Mr. Fisher indicated that there are none.
- Recorded land title records (or judicial records, where appropriate) that would identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the subject property under federal, tribal, state or local law; Mr. Fisher indicated that there are none.

Based on our review of the completed questionnaire, Mr. Fisher is unaware of the following:

- Specialized knowledge or experience related to the subject property or nearby properties.
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the subject property.
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property.

Based on our review of the completed questionnaire, Mr. Fisher is aware of information regarding the following:

- Information about a reduction in property value relative to environmental issues, due to asbestos and lead-based paint present in the onsite structure.
- Additionally, he believes that the purchase price being paid for the property reasonably reflects the fair market value.
- Commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases (presence of asbestos and lead-based paint onsite).

The following document regarding the subject property was provided by HSU and portions of the document are included in Appendix 4:

*Asbestos and Lead-Based Paint and Lead-Glazed Ceramic Tile Survey Report, Trinity Annex at Humboldt State University in Arcata, California,* prepared by Masek Consulting Services, Inc. (Masek), dated April 26, 2016. At the time of this survey, the subject property was occupied by the existing former hospital building. The report references that a permit to build the structure was documented and is dated July 2, 1943. Based on the results of the survey, the existing onsite structure contains both asbestos containing building materials and lead-based paint. Masek concluded that all contractors should have well organized asbestos and lead exposure assessment programs and exposure assessment databases. Masek considered exposure assessment mandatory, and until exposure assessment data are obtained, contractors must provide respiratory protection and other measures for site workers. All contractors and field personnel working within the existing onsite structure should have at least the two hour asbestos awareness training, and that any of their employees who will be performing work involving spot disturbances / removal of materials which contain asbestos have the 16 hour training needed for performing OSHA Class III asbestos work. With regard to lead, Masek reported if lead is present in a construction workplace in any quantity, the *construction employer* is required to make an initial determination of whether any employee's exposure to airborne lead exceeds the action level. This initial determination requires that the employer perform an exposure assessment. Masek reported that such monitoring may be done by clipping small battery-powered air pumps to the employees' belts, with hoses running to filter cassettes clipped to the lapel of their shirts. Additionally, if any of the materials generated during demolition are considered hazardous waste, it must be disposed at a hazardous waste landfill and must be hauled under a proper manifest by a licensed hazardous waste transporter. A copy of this report is included in Appendix 4.

# Records Review

## Physical Setting Sources

### Topography

According to the USGS topographic map for the Arcata South Quadrangle (1972), the subject property is situated at an elevation of about 80 to 90 feet above mean sea level. The existing subject property topography is generally flat. In general, the topography in the vicinity of the subject property slopes gradually toward the west.

### Geology and Hydrogeology

The subject property is located within the Northern California Coast Ranges. The Northern Coast Ranges are a section of the California Coast Ranges which run parallel to the Pacific Coast from the North San Francisco Bay Area to coastal Del Norte County. The Klamath Mountains, including the Siskiyou Mountains sub-range, lie to the north and northeast. The Southern Coast Ranges lie to the south. Geologic units generally consist of Pleistocene, sedimentary and metasedimentary, and alluvial deposits. Deeper seated geologic units consist of members of the Mesozoic Franciscan Formation, as well as Tertiary Marine and upper Cretaceous (Norris and Webb, 1991).

### Site Geology

According to the United States Geological Survey (USGS) Geologic Map of the Cape Mendocino, Eureka, Garberville, and southwestern part of the Hayfork 30 x 60 minute Quadrangles, the subject property is underlain by uplifted Quaternary marine shoreline and aolian deposits (Qm). These deposits are described as gravel and sand deposited in marine terraces, on benches, and on dunes along present shorelines. Within the northern Eureka quadrangle, near Arcata, the deposits include older late Pleistocene dune sands (USGS, 2000).

### Regional Groundwater Occurrence and Quality

The subject property is located within the Mad River Valley Basin (1-08) of the North Coast Groundwater Basin.

During the preparation of this Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCB's) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property:

According to the September 26, 2017 *Second Half 2017 Semi-Annual Groundwater Monitoring, College Creek Surface Water Analysis, French Drain Evaluation and Seal Emplacement, Humboldt State University Plant Operations Yard Former UST Area, 1 Harpst Street, Arcata, California*, prepared by SHN Consulting Engineers & Geologists, Inc. (SHN), SHN recently measured depth to groundwater in monitoring wells SW-6, SW-9, and PO-5 during the July 20, 2017, monitoring event. At that time, depth to groundwater ranged from 2.52 to 3.17 feet. Groundwater flow was calculated to be toward the west with an approximate gradient of 0.05 feet per foot. This Plant Operations Yard site is located adjacent to the north of the subject property. Further information regarding this adjacent property is in the Review of Agency Files section below.

# Standard Environmental Record Sources

EDR was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix B. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix B for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.

## Subject Property

The subject property was not listed on any of the databases searched by EDR.

## Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., LUST, National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed UST test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, “no further action”)
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

**Table 2 EDR Listing Summary of Select Sites Within One-Eighth Mile of the Subject Site**

| Site Name | EDR Site ID | Site Address | Distance from Subject Property (miles) | Database Reference |
|---|---|---|---|---|
| **Adjacent Property** | | | | |
| HSU Plant Operations, Humboldt State University – Plant Ops | A1-A6, 7 | 14th and B Streets, Arcata | Adjacent to the north | CA FID UST, SWEEPS UST, HIST UST, **LUST (GeoTracker)** |
| **Nearby Release Sites** | | | | |
| Humboldt State University | B8, B9 | 1 Harpst Street | Less than 1/8 mile to the northeast | **CHMIRS**, CUPA Listings, EMI, ENF, HAZNET, NPDES, RCRA-LQG, PADS, FINDS, ECHO |

**Bold** – indicates release database listing.

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.

### Orphan Listings

EDR reported four orphan or unmapped site listings, which EDR is unable to plot due to insufficient address information. Based on Rincon's review of the limited address information or site descriptions for the orphan listings, the four sites are not expected to impact the subject property.

## Additional Environmental Record Sources

### Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, up gradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., SWRCB GeoTracker database, DTSC EnviroStor database) and/or files requested from the applicable regulatory agency, as described below.

#### Subject Property

The subject property was not listed on databases searched by EDR.

## Adjacent Property

One adjacent property was listed in databases searched by EDR as follows:

- **HSU Plant Operations, Humboldt State University – Plant Ops – 14th and B Streets.** This property is located adjacent to the north of the subject property and was listed on the following databases searched by EDR: Statewide Environmental Evaluation and Planning System (SWEEPS) Underground Storage Tank (UST), Historical (HIST) UST, CA Facility Index (CA FID) UST, and Leaking Underground Storage Tank (LUST) (GeoTracker). The UST database listing indicates that two 600-gallon diesel fuel USTs are associated with the plant operations site. The HIST UST listing indicates that a 6,000 gallon fuel UST was installed on the HSU Plant Operations property in 1963.

  According to GeoTracker, site cleanup status is listed as "Open – Site Assessment as of 5/15/2015." The potential contaminants of concern are listed as "gasoline, MTBE/TBA/other fuel oxygenates." The potential media affected was listed as "Aquifer used for drinking water supply." According to the August 22, 2005 Interim Remedial Action Plan for the site, the primary constituents of concern are total petroleum hydrocarbons-gasoline (TPH-g); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary-butyl ether (MTBE) resulting from a former onsite UST release (LACO, 2005).

  According to the recent September 26, 2017 semi-annual groundwater monitoring report, *"Remedial actions taken to date have reduced petroleum hydrocarbon mass in the secondary source area of the Plant Operations facility; however, recalcitrant dissolved phase methyl-tertiary butyl ether (MTBE) and tertiary-butyl alcohol (TBA) have been recorded for groundwater samples collected from shallow monitoring wells located between the Plant Operations secondary source area and College Creek. Declining dissolved-phase MTBE concentrations over time are interpreted as being attributable to active natural attenuation mechanisms and historical remediation efforts. Laboratory analytical and field note records indicate that a stormwater conveyance pipe extending from 14th Street to College Creek may serve as a conduit for non-stormwater discharges. Historical documentation of work performed by HSU on a French drain suggests that the French drain may have served as a conduit for flow of shallow groundwater intercepted by the French drain to the general vicinity of the stormwater conveyance pipe; the French drain has subsequently been sealed."*

  Laboratory results of the recent groundwater sampling event from sampling locations SW-6, SW-9, and PO-5 were as follows:
  - TPH-g: ranged from below laboratory reporting limits (less than 50 micrograms per liter [µg/L]) to 760 µg/L
  - Benzene, toluene, and ethylbenzene: below laboratory reporting limits (less than 0.50 µg/L
  - M,p-xylenes: ranged from below laboratory reporting limits (less than 0.50 µg/L) to 1.0 µg/L
  - O-xylenes: below laboratory reporting limits (less than 0.50 µg/L)
  - MTBE: 6.5 to 340 µg/L
  - TBA: below laboratory reporting limits (less than 1.0 µg/L) to 210 µg/L
  - DIPE, ETBE, and TAME: below laboratory reporting limits (less than 0.50 to 1.0 µg/L)

  Per the report, *"…concentration data reported after October 2010 follows a steady declining trend following a post-remediation concentration rebound."* No further recommendations for groundwater sampling were included in the September 2017 semi-annual groundwater

monitoring report. Additionally, SHN recommended the following, *"If MTBE is no longer detectible in the stormwater conveyance pipe discharge, as demonstrated over successive sampling events, [then they] recommend site closure."*

SHN recently submitted a request for closure report. Reportedly, a French drain presumed to convey MTBE-impacted groundwater from a secondary source area to the vicinity of subgrade stormwater infrastructure was sealed at two locations to inhibit future migration of impacted water. HSU Plant Operations personnel coordinated and conducted field efforts to emplace concrete and bentonite seals. Per the report, *"Stormwater conveyance pipe discharge samples recorded very low concentrations of dissolved-phase methyl-tertiary butyl ether (MTBE) concentrations; historical sampling of College Creek surface water downstream of the confluence between College Creek and the stormwater conveyance pipe has recorded MTBE concentrations below standard detection limits. SHN requests a recommendation for no further action be made for the site."*

Based on our review of the documents, the contaminated groundwater associated with the HSU Plant Operations site is located roughly 150 feet to the north-northwest of the subject property and flows towards the Creek to the west of the HSU property and northwest of the subject property. Although the northern adjacent release case remains open at this time, based on the results of the recent groundwater monitoring event and the recorded groundwater flow direction in the vicinity of the former release (to the west and not towards the subject property), the Humboldt State Plant Operations Yard release is not expected to impact the subject property.

## Nearby Release Site

One nearby release site (within 1/8 mile) was listed in databases searched by EDR as follows:

- **Humboldt State University – 1 Harpst Street.** This property is located on the State University Campus and is roughly 550 feet to the northeast of the subject property. The University was listed on the following databases searched by EDR: California Hazardous Material Incident Reporting System (CHMIRS), Certified Unified Programs Agencies (CUPA) Listings, Emissions Inventory Index (EMI), Enforcement Action Listing (ENF), Hazardous Materials (HAZNET), and National Pollutant Discharge Elimination System (NPDES). One CHMIRS release listing indicates that a release of raw sewage into a storm drain leading to College Creek occurred on the HSU property on 11/26/2012. Approximately 50 gallons were released to the creek due to a sewer main back up/debris blockage. A second CHIMRS release listing indicates that one gallon of mineral spirits was released to a storm drain leading to Campbell Creek on 10/3/2008. According to the listing, "*The County Sheriff's bomb squad blew up a pipe because they thought it was a pipe bomb. The Lieutenant Governor was visiting the campus at the time… The device actually turned out to be a paint roller stored in a pipe in mineral spirits."* A third CHMIRS listing indicated that a release of 0.5 gallons of paint to a storm drain leading to Jolly Giant Creek occurred on 3/15/2012.The EMI database listing indicates that the university has generated greenhouses gases; however, no violations were found. The NPDES listing indicates that the university was permitted to discharge to the sanitary sewer system. Based on the information provided by EDR, the nearby former CHMIRS release listings located on the HSU property are not expected to impact the subject property.

# Review of State of California Division of Oil and Gas Records

A review of the Department of Conservation, Division of Oil, Gas & Geothermal Resources Online Mapping System indicates that no oil wells are located on the subject property, adjacent properties, or within one-quarter mile of the subject property.

# Review of National Pipeline Mapping System Records

A review of the National Pipeline Mapping System (NPMS) online Public Map Viewer[1] indicates that no natural gas transmission pipelines or hazardous liquid pipelines are located on the subject property or adjacent properties. According to the Public Map Viewer, the nearest gas transmission pipeline is located approximately 1,700 feet to the south of the subject property along Bayside Road.

# Known or Suspect Contaminated Release Sites with Potential Vapor Migration

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If up gradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons and other COCs.

## Petroleum Hydrocarbons

Based on our review of the EDR report information as indicated above, there are no onsite, adjacent, or up gradient known or suspect petroleum hydrocarbon-impacted soil or groundwater plumes located within 30 feet of the subject property.

## Other COCs

Based on our review of the EDR report, there are no adjacent or up gradient known or suspect contaminated soil or groundwater plumes located within 100 feet of the subject property.

[1] https://www.npms.phmsa.dot.gov/PublicViewer/

# Historical Use Information on the Property and the Adjoining Properties

The historical records review completed for this Phase I ESA includes city directories, fire insurance maps (Sanborn Maps), aerial photographs, and topographic maps as detailed in the following sections. Copies of the historical resources reviewed are included in Appendix C. Table 3 provides a summary of the historical use information available for the subject property.

## Review of Historical Aerial Photographs

Aerial photographs from EDR's aerial photograph collection were obtained and reviewed. In addition, a current aerial from Google Earth was also reviewed.

## Review of Historical Topographic Maps

Historical topographic maps from EDR's map collection were obtained and reviewed.

## Review of City Directory Listings

EDR was contracted to provide copies of city directory listings for the subject property and select adjacent properties.

## Review of Fire Insurance Maps

Fire insurance maps were obtained from EDR and reviewed.

## Review of City of Fullerton Building Permit Records

A request to review City of Arcata, California Building Permits was submitted by voicemail to the Building Division on January 25, 2018. The building department responded the same day that no building permits were on file for the subject property.

## Other Historical Sources

Based on the historical information obtained, no additional historical sources were reviewed.

## Summary of Historical Uses

### Subject Property

Based on our review of the documents listed above and summarized in Table 3 below, it appears that the subject property was a vacant city block from at least 1919 through approximately 1941. By 1947, the Trinity Hospital had been constructed (property owner provided information). According to the 1951 Sanborn Map, the Trinity Hospital occupies the subject property. Sanborn Maps indicate that laundry operations were located in the northeast wing of the former Trinity Hospital from at least 1951 through at least 1961. The nature of the onsite laundry operations is unknown (water wash versus dry cleaning). Based on aerial photographs, the subject property remains occupied by the Trinity Hospital and generally resembles its present-day configuration since the facility was constructed in 1943. City directories indicate that 1350 C Street was Trinity Hospital of Arcata in 1958, 1964, 1968, and 1972 and was an Administration Building in 1982.

**Table 3 Historical Use of the Subject Property**

| Year | Use | Source |
|---|---|---|
| **Subject Property - *1350 C Street, Arcata, California*** | | |
| 1919 | The subject property is undeveloped. | Sanborn Map (SM) |
| 1928 | The subject property remains undeveloped. | SM |
| 1933 | The subject property appears to be undeveloped. | Topographic Map (TM) – Eureka Quadrangle |
| 1941 | Similar to the 1919 and 1928 SMs. | SM |
| 1941 | The subject property is vacant and undeveloped. | Aerial Photograph (AP) - USDA |
| 1942 | The subject property appears to be undeveloped. | TM - Eureka Quadrangle |
| 1947 | Trinity Hospital is reportedly constructed. | Property Owner Questionnaire |
| 1947 | The subject property is shaded indicating development. | TM - Eureka Quadrangle |
| 1948 | An addition was made to the Trinity Hospital building. | Property Owner Questionnaire |
| 1951 | The subject property is occupied by Trinity Hospital; there is a laundry facility indicated as part of the onsite facilities. | SM |
| 1951 | Similar to the 1947 TM. | TM - Eureka Quadrangle |
| 1954 | The subject property appears to be occupied by Trinity Hospital. | AP – USGS |
| 1957 | Similar to the 1954 AP. | AP – USDA |
| 1959 | The TM indicates that the subject property is occupied by Trinity Hospital. | TM – Arcata South Quadrangle |
| 1961 | Similar to the 1951 SM. | SM |
| 1972 | Similar to the 1959 TM. | TM – Arcata South Quadrangle |
| 1972 | Similar to 1957 AP. | AP – USGS |
| 1973 | A second addition was made to the Trinity Hospital building. | Property Owner Questionnaire |
| 1983 | Similar to the 1972 AP. | AP - USGS |
| 1993 | Similar to the 1983 AP. | AP – USGS/DOQQ |
| 2005 | Similar to the 1993 AP. | AP – USDA/NAIP |
| 2009 | Similar to the 2005 AP. | AP – USDA/NAIP |
| 2010 | Similar to the 2009 AP. | AP – USDA/NAIP |
| 2012 | Similar to the 2010 AP. | AP – USDA/NAIP |
| 2012 | Similar to 1972 TM. | TM – Arcata South |

| Year | Use | Source |
|---|---|---|
| | | Quadrangle |
| 2015-2016 | The subject property remains occupied by the former Trinity Hospital facility and generally resembles its present-day configuration. | Google Earth |

## Northern Adjacent Properties (Across 14th Street)

Based on our review of the documents listed above, it appears that the northern adjacent properties (across 14th Street) were developed with residential dwellings and detached garages by 1928. According to the available Sanborn Maps and aerial photographs, these properties do not change and remain occupied by residential dwellings at least from 1928 through 1961. According to the aerial photographs, the existing northern adjacent University structure (operations facility) was constructed by approximately 1972. In general, the northern adjacent properties remain unchanged and occupied by the existing University structure (operations facility) since 1971.

## Eastern Adjacent Properties (Across B Street)

Based on our review of the documents listed above, it appears that the eastern adjacent properties (across B Street) were undeveloped from at least 1919 through 1928. By 1941, the eastern adjacent properties are occupied by two residential dwellings, one with a detached garage. By 1951, the eastern adjacent properties consist of four parcels occupied by residential dwellings. According to the 1961 Sanborn Map, the eastern adjacent properties consist of five parcels, each occupied by residential dwellings. According to aerial photographs, the eastern adjacent properties appear to remain occupied by residential structures through present-day. City directories indicate that the properties have been occupied by various residents through time.

## Southern Adjacent Properties (Across 13th Street)

Based on our review of the documents listed above, it appears that the southern adjacent properties (across 13th Street) were mostly undeveloped from at least 1919 through 1928. There is detached residential garage indicated on both the 1919 and 1928 Sanborn maps located south of 299 13th Street (on C Street; no address is specified). By 1941, a residential dwelling with a detached garage has been constructed at 1289 B Street and at 1290 C Street and the properties remain unchanged through 1961. According to aerial photographs, the southern adjacent properties appear to remain occupied by residential structures through present-day. City directories indicate that the properties have been occupied by various residents through time.

## Western Adjacent Properties (Across C Street)

Based on our review of the documents listed above, it appears that the western adjacent properties (across Street) were mostly undeveloped from at least 1919 through 1928. By 1941, the western adjacent properties are occupied by four residential dwellings and two detached garages. Available Sanborn Maps indicate that the western adjacent properties remain unchanged through 1961. According to aerial photographs, the western adjacent properties appear to remain occupied by residential structures through present-day. City directories indicate that the properties have been occupied by various residents through time.

## Gaps in Historical Sources

Several gaps of greater than five years were identified in the historical records reviewed, from 1919 to 1928, 1933 to 1941, 1961 to 1972, 1983 to 1993, and 1993 to 2005. These gaps are considered insignificant because the use of the subject property appears to be similar and does not change prior to and following the gaps.

# Interviews

Rincon Consultants performed interviews regarding the subject property and surrounding areas. The purpose of the interviews was to discuss current and historical conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property.

## Interview with Owner

An interview questionnaire was completed by the property owner representative, Michael Fisher, Associate Director of Planning, Design, and Construction for Humboldt State University. A copy of the completed questionnaire is included in Appendix A. The following information is based on our review of the completed questionnaire.

Mr. Fisher indicated the following:

- The current owner of the subject property is Humboldt State University, Real Estate Holdings.
- The original building was erected in 1947, the first addition was dated 1948, and a second addition was dated 1973.
- The subject property is currently used for storage. There has been no active occupied use of the subject property building for the past six years. The site is an active parking area with three separate lots totaling 42 stalls.
- The subject property is contained in one city block bordered on all sides by streets: land beyond to the north is occupied and has been historically occupied by Humboldt State University campus; land beyond to the south, west, and east is occupied and has historically been occupied by single-family residential homes.
- Regarding previous site use, “the building and site was originally the only local hospital for the region until the late 1970's; since then it was offices and then classrooms once HSU bought it.”

Mr. Fisher indicated he is unaware of the presence of industrial drums, pits, ponds, lagoons, sumps, clarifiers, solvent degreasers, records indicating the presence of PCBs, or records indicating the presence of pesticides or herbicides.

Mr. Fisher indicated that there is lead paint in soil at the perimeter of the building due to the deteriorating exterior.

With regard to the potential presence of onsite USTs, Mr. Fisher indicated that “it may be likely given the history of our area and its original construction date.” However, to his knowledge there are no vent pipes, fill pipes, or other access ways indicating a fill pipe protruding from the ground on the subject property.

Mr. Fisher does not know if there currently or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors; however, he indicated that the subject property use for “many years as a hospital may lead to the discovery of this condition.”

Mr. Fisher does not know if there currently or have there been previously, a transformer, capacitor, or any hydraulic equipment on the subject property; however, he indicated that the subject property use for “many years as a hospital may lead to the discovery of this condition.”

Mr. Fisher indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property.

## Interview with Site Manager

During the site reconnaissance, Garrett McSorely, Architect for Humboldt State University indicated that the subject property hospital building is not in use. He indicated that the building used to operate as a hospital and that the east wing had been used as a hydrogen energy research laboratory until approximately 2008. He also indicated that the east wing is currently used for the storage of academic papers, files, stage sets, and musical instruments.

## Interviews with Occupants

The subject property is developed with a former hospital building and is unoccupied; therefore, no occupants were interviewed as part of this research effort. Additionally, Mr. Fisher indicated that the building has not been used for purposes other than storage in the last six years.

## Interviews with Local Government Officials

A request to review City of Arcata, California Building Permits was submitted by voicemail to the Building Division on January 25, 2018. The building department responded the same day that they had no permits on file for the subject property.

To review Certified Unified Programs Agency (CUPA) documents that may be associated with the onsite former hospital building, Rincon contacted the Arcata Fire District by email and phone on January 25, 2018. However, Ms. Becky Schuette, Business Manager for the Arcata Fire District indicated that the fire department does not have records on file for the State-owned property and that HSU would have records, if any.

# Site Reconnaissance

Rincon Consultants performed a reconnaissance of the subject property on January 30, 2018 accompanied by Garrett McSorley, Architect for Humboldt State University. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

## Methodology and Limiting Conditions

The site reconnaissance was conducted by:

1. Observing the subject property from public thoroughfares,
2. Observing the adjacent properties from public thoroughfares,
3. Observing the exterior of the onsite structure,
4. Observing the interior of the structure,
5. Backtracking to correlate exterior features with interior features, as necessary and possible, and
6. Observing the subject property from driveways, roads, and walking paths/sidewalks.

## Current Use of the Property and Adjacent Properties

The subject property is currently developed with the former Trinity Hospital facilities. Adjacent properties are occupied by single-family residential homes and Humboldt State University buildings and offices.

## Past Use of the Property and Adjacent Properties

Based on our site reconnaissance, past uses at the subject property and adjacent properties are not readily apparent. However, the subject property is known to have been historically in use as Trinity Hospital since 1947.

## Current or Past Uses in the Surrounding Areas

The subject property is surrounded by residential and educational land use as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

## Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

Geologic, hydrogeologic, hydrologic, and topographic information are as previously stated in the Physical Settings Section of this report.

# General Description of Structures

The subject property is developed with the former Trinity Hospital buildings and parking areas.

# Interior and Exterior Observations

## Hazardous Substances and Petroleum Products in Connection with Identified Uses

Small quantities (5 to 10 gallon containers) of various hazardous substances and petroleum products observed during the site reconnaissance are as follows:

- Paints
- Household cleaning products
- Chemicals used for boiler
- Motor oil
- Fuel cans
- Pesticide containers
- Propane tanks

With the exception of spilled paint, Rincon did not observe indications of releases from these containers.

Additionally, Mr. McSorely indicated that the hospital used to generate medical waste but that ceased with hospital operations.

## Storage Tanks

No USTs were observed on the subject property during the site reconnaissance. There is an above ground water tank associated with the boiler which is located in the basement.

## Odors

During the site reconnaissance, Rincon noticed mildew odors in the basement areas, likely the result of active and historical water leaks.

## Drums

During the site reconnaissance, 55-gallon industrial drums were observed in the boiler room. According to Mr. McSorely, the drums contained chemical related to the operation of the boiler.

## Hazardous Substances and Petroleum Products Containers Not in Connection with Identified Uses

Hazardous substances or petroleum products not in connection with identified uses were not observed at the subject property.

## Unidentified Substance Containers

During the site reconnaissance, two unidentified substance containers were observed by the boiler. The contents of the containers were unable to be determined (the labels were faded and illegible). However leaks, releases, or stains near the containers were not observed.

## Indications of Polychlorinated Biphenyls (PCBs)

A transformer was observed in the basement by the furnace. Whether the transformer contains PCBs is unknown; however, there was no indication of a release in the vicinity of the transformer.

No other hydraulic equipment was observed on the subject property.

## Other Conditions of Concern

During the site reconnaissance Rincon did not note any of the following:

- Clarifiers and sumps
- Degreasers/parts washers
- Pits, ponds, and lagoons
- Stressed vegetation
- Waste water
- Wells
- Septic systems/effluent disposal system

**Stains or corrosion** – Multiple oil stains were observed in the parking lots. The oil stains appeared to be from parked vehicles and were minor. Significant water staining in the basement along with active water leaks were observed. Excessive rusting was also observed on metal surfaces inside the building.

**Heating/Cooling** - The subject property building is equipped with a boiler and boiler room.

**Incinerator** – An incinerator was observed in the basement of the hospital.

**Paint chipping off walls** – Peeled and chipping paint was observed on surfaces throughout the subject property building.

**Hydrogen cylinders** – Multiple hydrogen cylinders were located in an onsite hydrogen shack. The east wing of the former hospital building was used as a hydrogen fuel research laboratory until approximately 2008.

# Evaluation

## Findings

Known or suspect recognized environmental conditions associated with the subject property include the following:

- Northern adjacent Humboldt State University Plant Operations leaking USTs
- The presence of asbestos containing building materials and lead-based paint onsite
- Onsite "laundry" operations as indicated on historical Sanborn Maps (1951 through at least 1961)

A. **Northern adjacent Humboldt State University Plant Operations leaking USTs.** Although the northern adjacent release case remains open at this time, based on the results of the recent groundwater monitoring event and the recorded groundwater flow direction in the vicinity of the former release (to the west and not towards the subject property), the Humboldt State Plant Operations Yard release is not expected to impact the subject property. Therefore, the release is considered *de minimis* with respect to the subject property.

B. **The presence of asbestos containing building materials and lead-based paint onsite.** Based on the 2016 asbestos containing building material (ACM) and lead-based paint (LBP) survey conducted for the former Trinity Hospital by Masek, measureable amounts of ACM and LBP are present onsite. Additionally, the property owner indicated that lead-based paint chips exist in the soil adjacent to the perimeter of the former hospital building. It is our understanding that the soil adjacent to the building has not yet been sampled and tested for the presence of lead; therefore, the concentration of lead in soil is unknown. Therefore the potential for elevated concentrations of lead in soil is considered a potential *Recognized Environmental Condition.*

C. **Onsite "laundry" operations as indicated on historical Sanborn Maps (1951 through at least 1961).** Sanborn Maps indicate that laundry operations were located in the northeast wing of the former Trinity Hospital from at least 1951 through at least 1961. The nature of the onsite laundry operations is unknown (water wash versus dry cleaning). Dry cleaning operations are often associated with the use of hydrocarbons and solvents. Therefore, the potential for former onsite dry cleaning in the northeast wing of the former hospital is considered a potential *Recognized Environmental Condition.*

## Conclusions

Rincon has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E 1527-13 for the HSU Trinity Annex property located at 1350 C Street in Arcata, California. Any exceptions to, or deletions from, this practice are described in the Deviations section of this report. This assessment has revealed evidence of two potential *Recognized Environmental Conditions* in connection with the subject property as follows:

### Potential Recognized Environmental Conditions

1. Potential presence of elevated concentrations of lead in soil (from deteriorated lead-based paint) adjacent to the perimeter of the former hospital building
2. Onsite "laundry" operations as indicated on historical Sanborn Maps (1951 through at least 1961)

## Recommendations

To evaluate the presence of lead in soil (from deteriorated lead-based paint) adjacent to the former hospital building, we recommend collecting soil samples from areas of exposed soil along the perimeter of the onsite structure and analyzing the samples for total lead.

To evaluate impacts related to potential onsite dry cleaning operations, we recommend performing a soil vapor survey within the northeast wing of the former hospital building.

As stated in the 2016 asbestos containing building material (ACM) and lead-based paint (LBP) survey conducted for the former Trinity Hospital by Masek, we recommend that all onsite workers be properly trained to handle ACM and LBP during the demolition of the onsite building.

Additionally, if any of the materials generated during demolition are considered hazardous waste, it must be disposed of at a hazardous waste landfill and must be hauled under a proper manifest by a licensed hazardous waste transporter.

## Deviations

Deviations from ASTM practice were not encountered during the completion of this Phase I ESA.

# References

The following published reference materials were used in preparation of this Phase I ESA:

**City Directory Listings**
Listings provided by Environmental Data Resources (EDR).

**Environmental Database**
EDR report dated January 18, 2018.

**Geology**

United States Geological Survey (USGS), Geologic Map of the Cape Mendocino, Eureka, Garberville, and southwestern part of the Hayfork 30 x 60 minute Quadrangles, 2000; Norris, R.M. and Webb, R.W., Geology of California, 1991.

**Groundwater**
California DWR, *California's Groundwater Bulletin 118*, 2003; RWQCB online database (GeoTracker). Accessed January 2018.

**Historical Aerial Photographs**
Photos provided by EDR and Google Earth.

**Historical Topographic Maps**
Maps provided by EDR.

**Oil and Gas Records**
State of California, Division of Oil, Gas and Geothermal Resources website: http://www.consrv.ca.gov/DOG/index.htm. Accessed January 2018.

**Pipelines**
National Pipeline Mapping System (NMPS) Public Map Viewer, https://www.npms.phmsa.dot.gov/PublicViewer/. Accessed January 2018.

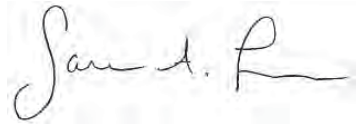
**Topography**
USGS topographic map (1972, Arcata South Quadrangle).

# Signatures of Environmental Professionals

The qualified environmental professionals that are responsible for preparing the report include Walt Hamann, Sarah Larese, and Meghan Hearne. Their qualifications are summarized in the following section.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

| Signature | February 21, 2018 |
|---|---|
| | Date |
| Walt Hamann, PG, CEG | Vice President |
| Name | Title |



| Signature | February 21, 2018 |
|---|---|
| | Date |
| Sarah Larese | Senior Environmental Scientist |
| Name | Title |

| Signature | February 21, 2018 |
|---|---|
| | Date |
| Meghan Hearne, GIT | Environmental Scientist |
| Name | Title |

# Qualifications of Environmental Consultants

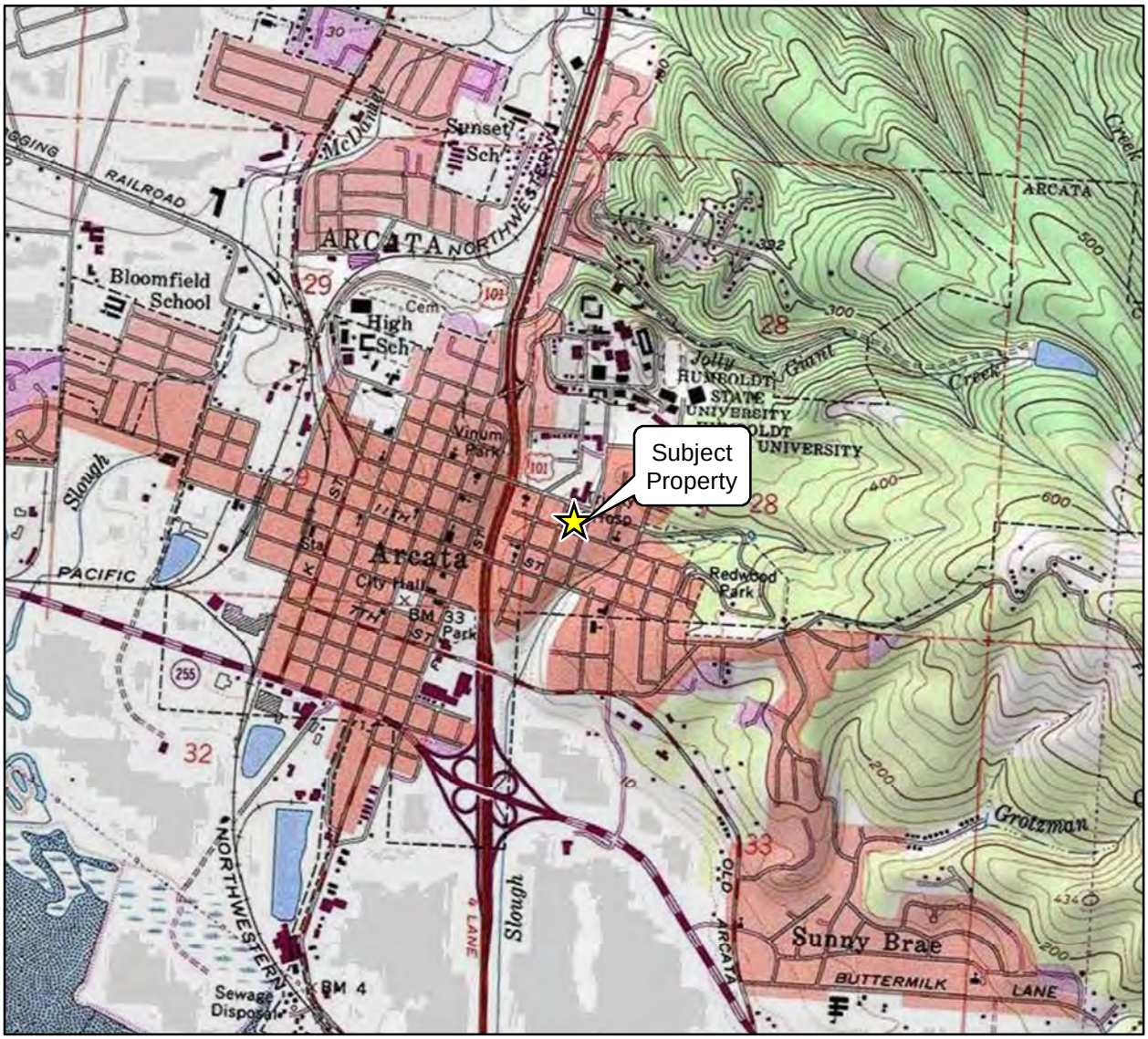
The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Walt Hamann, Sarah Larese, and Meghan Hearne. Their qualifications are summarized below.

| Environmental Consultant Qualifications | X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience | X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries | X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience | X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience |
|---|---|---|---|---|
| Walt Hamann | PG, CHG, CEG | | MS Geology | 30 years |
| Sarah Larese | | | BA Environmental Studies | 18 years |
| Meghan Hearne | GIT | | MS Geology | 11 years |

**Walt Hamann**, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 30 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

**Sarah A. Larese** is a Senior Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in environmental studies from the University of California, Santa Barbara, California. Ms. Larese has experience in development, implementation and project management of environmental assessment and remediation projects, especially relating to underground storage tanks. Ms. Larese's responsibilities at Rincon include implementation of Phase I and II Environmental Site Assessments as well as conducting site remediation field activities and preparation of environmental reports. She has 18 years of experience conducting research, assessment and remediation projects.

**Meghan Hearne** is an Environmental Scientist with Rincon Consultants. She holds a Master of Science degree in Geology from the University of North Carolina at Wilmington. Ms. Hearne has experience working on geotechnical investigations and Phase I and Phase II Environmental Site Assessments for a variety of commercial, rural, and industrial properties. Ms. Hearne's responsibilities at Rincon include implementation of Phase I and Phase II Environmental Site Assessments and reports.




*Imagery provided by National Geographic Society, ESRI and its licensors © 2018. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.*

Vicinity Map

Figure 1

*Imagery provided by Google and its licensors © 2018.*

Site Map

Figure 2

*Imagery provided by Google and its licensors © 2018.*

## Adjacent Land Use Map

Figure 3

**Photograph 1.** View of the subject property, facing east.

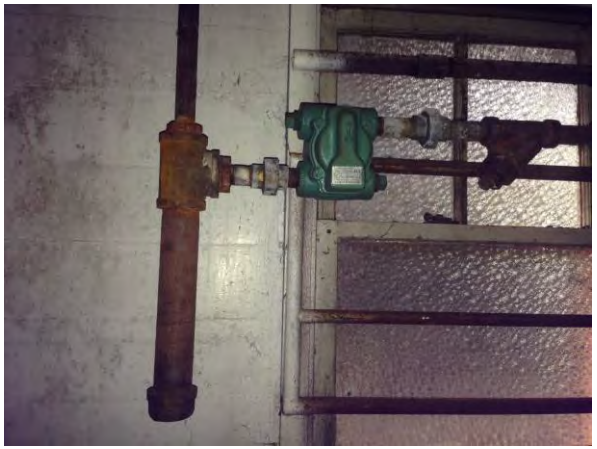
**Photograph 2.** View of deteriorated lead-based paint on the subject property building, from the north end of the parking lot facing west.

**Photograph 3.** View of the ramp leading to the basement of the subject property building, facing south.

**Photograph 4.** View of the northern adjacent property, Humboldt State University campus, facing north.

**Photograph 5.** View of adjacent residential properties (residential to the east, west, and south of the subject property), facing southeast from the corner of B and 13th Streets.

**Photograph 6.** View inside of the basement boiler room.

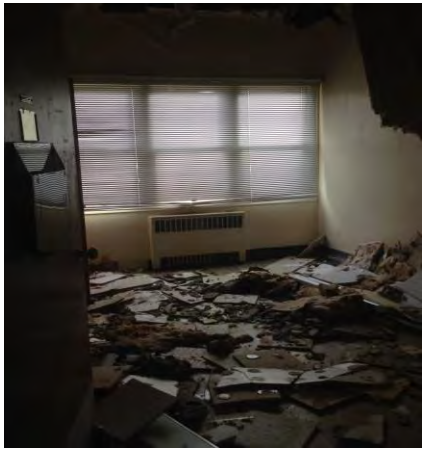


**Photograph 7.** View of rusted and corroded pipes in the basement of the subject property building.

**Photograph 8.** View of the boiler treatment chemical containers stored in the basement of the subject property building.

**Photograph 9.** View of one of multiple spilled paint containers located in the basement of the subject property building.

**Photograph 10.** View of typical subject property building storage material (computer equipment, files, theatre set materials, etc.).



**Photograph 11.** View of the inside of one of the rooms with a caved-in ceiling and stained flooring.

**Photograph 12.** View of the inside of one of the rooms with a caved-in ceiling.

# Appendix A

Interview Documentation

**Rincon Project** _____
**Site Name and Full Address:** _____

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form (via fax 760-918-9444 or email _____) to us within one week from the date of this transmittal.

| | |
|---|---|
| **1)** | **Was the subject property or any adjoining property ever used as:**<br>❑ a gasoline or other fueling station<br>❑ a motor vehicle repair facility<br>❑ a commercial printing facility<br>❑ a dry cleaners<br>❑ a photo developing laboratory<br>❑ a metal plating facility<br>❑ a farm<br>❑ a junkyard or landfill<br>❑ a waste treatment, storage, disposal, processing or recycling facility<br>❑ a machine shop<br>❑ a manufacturing facility<br>❑ an oil production facility (including oil wells)<br>❑ any other industrial use<br>(*please check all that apply and describe*) |

| | | |
|---|---|---|
| **2)** | **Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.** | |
| **2a** | **Current Use of Subject Property** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of current operation*) |
| **2b** | **Current Use of Northern Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of current operation*) |
| **2c** | **Current Use of Southern Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of current operation*) |
| **2d** | **Current Use of Western Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of current operation*) |

**Rincon Project** _____
**Site Name and Full Address:** _____

| | | |
|---|---|---|
| **2e** | **Current Use of Eastern Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of current operation*) |

| | | |
|---|---|---|
| **3)** | **Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.** | |
| **3a** | **Previous Use of Subject Property** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of previous operations, former property owners, and dates of operation*) |
| **3b** | **Previous Use of Northern Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of previous operations*) |
| **3c** | **Previous Use of Southern Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of previous operations*) |
| **3d** | **Previous Use of Western Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of previous operations*) |
| **3e** | **Previous Use of Eastern Adjoining Properties** (*please check all that apply*)<br>❑ Commercial (retail, offices, etc.)<br>❑ Residential (single family or apartments)<br>❑ Industrial (manufacturing, warehousing, processing)<br>❑ Other- Please Describe | (*please include a brief description of previous operations*) |

| | | |
|---|---|---|
| **4)** | **Who is the current owner of the property?** | |

| | | |
|---|---|---|
| **5)** | **When did current ownership begin?** | |

**Rincon Project** _____
**Site Name and Full Address:** _____

| | | |
|---|---|---|
| **6)** | **What is the age of the on-site facility?** | |

| | | |
|---|---|---|
| **7)** | **Who is the previous owner of the property?** | |

| | |
|---|---|
| **8)** | **Please indicate the property's current** |
| | electrical service provider - |
| | water service provider - |
| | natural gas service provider - |
| | sewer service provider - |
| | solid waste hauler - |

| | | |
|---|---|---|
| **9)** | **To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate?** (*if Yes or Unknown, include how many, type, and size*) | |
| | ❑ Damaged or discarded automotive or industrial batteries | |
| | ❑ Paints | |
| | ❑ Oils or solvents | |
| | ❑ Motor vehicle fuel | |
| | ❑ Pesticides or herbicides | |
| | ❑ Other chemicals or hazardous substances | |

| | | | |
|---|---|---|---|
| **10)** | **Please indicate any wastes generated at the facility.** | | |
| | **Hazardous waste:** | **Quantity:** | **Disposal Method:** |
| | | | |
| | | | |
| | | | |
| | | | |

**Rincon Project** _____
**Site Name and Full Address:** _____

| | | |
|---|---|---|
| **11)** | **Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **12)** | **Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **13)** | **Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **14)** | **Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **15)** | **Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **16)** | **Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

**Rincon Project** _____
**Site Name and Full Address:** _____

| | | |
|---|---|---|
| **17)** | **Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **18)** | **If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **19)** | **Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **20)** | **To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **21)** | **Have any of the following ever been dumped above grade, buried and/or burned on the property?** (*please check all that apply and describe if possible*) | |
| | ❑ Hazardous substances | |
| | ❑ Petroleum products | |
| | ❑ Unidentified waste materials | |
| | ❑ Tires | |
| | ❑ Automotive or industrial batteries | |
| | ❑ Other waste materials (please describe) | |

**Rincon Project** _____
**Site Name and Full Address:** _____

| | | |
|---|---|---|
| **22)** | **Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **23)** | **Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **24)** | **Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **25)** | **Do you have any knowledge of environmental liens that may have been recorded against the property or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **26)** | **Do you have any knowledge of activity and use limitations (AULs) such as engineering controls, deed restrictions, land use restrictions, or institutional controls that may have been recorded against the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **27)** | **Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

**Rincon Project** _____
**Site Name and Full Address:** _____

| | | |
|---|---|---|
| **28)** | **Do you have any knowledge of any environmental site assessments of the property or facility?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **29)** | **Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **30)** | **Are there any site-specific geotechnical or geologic reports available for the subject property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| | | |
|---|---|---|
| **31)** | **Is there a Title Report available for the subject property?** | |
| | ❑ Yes<br>❑ No<br>❑ Unknown | *If Yes or Unknown, please describe* |

| **This questionnaire was completed by (*please print*)** | |
|---|---|
| **Name** | |
| **Title** | |
| **Firm** | |
| **Street Address** | |
| **City, State, Zip Code** | |
| **Phone Number** | |
| **Fax Number** | |
| **What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)?** | |

**Rincon Project** _____
**Site Name and Full Address:** _____

**Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:**

Rincon Consultants, Inc.
2215 Faraday Avenue, Suite A
Carlsbad, CA 92008
Attention: Environmental Site Assessment Division
Fax: (760) 918-9444
Email: _____@rinconconsultants.com

**Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.**

**Signature** _____ **Date** _____

**User Questionnaire**

**Rincon Project** _____

**Site Name and Full Address:** _____

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

***We respectfully request that you fill out this form and e-mail it to _____ at _____@RinconConsultants.com within one week from the date of this transmittal.***

| | |
|---|---|
| ***1.*** Why is the Phase I ESA required or being performed? | |
| ***2.*** What type of property transaction is planned? (i.e. sale, purchase, exchange) | |
| ***3.*** What is the entire site address? | |
| ***4.*** What is the Assessor's Parcel Number(s)? | |
| ***5.*** Are any considerations beyond the requirements of Practice E1527 to be considered? (i.e. lien search, asbestos & lead based paint, radon) | |
| ***6.*** Identify all parties who will rely on the Phase I report. | |
| ***7.*** Identify the Site Manager/Contact and how the contact can be reached. | |

**Rincon Project** _____

**Site Name and Full Address:** _____

| | |
|---|---|
| ***8.*** Identify the Site Owner and how the owner can be reached. | |
| ***9.*** Do you have copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning any other knowledge or experience with the property that may be pertinent to the environmental professional (i.e. title report, previous Ph I and II ESAs, Environmental Impact Studies)? | |

***1.*** **Did a search of *recorded land title records* (or judicial records, where appropriate) identify any environmental liens filed or recorded against the *property?***

Please checkmark the most appropriate response:

☐ I *have not* reviewed the records and ***do not know*** if there are any filed or recorded environmental liens.

☐ I *have* reviewed the records, and ***No, there aren't any*** filed or recorded environmental liens.

☐ I *have* reviewed the records, and ***Yes, there are*** environmental liens. Explain:

_____

***2.*** **Did a search of recorded land title records (or judicial records, where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?**

Please checkmark the most appropriate response:

☐ I *have not* reviewed the records and ***do not know*** if there are any filed/recorded AULs or any AULs in place at the site.

☐ I *have* reviewed the records, and ***No, there aren't any*** filed/recorded AULs or any AULs in place at the site.

☐ I *have* reviewed the records, and ***Yes, there are*** AULs filed, recorded, and/or in place at the site. Explain:

_____

**Rincon Project** _____

**Site Name and Full Address:** _____

***3.*** **Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?**

Please checkmark the most appropriate response:

☐ I *have not* reviewed the Title Report and ***do not know*** if it provides environmental cleanup liens or AULs information.

☐ I *have* reviewed the Title Report, and ***No, it does not*** provide environmental cleanup liens or AULs information.

☐ I *have* reviewed the Title Report, and ***Yes, it does provide*** environmental cleanup liens or AULs information. Explain:

_____

***4.*** **Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?**

Please checkmark the most appropriate response:

☐ ***No***, I *do not* have any specialized knowledge and/or experience related to the property or nearby properties.

☐ ***Yes***, I *do* have specialized knowledge and/or experience related to the property or nearby properties. Explain:

_____

***5.*** **As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?**

Please checkmark the most appropriate response:

☐ ***No***, I *do not* have any information about a reduction in property value relative to environmental issues.

☐ ***Yes***, I *do* have information about a reduction in property value relative to environmental issues. Explain:

_____

***6.*** **Does the purchase price being paid for this property reasonably reflect the fair market value of the property?**

Please checkmark the most appropriate response:

☐ ***Yes***, I *do* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.

**Rincon Project** _____

**Site Name and Full Address:** _____

☐ ***No***, I *do not* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

a. **If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (40 CFR 312.29)**

Please checkmark the most appropriate response:

☐ ***No***, I *have not* considered the idea that known or believed contamination at the site has caused the lower purchase price.

☐ ***Yes***, I *have* considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain.

_____

***7.*** **Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,**

a. Do you know the past uses of the property?

☐ I *do not* know.

☐ I *do* know. Explain:

_____

b. Do you know of specific chemicals are present or once were present at the property?

☐ I *do not* know.

☐ I *do* know. Explain:

_____

c. Do you know of any spills or other chemical releases that have taken place at the property?

☐ I *do not* know.

☐ I *do* know. Explain:

_____

d. Do you know of any environmental cleanups have taken place at the property?

☐ I *do not* know.

☐ I *do* know. Explain:

_____

**Rincon Project** _____

**Site Name and Full Address:** _____

***8.*** **Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?**

Please checkmark the most appropriate response:

☐ ***No***, I *do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.*

☐ ***Yes***, I *do know of and/or do have experience with obvious indicators that point to the presence or likely presence of contamination at the property*. Explain:

_____

***9.*** **Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site?**

☐ ***No***, I *am not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site.*

☐ ***Yes***, I *am aware of pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site*. Explain:

_____

***10.*** **Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site?**

☐ ***No***, I *am not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.*

☐ ***Yes***, I *am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.* Explain:

_____

***11.*** **Are you aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?**

☐ ***No***, I *am not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.*

☐ ***Yes***, I *am aware of a notice, or notices, from a government entity (or multiple government entities) regarding a possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.* Explain:

_____

**Rincon Project** _____

**Site Name and Full Address:** _____

**This questionnaire was completed by (please print):**

| | |
|---|---|
| Name | |
| Title | |
| Firm | |
| Street Address | |
| City, State, Zip Code | |
| Phone Number | |
| Fax Number | |
| What is the preparer's relationship to the property (i.e., seller, buyer, occupant, property manager, employee, agent, consultant)? | |

**The preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct, and to the best of the preparer's knowledge, no material facts have been suppressed or misstated.**

**Signature** **Date**

*Please email this form to* _____ *at* _____***@RinconConsultants.com***.
*This form may also be mailed or faxed to the following address:*

Rincon Consultants, Inc.
***Attention:*** _____
2215 Faraday Avenue, Suite A
Carlsbad, California 92008
Fax: (760) 918-9444

# Appendix B

Regulatory Records Documentation

**Trinity Annex**
1305 C Street
Arcata, CA 95521

Inquiry Number: 05163100.2r
January 18, 2018

# The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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**GEOCHECK ADDENDUM**

| | |
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***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.


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# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

1305 C STREET
ARCATA, CA 95521

### COORDINATES

| | |
|---|---|
| Latitude (North): | 40.8713710 - 40° 52' 16.93'' |
| Longitude (West): | 124.0797350 - 124° 4' 47.04'' |
| Universal Tranverse Mercator: | Zone 10 |
| UTM X (Meters): | 409013.1 |
| UTM Y (Meters): | 4524827.5 |
| Elevation: | 89 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 5609276 ARCATA SOUTH, CA |
| Version Date: | 2012 |
| North Map: | 5629078 ARCATA NORTH, CA |
| Version Date: | 2012 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20140608, 20140607 |
| Source: | USDA |

## MAPPED SITES SUMMARY

Target Property Address:
1305 C STREET
ARCATA, CA 95521

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | HSU PLANT OPERATIONS | CORNER OF 14TH & B | CA FID UST | Higher | 38, 0.007, ENE |
| A2 | HSU PLANT OPERATIONS | CORNER OF 14TH & B S | SWEEPS UST | Higher | 38, 0.007, ENE |
| A3 | PLANT OPERATIONS | CORNER OF 14TH AND B | HIST UST | Higher | 39, 0.007, ENE |
| A4 | PLANT OPERATIONS | CORNER OF 14TH AND B | HIST UST | Higher | 39, 0.007, ENE |
| A5 | HUMBOLDT STATE UNIVE | FOURTEENTH & B STREE | LUST | Higher | 39, 0.007, ENE |
| A6 | PLANT OPERATIONS | CORNER OF 14TH & B S | HIST UST | Higher | 39, 0.007, ENE |
| 7 | HUMBOLDT STATE UNIV- | FOURTEENTH & B ST | LUST, HIST CORTESE | Lower | 58, 0.011, WNW |
| B8 | HUMBOLDT STATE UNIVE | 1 HARPST ST | CHMIRS, CUPA Listings, EMI, ENF, HAZNET, NPDES | Higher | 554, 0.105, NE |
| B9 | HUMBOLDT STATE UNIVE | 14TH & B STREET | RCRA-LQG, PADS, FINDS, ECHO | Higher | 554, 0.105, NE |
| C10 | AT&T CALIFORNIA - TE | 1300 G ST | UST | Higher | 1180, 0.223, WNW |
| C11 | PACIFIC BELL | 1300 G STREET | UST, SWEEPS UST, HIST UST, RCRA NonGen / NLR,... | Higher | 1180, 0.223, WNW |
| D12 | BLOXHAMS EXXON SERV | 1401 G STREET | HIST UST | Higher | 1299, 0.246, WNW |
| D13 | BLOXHAM'S EXXON SERV | 1401 G ST | HIST UST | Higher | 1299, 0.246, WNW |
| D14 | BLOXHAM'S SHELL | 1401 G ST | SWEEPS UST, CA FID UST | Higher | 1299, 0.246, WNW |
| D15 | BLOXHAM'S SHELL | 1401 G ST | UST | Higher | 1299, 0.246, WNW |
| D16 | BLOXHAM'S TIGER MART | 1401 G STREET | LUST, CUPA Listings, EMI, HIST CORTESE | Higher | 1299, 0.246, WNW |
| D17 | BLOXHAM'S SHELL - GA | 1401 G ST | UST | Higher | 1299, 0.246, WNW |
| 18 | DOLF ESTATE | 1184 BAYVIEW AVENUE | LUST | Higher | 1348, 0.255, SE |
| D19 | SWEET, WALTER B., IN | 15TH STREET 760 | LUST | Lower | 1453, 0.275, WNW |
| E20 | U. S. BANK OF CALIFO | TENTH & G ST | LUST, HIST CORTESE | Lower | 1468, 0.278, WSW |
| 21 | SWEET, WALTER B., IN | 760 15TH | LUST, HIST CORTESE | Lower | 1494, 0.283, NW |
| F22 | HUMBOLDT STATE UNIVE | LAUREL DRIVE & B STR | LUST | Higher | 1508, 0.286, NNE |
| F23 | HUMBOLDT STATE UNIV- | LAUREL DR & B ST | HIST CORTESE | Higher | 1508, 0.286, NNE |
| F24 | HUMBOLDT STATE UNIVE | B STREET & LAUREL DR | LUST | Higher | 1508, 0.286, NNE |
| F25 | HUMBOLDT STATE UNIV- | LAUREL DRIVE & B ST | LUST | Higher | 1508, 0.286, NNE |
| E26 | U. S. BANK OF CALIFO | TENTH & G STREETS | LUST | Lower | 1533, 0.290, WSW |
| E27 | UNOCAL #0885 | 1033 G | LUST, HIST CORTESE | Lower | 1549, 0.293, WSW |
| 28 | MAD RIVER HARDWOOD C | | SLIC | Lower | 1580, 0.299, SSW |
| G29 | ARCATA FIRE PROTECTI | 631 NINTH STREET | LUST, HIST UST, HIST CORTESE | Lower | 1629, 0.309, SW |
| G30 | OLD ARCATA CITY HALL | 900 G STREET | LUST | Lower | 1653, 0.313, WSW |
| 31 | ARCATA, CITY OF, CBD | CENTRAL BUSINESS DIS | SLIC | Lower | 1825, 0.346, SSW |
| H32 | SCIARONI PROPERTY | 1800 BOTTOMS | LUST, HIST CORTESE | Lower | 1837, 0.348, NNW |
| I33 | GHERA PROPERTY | 987 H STREET | SLIC | Lower | 1858, 0.352, WSW |
| I34 | DELUXE CLEANERS | 987 H ST | SEMS-ARCHIVE, RCRA-SQG, SLIC, FINDS, ECHO, ENF,... | Lower | 1858, 0.352, WSW |
| H35 | PHILLY CHEESE STEAK | 1811 G STREET | LUST | Lower | 1866, 0.353, NNW |
| I36 | NELSON PROPERTY | 854 10TH STREET | SLIC | Lower | 1913, 0.362, WSW |
| H37 | HUMBOLDT STATE UNIVE | GYMNASIUM LANE | LUST | Lower | 1973, 0.374, NNW |
| H38 | SIMPSON TIMBER (BRAI | BRAINARD YARD | LUST | Lower | 1973, 0.374, NNW |
| H39 | HUMBOLDT STATE UNIVE | HSU SEQUOIA MALL | LUST | Lower | 1973, 0.374, NNW |

## MAPPED SITES SUMMARY

Target Property Address:
1305 C STREET
ARCATA, CA 95521

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| H40 | REDWOOD EMPIRE AGGRE | HIGHWAY 101/GUINTOLI | LUST | Lower | 1973, 0.374, NNW |
| 41 | LITTLE LAKES INDUSTR | 748 F ST | US BROWNFIELDS | Lower | 1995, 0.378, SW |
| J42 | UNIVERSAL FOREST PRO | | SLIC | Lower | 2030, 0.384, SSW |
| J43 | MANILA ELEMENTARY SC | | SLIC | Lower | 2030, 0.384, SSW |
| K44 | ARCATA UNIONTOWN 76 | 724 G STREET | LUST, CUPA Listings, EMI, HAZNET, HIST CORTESE | Lower | 2121, 0.402, SW |
| 45 | PRIVATE RESIDENCE | PRIVATE RESIDENCE | LUST | Lower | 2127, 0.403, West |
| L46 | SCHMIDT RESIDENCE | 1562 J | LUST, HIST CORTESE | Lower | 2129, 0.403, WNW |
| M47 | NORTHCOAST ENVIRONME | 879 NINTH STREET | US BROWNFIELDS | Lower | 2152, 0.408, WSW |
| M48 | NORTHCOAST ENVIRONME | 879 NINTH ST | LUST | Lower | 2152, 0.408, WSW |
| M49 | NORTHCOAST ENVIRONME | 879 NINTH STREET | SLIC | Lower | 2152, 0.408, WSW |
| L50 | SCHMIDT RESIDENCE | J STREET 1562 | LUST | Lower | 2190, 0.415, WNW |
| K51 | ARCO #00421 | 660 SEVENTH STREET | LUST | Lower | 2274, 0.431, SW |
| N52 | CAHILL'S SPIRIT | 1122 K STREET | LUST, CUPA Listings, EMI, HIST CORTESE | Lower | 2426, 0.459, West |
| 53 | ARCATA, CITY CORPORA | 600 G STREET, SOUTH | SLIC | Lower | 2437, 0.462, SW |
| O54 | ARCATA PARKING LOT | 789 I STREET | SLIC | Lower | 2471, 0.468, WSW |
| N55 | SHELL, CAHILL | K STREET 1122 | LUST | Lower | 2492, 0.472, West |
| P56 | MARV'S ELECTRIC | 1188 THIRTEENTH | LUST, HIST CORTESE | Lower | 2492, 0.472, WNW |
| P57 | HITT FAMILY BYPASS T | 1188 THIRTEENTH STRE | LUST | Lower | 2492, 0.472, WNW |
| O58 | SACCHI PROPERTIES | 865 EIGHTH STREET | LUST, SLIC | Lower | 2519, 0.477, WSW |
| N59 | GERMAN MOTORS OF ARC | K STREET 1065 | LUST | Lower | 2535, 0.480, West |
| N60 | WALLACE AND HINZ | 1065 K ST | RCRA-SQG, LUST, FINDS, ECHO, HAZNET, HIST CORTESE | Lower | 2613, 0.495, West |
| 61 | ARCATA COMMUNITY REC | 1380 NINTH STREET | LUST, SLIC, HIST UST, Notify 65 | Lower | 3434, 0.650, West |
| 62 | WING INFLATABLES, IN | 1220 5TH ST | ENVIROSTOR, CUPA Listings, HIST CORTESE | Lower | 3844, 0.728, WSW |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### *Federal NPL site list*

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

### *Federal Delisted NPL site list*

Delisted NPL ---------- National Priority List Deletions

### *Federal CERCLIS list*

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

### *Federal RCRA CORRACTS facilities list*

CORRACTS ---------- Corrective Action Report

### *Federal RCRA non-CORRACTS TSD facilities list*

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

### *Federal RCRA generators list*

RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

### *Federal institutional controls / engineering controls registries*

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

### *Federal ERNS list*

ERNS ---------- Emergency Response Notification System

# EXECUTIVE SUMMARY

***State- and tribal - equivalent NPL***

RESPONSE ---------- State Response Sites

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF ---------- Solid Waste Information System

***State and tribal leaking storage tank lists***

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

***State and tribal registered storage tank lists***

FEMA UST ---------- Underground Storage Tank Listing
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

***State and tribal voluntary cleanup sites***

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

***State and tribal Brownfields sites***

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT ---------- Waste Management Unit Database
SWRCY ---------- Recycler Database
HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---------- Historical Calsites Database
SCH ---------- School Property Evaluation Program
CDL ---------- Clandestine Drug Labs
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
US CDL ---------- National Clandestine Laboratory Register

***Local Land Records***

LIENS ---------- Environmental Liens Listing
LIENS 2 ---------- CERCLA Lien Information
DEED ---------- Deed Restriction Listing

# EXECUTIVE SUMMARY

***Records of Emergency Release Reports***

| | |
|---|---|
| HMIRS | Hazardous Materials Information Reporting System |
| CHMIRS | California Hazardous Material Incident Report System |
| LDS | Land Disposal Sites Listing |
| MCS | Military Cleanup Sites Listing |
| SPILLS 90 | SPILLS 90 data from FirstSearch |

***Other Ascertainable Records***

| | |
|---|---|
| FUDS | Formerly Used Defense Sites |
| DOD | Department of Defense Sites |
| SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing |
| US FIN ASSUR | Financial Assurance Information |
| EPA WATCH LIST | EPA WATCH LIST |
| 2020 COR ACTION | 2020 Corrective Action Program List |
| TSCA | Toxic Substances Control Act |
| TRIS | Toxic Chemical Release Inventory System |
| SSTS | Section 7 Tracking Systems |
| ROD | Records Of Decision |
| RMP | Risk Management Plans |
| RAATS | RCRA Administrative Action Tracking System |
| PRP | Potentially Responsible Parties |
| PADS | PCB Activity Database System |
| ICIS | Integrated Compliance Information System |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS | Material Licensing Tracking System |
| COAL ASH DOE | Steam-Electric Plant Operation Data |
| COAL ASH EPA | Coal Combustion Residues Surface Impoundments List |
| PCB TRANSFORMER | PCB Transformer Registration Database |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| DOT OPS | Incident and Accident Data |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| INDIAN RESERV | Indian Reservations |
| FUSRAP | Formerly Utilized Sites Remedial Action Program |
| UMTRA | Uranium Mill Tailings Sites |
| LEAD SMELTERS | Lead Smelter Sites |
| US AIRS | Aerometric Information Retrieval System Facility Subsystem |
| US MINES | Mines Master Index File |
| ABANDONED MINES | Abandoned Mines |
| FINDS | Facility Index System/Facility Registry System |
| UXO | Unexploded Ordnance Sites |
| ECHO | Enforcement & Compliance History Information |
| DOCKET HWC | Hazardous Waste Compliance Docket Listing |
| FUELS PROGRAM | EPA Fuels Program Registered Listing |
| CA BOND EXP. PLAN | Bond Expenditure Plan |
| Cortese | "Cortese" Hazardous Waste & Substances Sites List |
| DRYCLEANERS | Cleaner Facilities |
| EMI | Emissions Inventory Data |
| ENF | Enforcement Action Listing |
| Financial Assurance | Financial Assurance Information Listing |
| HAZNET | Facility and Manifest Data |

ICE ---- ICE
HWP ---- EnviroStor Permitted Facilities Listing
HWT ---- Registered Hazardous Waste Transporter Database
MINES ---- Mines Site Location Listing
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PEST LIC ---- Pesticide Regulation Licenses Listing
PROC ---- Certified Processors Database
UIC ---- UIC Listing
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF ---- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---- Recovered Government Archive Leaking Underground Storage Tank

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status

indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 12/11/2017 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***DELUXE CLEANERS*** | ***987 H ST*** | ***WSW 1/4 - 1/2 (0.352 mi.)*** | ***I34*** | ***69*** |

***Federal RCRA generators list***

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUMBOLDT STATE UNIVE*** | ***14TH & B STREET*** | ***NE 0 - 1/8 (0.105 mi.)*** | ***B9*** | ***28*** |

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/30/2017 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***WING INFLATABLES, IN*** | ***1220 5TH ST*** | ***WSW 1/2 - 1 (0.728 mi.)*** | ***62*** | ***141*** |
| Facility Id: 12240117 | | | | |
| Status: Refer: RWQCB | | | | |

# EXECUTIVE SUMMARY

***State and tribal leaking storage tank lists***

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 33 LUST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| HUMBOLDT STATE UNIVE<br>Database: LUST, Date of Government Version: 12/11/2017<br>Status: Open - Site Assessment<br>Global Id: T0602300305 | FOURTEENTH & B STREE | ENE 0 - 1/8 (0.007 mi.) | A5 | 10 |
| ***BLOXHAM'S TIGER MART***<br>Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Database: LUST, Date of Government Version: 12/11/2017<br>Status: Open - Site Assessment<br>Facility Id: 1THU211<br>Global Id: T0602300156 | ***1401 G STREET*** | ***WNW 1/8 - 1/4 (0.246 mi.)*** | ***D16*** | ***42*** |
| DOLF ESTATE<br>Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602393587 | 1184 BAYVIEW AVENUE | SE 1/4 - 1/2 (0.255 mi.) | 18 | 49 |
| HUMBOLDT STATE UNIVE<br>Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300309 | LAUREL DRIVE & B STR | NNE 1/4 - 1/2 (0.286 mi.) | F22 | 54 |
| HUMBOLDT STATE UNIVE<br>Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300009 | B STREET & LAUREL DR | NNE 1/4 - 1/2 (0.286 mi.) | F24 | 56 |
| HUMBOLDT STATE UNIV-<br>Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU409 | LAUREL DRIVE & B ST | NNE 1/4 - 1/2 (0.286 mi.) | F25 | 57 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUMBOLDT STATE UNIV-***<br>Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU405 | ***FOURTEENTH & B ST*** | ***WNW 0 - 1/8 (0.011 mi.)*** | ***7*** | ***15*** |
| SWEET, WALTER B., IN<br>Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU695 | 15TH STREET 760 | WNW 1/4 - 1/2 (0.275 mi.) | D19 | 51 |
| ***U. S. BANK OF CALIFO***<br>Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU047 | ***TENTH & G ST*** | ***WSW 1/4 - 1/2 (0.278 mi.)*** | ***E20*** | ***52*** |
| ***SWEET, WALTER B., IN***<br>Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300493 | ***760 15TH*** | ***NW 1/4 - 1/2 (0.283 mi.)*** | ***21*** | ***52*** |
| U. S. BANK OF CALIFO<br>Database: LUST, Date of Government Version: 12/11/2017 | TENTH & G STREETS | WSW 1/4 - 1/2 (0.290 mi.) | E26 | 57 |

Status: Completed - Case Closed
Global Id: T0602300042

***UNOCAL #0885*** ***1033 G*** ***WSW 1/4 - 1/2 (0.293 mi.)*** ***E27*** ***59***
Database: LUST REG 1, Date of Government Version: 02/01/2001
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 1THU548
Global Id: T0602300412

***ARCATA FIRE PROTECTI*** ***631 NINTH STREET*** ***SW 1/4 - 1/2 (0.309 mi.)*** ***G29*** ***61***
Database: LUST REG 1, Date of Government Version: 02/01/2001
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 1THU021
Global Id: T0602300021

OLD ARCATA CITY HALL 900 G STREET WSW 1/4 - 1/2 (0.313 mi.) G30 64
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Global Id: T0602379923

***SCIARONI PROPERTY*** ***1800 BOTTOMS*** ***NNW 1/4 - 1/2 (0.348 mi.)*** ***H32*** ***67***
Database: LUST REG 1, Date of Government Version: 02/01/2001
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 1THU299
Global Id: T0602300229

PHILLY CHEESE STEAK 1811 G STREET NNW 1/4 - 1/2 (0.353 mi.) H35 81
Database: LUST, Date of Government Version: 12/11/2017
Status: Open - Site Assessment
Global Id: T10000003375

HUMBOLDT STATE UNIVE GYMNASIUM LANE NNW 1/4 - 1/2 (0.374 mi.) H37 85
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Global Id: T0602300373

SIMPSON TIMBER (BRAI BRAINARD YARD NNW 1/4 - 1/2 (0.374 mi.) H38 86
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Global Id: T0602300024

HUMBOLDT STATE UNIVE HSU SEQUOIA MALL NNW 1/4 - 1/2 (0.374 mi.) H39 88
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Global Id: T0602300330

REDWOOD EMPIRE AGGRE HIGHWAY 101/GUINTOLI NNW 1/4 - 1/2 (0.374 mi.) H40 90
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Global Id: T0602300131

***ARCATA UNIONTOWN 76*** ***724 G STREET*** ***SW 1/4 - 1/2 (0.402 mi.)*** ***K44*** ***95***
Database: LUST REG 1, Date of Government Version: 02/01/2001
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 1THU555
Global Id: T0602300418

PRIVATE RESIDENCE PRIVATE RESIDENCE W 1/4 - 1/2 (0.403 mi.) 45 103
Database: LUST, Date of Government Version: 12/11/2017

Status: Completed - Case Closed
Global Id: T0602387037

| | | | | |
|---|---|---|---|---|
| ***SCHMIDT RESIDENCE*** | ***1562 J*** | ***WNW 1/4 - 1/2 (0.403 mi.)*** | ***L46*** | ***105*** |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300499 | | | | |
| NORTHCOAST ENVIRONME | 879 NINTH ST | WSW 1/4 - 1/2 (0.408 mi.) | M48 | 109 |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602384739 | | | | |
| SCHMIDT RESIDENCE | J STREET 1562 | WNW 1/4 - 1/2 (0.415 mi.) | L50 | 111 |
| Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU710 | | | | |
| ARCO #00421 | 660 SEVENTH STREET | SW 1/4 - 1/2 (0.431 mi.) | K51 | 111 |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602393548 | | | | |
| ***CAHILL'S SPIRIT*** | ***1122 K STREET*** | ***W 1/4 - 1/2 (0.459 mi.)*** | ***N52*** | ***113*** |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300332 | | | | |
| SHELL, CAHILL | K STREET 1122 | W 1/4 - 1/2 (0.472 mi.) | N55 | 122 |
| Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU437 | | | | |
| ***MARV'S ELECTRIC*** | ***1188 THIRTEENTH*** | ***WNW 1/4 - 1/2 (0.472 mi.)*** | ***P56*** | ***122*** |
| Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU470 | | | | |
| HITT FAMILY BYPASS T | 1188 THIRTEENTH STRE | WNW 1/4 - 1/2 (0.472 mi.) | P57 | 122 |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300356 | | | | |
| ***SACCHI PROPERTIES*** | ***865 EIGHTH STREET*** | ***WSW 1/4 - 1/2 (0.477 mi.)*** | ***O58*** | ***124*** |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602306416 | | | | |
| GERMAN MOTORS OF ARC | K STREET 1065 | W 1/4 - 1/2 (0.480 mi.) | N59 | 130 |
| Database: LUST REG 1, Date of Government Version: 02/01/2001<br>Facility Id: 1THU275 | | | | |
| ***WALLACE AND HINZ*** | ***1065 K ST*** | ***W 1/4 - 1/2 (0.495 mi.)*** | ***N60*** | ***130*** |
| Database: LUST, Date of Government Version: 12/11/2017<br>Status: Completed - Case Closed<br>Global Id: T0602300207 | | | | |

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there are 11 SLIC sites within

approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MAD RIVER HARDWOOD C<br>Database: SLIC REG 1, Date of Government Version: 04/03/2003<br>Facility Id: 1NHU872 | | SSW 1/4 - 1/2 (0.299 mi.) | 28 | 61 |
| ARCATA, CITY OF, CBD<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Open - Inactive<br>Global Id: T0602393463 | CENTRAL BUSINESS DIS | SSW 1/4 - 1/2 (0.346 mi.) | 31 | 66 |
| GHERA PROPERTY<br>Database: SLIC REG 1, Date of Government Version: 04/03/2003<br>Facility Id: 1NHU522 | 987 H STREET | WSW 1/4 - 1/2 (0.352 mi.) | I33 | 69 |
| ***DELUXE CLEANERS***<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Open - Site Assessment<br>Global Id: T0602393218 | ***987 H ST*** | ***WSW 1/4 - 1/2 (0.352 mi.)*** | ***I34*** | ***69*** |
| NELSON PROPERTY<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Completed - Case Closed<br>Global Id: T10000000731 | 854 10TH STREET | WSW 1/4 - 1/2 (0.362 mi.) | I36 | 84 |
| UNIVERSAL FOREST PRO<br>Database: SLIC REG 1, Date of Government Version: 04/03/2003<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Completed - Case Closed<br>Facility Id: 1NHU489<br>Global Id: T0602393323 | | SSW 1/4 - 1/2 (0.384 mi.) | J42 | 94 |
| MANILA ELEMENTARY SC<br>Database: SLIC REG 1, Date of Government Version: 04/03/2003<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Completed - Case Closed<br>Facility Id: 1NHU373<br>Global Id: T0602393563 | | SSW 1/4 - 1/2 (0.384 mi.) | J43 | 94 |
| NORTHCOAST ENVIRONME<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Open - Assessment & Interim Remedial Action<br>Global Id: SL0602394358 | 879 NINTH STREET | WSW 1/4 - 1/2 (0.408 mi.) | M49 | 111 |
| ARCATA, CITY CORPORA<br>Database: SLIC REG 1, Date of Government Version: 04/03/2003<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Open - Inactive<br>Facility Id: 1NHU767<br>Global Id: T0602393537 | 600 G STREET, SOUTH | SW 1/4 - 1/2 (0.462 mi.) | 53 | 120 |
| ARCATA PARKING LOT<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Completed - Case Closed<br>Global Id: T10000002923 | 789 I STREET | WSW 1/4 - 1/2 (0.468 mi.) | O54 | 121 |
| ***SACCHI PROPERTIES***<br>Database: SLIC, Date of Government Version: 12/11/2017<br>Facility Status: Completed - Case Closed<br>Global Id: SL0602399734 | ***865 EIGHTH STREET*** | ***WSW 1/4 - 1/2 (0.477 mi.)*** | ***O58*** | ***124*** |

***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| AT&T CALIFORNIA - TE<br>Database: UST, Date of Government Version: 12/11/2017<br>Facility Id: 12-000-000055 | 1300 G ST | WNW 1/8 - 1/4 (0.223 mi.) | C10 | 35 |
| ***PACIFIC BELL***<br>Database: UST, Date of Government Version: 12/11/2017<br>Facility Id: 12-000-000055 | ***1300 G STREET*** | ***WNW 1/8 - 1/4 (0.223 mi.)*** | ***C11*** | ***35*** |
| BLOXHAM'S SHELL<br>Database: UST, Date of Government Version: 12/11/2017<br>Facility Id: 12-000-000593 | 1401 G ST | WNW 1/8 - 1/4 (0.246 mi.) | D15 | 41 |
| BLOXHAM'S SHELL - GA<br>Database: UST, Date of Government Version: 12/11/2017<br>Facility Id: 12-000-000593 | 1401 G ST | WNW 1/8 - 1/4 (0.246 mi.) | D17 | 49 |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 08/21/2017 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| LITTLE LAKES INDUSTR | 748 F ST | SW 1/4 - 1/2 (0.378 mi.) | 41 | 91 |
| NORTHCOAST ENVIRONME | 879 NINTH STREET | WSW 1/4 - 1/2 (0.408 mi.) | M47 | 106 |

***Local Lists of Registered Storage Tanks***

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are

3 SWEEPS UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| HSU PLANT OPERATIONS<br>Comp Number: 23779 | CORNER OF 14TH & B S | ENE 0 - 1/8 (0.007 mi.) | A2 | 8 |
| ***PACIFIC BELL***<br>Status: A<br>Tank Status: A<br>Comp Number: 14720 | ***1300 G STREET*** | ***WNW 1/8 - 1/4 (0.223 mi.)*** | ***C11*** | ***35*** |
| ***BLOXHAM'S SHELL***<br>Status: A<br>Tank Status: A<br>Comp Number: 18033 | ***1401 G ST*** | ***WNW 1/8 - 1/4 (0.246 mi.)*** | ***D14*** | ***40*** |

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 6 HIST UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| PLANT OPERATIONS | CORNER OF 14TH AND B | ENE 0 - 1/8 (0.007 mi.) | A3 | 9 |
| PLANT OPERATIONS | CORNER OF 14TH AND B | ENE 0 - 1/8 (0.007 mi.) | A4 | 9 |
| PLANT OPERATIONS<br>Facility Id: 00000023779<br>Facility Id: 00000023788 | CORNER OF 14TH & B S | ENE 0 - 1/8 (0.007 mi.) | A6 | 14 |
| ***PACIFIC BELL***<br>Facility Id: 00000014720 | ***1300 G STREET*** | ***WNW 1/8 - 1/4 (0.223 mi.)*** | ***C11*** | ***35*** |
| BLOXHAMS EXXON SERV | 1401 G STREET | WNW 1/8 - 1/4 (0.246 mi.) | D12 | 38 |
| BLOXHAM'S EXXON SERV<br>Facility Id: 00000018033 | 1401 G ST | WNW 1/8 - 1/4 (0.246 mi.) | D13 | 39 |

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 2 CA FID UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| HSU PLANT OPERATIONS<br>Facility Id: 12001468<br>Status: A | CORNER OF 14TH & B | ENE 0 - 1/8 (0.007 mi.) | A1 | 8 |
| ***BLOXHAM'S SHELL***<br>Facility Id: 12000508<br>Status: A | ***1401 G ST*** | ***WNW 1/8 - 1/4 (0.246 mi.)*** | ***D14*** | ***40*** |

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***PACIFIC BELL*** | ***1300 G STREET*** | ***WNW 1/8 - 1/4 (0.223 mi.)*** | ***C11*** | ***35*** |

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 3 CUPA Listings sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUMBOLDT STATE UNIVE*** | ***1 HARPST ST*** | ***NE 0 - 1/8 (0.105 mi.)*** | ***B8*** | ***15*** |
| Database: CUPA HUMBOLDT, Date of Government Version: 08/03/2017<br>Permit Status: (none)<br>Permit Status: 01 - Active<br>Local Site Id: FA0001517 | | | | |
| ***PACIFIC BELL*** | ***1300 G STREET*** | ***WNW 1/8 - 1/4 (0.223 mi.)*** | ***C11*** | ***35*** |
| Database: CUPA HUMBOLDT, Date of Government Version: 08/03/2017<br>Permit Status: 02 - Inactive<br>Local Site Id: FA0002338 | | | | |
| ***BLOXHAM'S TIGER MART*** | ***1401 G STREET*** | ***WNW 1/8 - 1/4 (0.246 mi.)*** | ***D16*** | ***42*** |
| Database: CUPA HUMBOLDT, Date of Government Version: 08/03/2017<br>Permit Status: 02 - Inactive<br>Permit Status: 01 - Active<br>Local Site Id: FA0000311 | | | | |

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 13 HIST CORTESE sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***BLOXHAM'S TIGER MART***<br>Reg Id: 1THU211 | ***1401 G STREET*** | ***WNW 1/8 - 1/4 (0.246 mi.)*** | ***D16*** | ***42*** |
| HUMBOLDT STATE UNIV- | LAUREL DR & B ST | NNE 1/4 - 1/2 (0.286 mi.) | F23 | 55 |

Reg Id: 1THU409

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUMBOLDT STATE UNIV-*** Reg Id: 1THU405 | ***FOURTEENTH & B ST*** | ***WNW 0 - 1/8 (0.011 mi.)*** | ***7*** | ***15*** |
| ***U. S. BANK OF CALIFO*** Reg Id: 1THU047 | ***TENTH & G ST*** | ***WSW 1/4 - 1/2 (0.278 mi.)*** | ***E20*** | ***52*** |
| ***SWEET, WALTER B., IN*** Reg Id: 1THU695 | ***760 15TH*** | ***NW 1/4 - 1/2 (0.283 mi.)*** | ***21*** | ***52*** |
| ***UNOCAL #0885*** Reg Id: 1THU548 | ***1033 G*** | ***WSW 1/4 - 1/2 (0.293 mi.)*** | ***E27*** | ***59*** |
| ***ARCATA FIRE PROTECTI*** Reg Id: 1THU021 | ***631 NINTH STREET*** | ***SW 1/4 - 1/2 (0.309 mi.)*** | ***G29*** | ***61*** |
| ***SCIARONI PROPERTY*** Reg Id: 1THU299 | ***1800 BOTTOMS*** | ***NNW 1/4 - 1/2 (0.348 mi.)*** | ***H32*** | ***67*** |
| ***ARCATA UNIONTOWN 76*** Reg Id: 1THU555 | ***724 G STREET*** | ***SW 1/4 - 1/2 (0.402 mi.)*** | ***K44*** | ***95*** |
| ***SCHMIDT RESIDENCE*** Reg Id: 1THU710 | ***1562 J*** | ***WNW 1/4 - 1/2 (0.403 mi.)*** | ***L46*** | ***105*** |
| ***CAHILL'S SPIRIT*** Reg Id: 1THU437 | ***1122 K STREET*** | ***W 1/4 - 1/2 (0.459 mi.)*** | ***N52*** | ***113*** |
| ***MARV'S ELECTRIC*** Reg Id: 1THU470 | ***1188 THIRTEENTH*** | ***WNW 1/4 - 1/2 (0.472 mi.)*** | ***P56*** | ***122*** |
| ***WALLACE AND HINZ*** Reg Id: 1THU275 | ***1065 K ST*** | ***W 1/4 - 1/2 (0.495 mi.)*** | ***N60*** | ***130*** |

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/14/2017 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

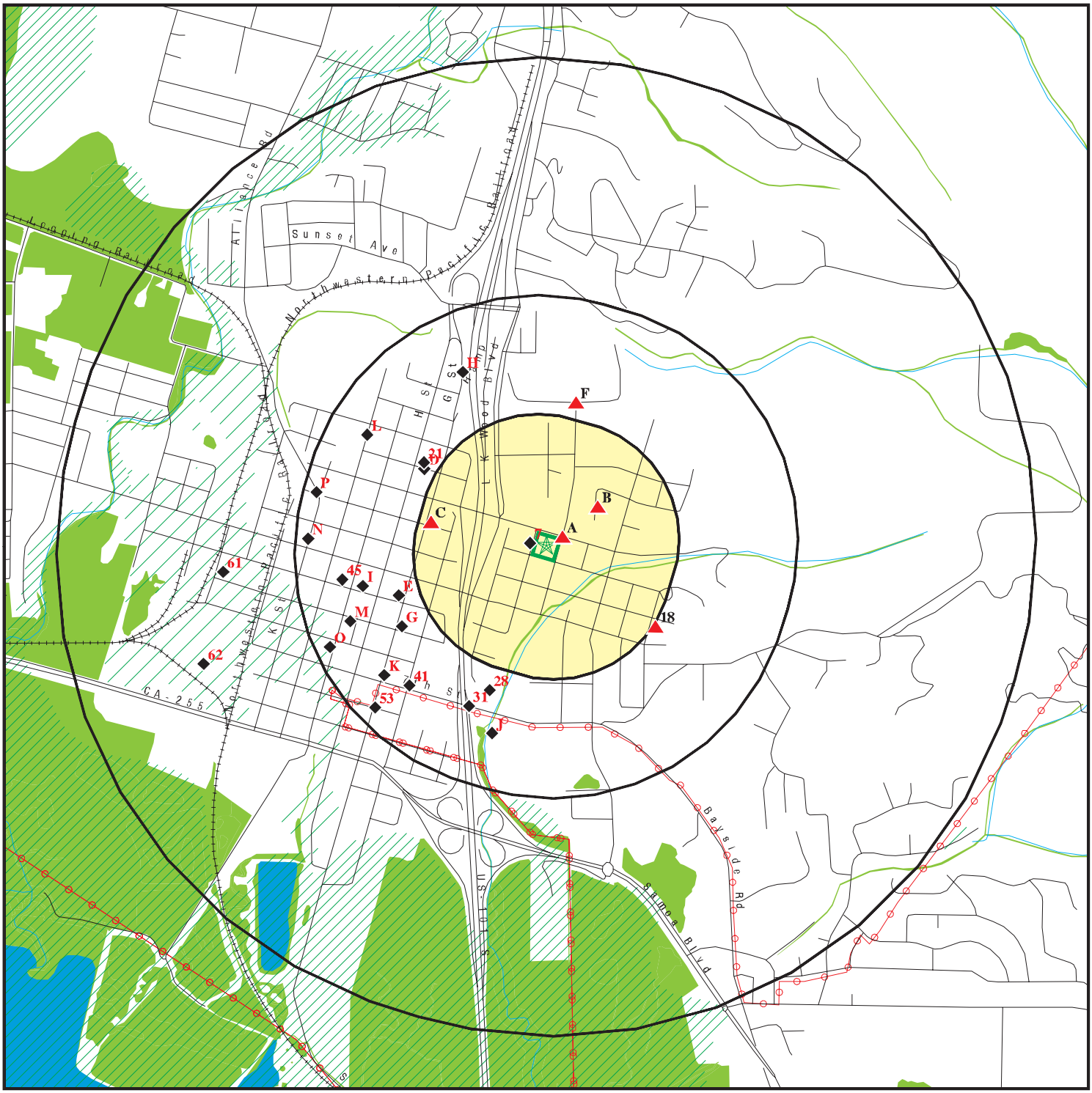
| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ARCATA COMMUNITY REC*** | ***1380 NINTH STREET*** | ***W 1/2 - 1 (0.650 mi.)*** | ***61*** | ***135*** |

# EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

| Site Name | Database(s) |
|---|---|
| HUMBOLDT CIVIC CENTER | SEMS-ARCHIVE |
| S&H AUTO WRECKERS | LUST |
| ARCO STATION (FORMER) | LUST |
| HUMBOLDT STATE UNIV-GIST HALL | LUST |

# OVERVIEW MAP - 05163100.2R




This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | |
|---|---|
| SITE NAME: Trinity Annex<br>ADDRESS: 1305 C Street<br>Arcata CA 95521<br>LAT/LONG: 40.871371 / 124.079735 | CLIENT: Rincon<br>CONTACT: Meghan Hearne<br>INQUIRY #: 05163100.2r<br>DATE: January 18, 2018 7:40 pm |

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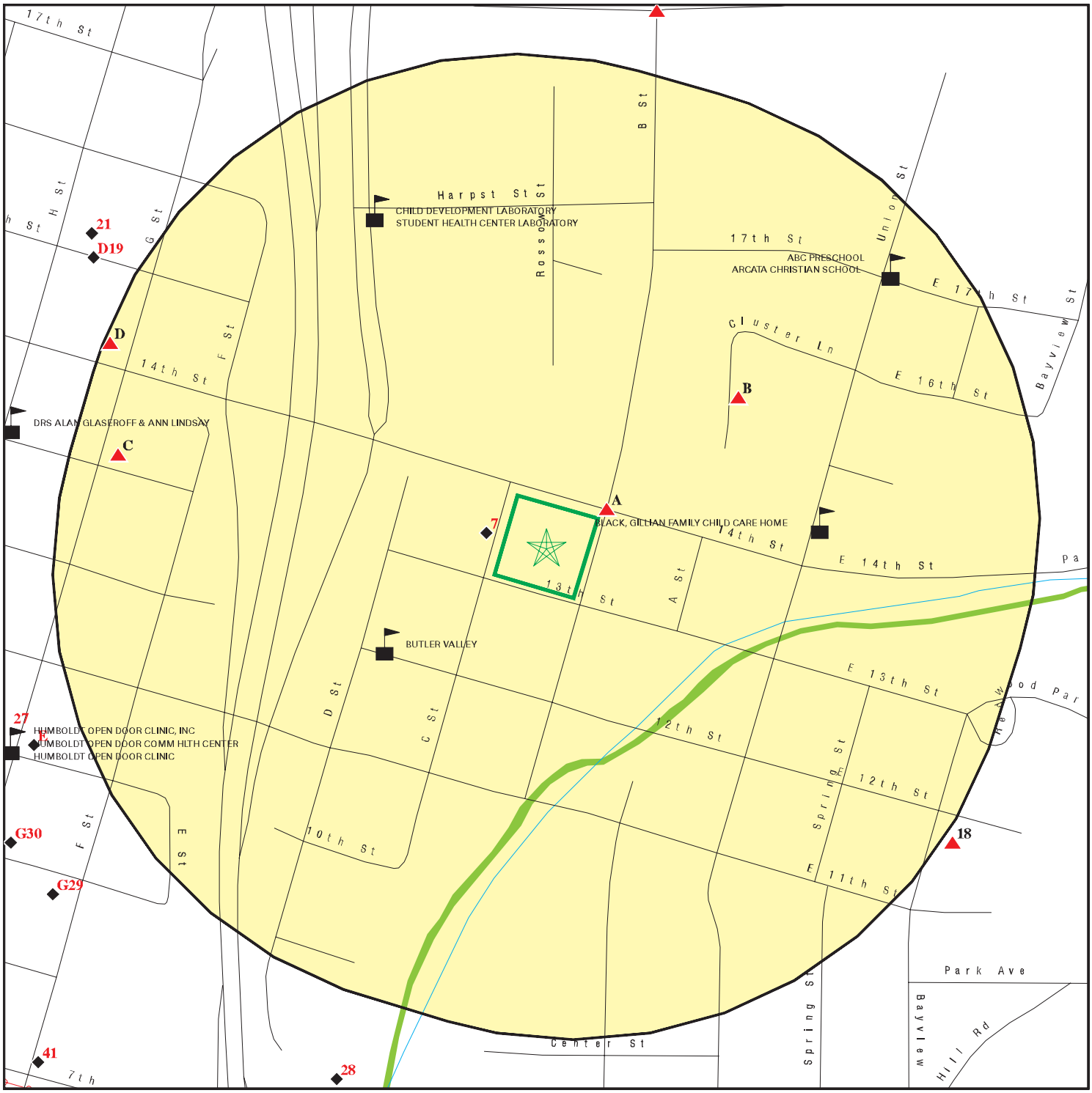
# DETAIL MAP - 05163100.2R




0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | |
|---|---|
| SITE NAME: Trinity Annex | CLIENT: Rincon |
| ADDRESS: 1305 C Street<br>Arcata CA 95521 | CONTACT: Meghan Hearne |
| LAT/LONG: 40.871371 / 124.079735 | INQUIRY #: 05163100.2r<br>DATE: January 18, 2018 7:42 pm |

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# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Federal NPL site list*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Federal Delisted NPL site list*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal CERCLIS list*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal CERCLIS NFRAP site list*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| ***Federal RCRA CORRACTS facilities list*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal RCRA non-CORRACTS TSD facilities list*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA generators list*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| RCRA-SQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-CESQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***State- and tribal - equivalent NPL*** | | | | | | | | |
| RESPONSE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***State- and tribal - equivalent CERCLIS*** | | | | | | | | |
| ENVIROSTOR | 1.000 | | 0 | 0 | 0 | 1 | NR | 1 |
| ***State and tribal landfill and/or solid waste disposal site lists*** | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal leaking storage tank lists*** | | | | | | | | |
| LUST | 0.500 | | 2 | 1 | 30 | NR | NR | 33 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SLIC | 0.500 | | 0 | 0 | 11 | NR | NR | 11 |
| ***State and tribal registered storage tank lists*** | | | | | | | | |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UST | 0.250 | | 0 | 4 | NR | NR | NR | 4 |
| AST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***State and tribal voluntary cleanup sites*** | | | | | | | | |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal Brownfields sites*** | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 2 | NR | NR | 2 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| WMUDS/SWAT | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| HAULERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| IHS OPEN DUMPS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST Cal-Sites | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCH | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Toxic Pits | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| US CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| SWEEPS UST | 0.250 | | 1 | 2 | NR | NR | NR | 3 |
| HIST UST | 0.250 | | 3 | 3 | NR | NR | NR | 6 |
| CA FID UST | 0.250 | | 1 | 1 | NR | NR | NR | 2 |
| ***Local Land Records*** | | | | | | | | |
| LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LIENS 2 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DEED | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| CHMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MCS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SPILLS 90 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| TRIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SSTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RAATS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PRP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PADS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ICIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MLTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH DOE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RADINFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOT OPS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN RESERV | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US AIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FINDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ECHO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOCKET HWC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CA BOND EXP. PLAN | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Cortese | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| CUPA Listings | 0.250 | | 1 | 2 | NR | NR | NR | 3 |
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EMI | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ENF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Financial Assurance | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HAZNET | 0.001 | | 0 | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| ICE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST CORTESE | 0.500 | | 1 | 1 | 11 | NR | NR | 13 |
| HWP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| HWT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MINES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MWMP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NPDES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PEST LIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Notify 65 | 1.000 | | 0 | 0 | 0 | 1 | NR | 1 |
| UIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WASTEWATER PITS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| WDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WIP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| EDR Hist Auto | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| EDR Hist Cleaner | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| RGA LF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RGA LUST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| - Totals -- | | 0 | 10 | 15 | 55 | 2 | 0 | 82 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1** **HSU PLANT OPERATIONS** **CA FID UST** **S101582146**
**ENE** **CORNER OF 14TH & B** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.007 mi.**
**38 ft.** **Site 1 of 6 in cluster A**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

CA FID UST:

| | |
|---|---|
| Facility ID: | 12001468 |
| Regulated By: | UTNKA |
| Regulated ID: | 00023779 |
| Cortese Code: | Not reported |
| SIC Code: | Not reported |
| Facility Phone: | Not reported |
| Mail To: | Not reported |
| Mailing Address: | PLANT OPERATIONS |
| Mailing Address 2: | Not reported |
| Mailing City,St,Zip: | ARCATA 95521 |
| Contact: | Not reported |
| Contact Phone: | Not reported |
| DUNs Number: | Not reported |
| NPDES Number: | Not reported |
| EPA ID: | Not reported |
| Comments: | Not reported |
| Status: | Active |

---

**A2** **HSU PLANT OPERATIONS** **SWEEPS UST** **S106927417**
**ENE** **CORNER OF 14TH & B ST** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.007 mi.**
**38 ft.** **Site 2 of 6 in cluster A**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

SWEEPS UST:

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 23779 |
| Number: | Not reported |
| Board Of Equalization: | Not reported |
| Referral Date: | Not reported |
| Action Date: | Not reported |
| Created Date: | Not reported |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 12-000-023779-000001 |
| Tank Status: | Not reported |
| Capacity: | 6000 |
| Active Date: | Not reported |
| Tank Use: | M.V. FUEL |
| STG: | PRODUCT |
| Content: | REG UNLEADED |
| Number Of Tanks: | 2 |

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 23779 |
| Number: | Not reported |
| Board Of Equalization: | Not reported |
| Referral Date: | Not reported |
| Action Date: | Not reported |
| Created Date: | Not reported |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 12-000-023779-000002 |
| Tank Status: | Not reported |
| Capacity: | 600 |

**HSU PLANT OPERATIONS (Continued)** **S106927417**

Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

---

**A3** **PLANT OPERATIONS** **HIST UST** **S118414141**
**ENE** **CORNER OF 14TH AND B STS** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.007 mi.**
**39 ft.** **Site 3 of 6 in cluster A**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

HIST UST:
File Number: 00025EFD
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00025EFD.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

---

**A4** **PLANT OPERATIONS** **HIST UST** **S118414140**
**ENE** **CORNER OF 14TH AND B STREETS** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.007 mi.**
**39 ft.** **Site 4 of 6 in cluster A**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

HIST UST:
File Number: 00025F0E
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00025F0E.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

**PLANT OPERATIONS (Continued)** **S118414140**

| | |
|---|---|
| Tank Num: | Not reported |
| Container Num: | Not reported |
| Year Installed: | Not reported |
| Tank Capacity: | Not reported |
| Tank Used for: | Not reported |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Not reported |

Click here for Geo Tracker PDF:

---

**A5** **HUMBOLDT STATE UNIVERSITY - PLANT OPS** **LUST** **S110654153**
**ENE** **FOURTEENTH & B STREET** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.007 mi.**
**39 ft.** **Site 5 of 6 in cluster A**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300305 |
| Global Id: | T0602300305 |
| Latitude: | 40.872638123 |
| Longitude: | -124.079618369 |
| Status: | Open - Site Assessment |
| Status Date: | 05/15/2015 |
| Case Worker: | MAV |
| RB Case Number: | 1THU405 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Local Agency |
| Local Case Number: | 12405 |
| Potential Media Affect: | Aquifer used for drinking water supply |
| Potential Contaminants of Concern: | MTBE / TBA / Other Fuel Oxygenates, Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300305 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP LEAD |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | beth.lamb@waterboards.ca.gov |
| Phone Number: | 7075762669 |

| | |
|---|---|
| Global Id: | T0602300305 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300305 |
| Action Type: | RESPONSE |
| Date: | 01/31/2014 |

**HUMBOLDT STATE UNIVERSITY - PLANT OPS (Continued)** **S110654153**

Action: Site Investigation Workplan - Regulator Responded

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 07/15/2009
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 05/07/1992
Action: * Historical Enforcement

Global Id: T0602300305
Action Type: REMEDIATION
Date: 07/15/2002
Action: Excavation

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 08/31/2009
Action: Staff Letter

Global Id: T0602300305
Action Type: Other
Date: 05/07/1992
Action: Leak Stopped

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 01/27/2015
Action: Staff Letter

Global Id: T0602300305
Action Type: REMEDIATION
Date: 10/15/2006
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 09/05/2017
Action: Site Visit / Inspection / Sampling

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 06/11/2003
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 11/25/2003
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 08/05/2003
Action: Staff Letter

**HUMBOLDT STATE UNIVERSITY - PLANT OPS (Continued)** **S110654153**

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 01/14/2004
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 05/19/2004
Action: Staff Letter

Global Id: T0602300305
Action Type: REMEDIATION
Date: 01/15/2006
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 04/03/2002
Action: * Historical Enforcement

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 05/23/2017
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 05/02/2010
Action: Meeting

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 05/05/2016
Action: Site Visit / Inspection / Sampling

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 05/22/2012
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 10/10/2008
Action: Staff Letter

Global Id: T0602300305
Action Type: Other
Date: 05/07/1992
Action: Leak Discovery

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 10/20/2009
Action: Meeting

Global Id: T0602300305
Action Type: ENFORCEMENT

**HUMBOLDT STATE UNIVERSITY - PLANT OPS (Continued)** **S110654153**

Date: 02/24/2012
Action: Staff Letter

Global Id: T0602300305
Action Type: ENFORCEMENT
Date: 04/12/2012
Action: Staff Letter

Global Id: T0602300305
Action Type: Other
Date: 05/07/1992
Action: Leak Reported

LUST:
Global Id: T0602300305
Status: Open - Case Begin Date
Status Date: 05/07/1992

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 05/07/1992

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 08/05/1993

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 08/18/1993

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 04/25/1994

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 06/11/2003

Global Id: T0602300305
Status: Open - Remediation
Status Date: 08/05/2003

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 11/25/2003

Global Id: T0602300305
Status: Open - Remediation
Status Date: 01/14/2004

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 05/19/2004

Global Id: T0602300305
Status: Open - Verification Monitoring
Status Date: 08/28/2009

**HUMBOLDT STATE UNIVERSITY - PLANT OPS (Continued)** **S110654153**

Global Id: T0602300305
Status: Open - Site Assessment
Status Date: 05/15/2015

---

**A6** **PLANT OPERATIONS** **HIST UST** **U001611495**
**ENE** **CORNER OF 14TH & B STS.** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.007 mi.**
**39 ft.** **Site 6 of 6 in cluster A**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000023779
Facility Type: Other
Other Type: UNIVERSITY
Contact Name: LIONEL J. ORTIZ
Telephone: 7078263646
Owner Name: HUMBOLT STATE UNIVERSITY
Owner Address: Not reported
Owner City,St,Zip: ARCATA, CA 95521
Total Tanks: 0003

Tank Num: 001
Container Num: 1
Year Installed: 1963
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 001
Container Num: 1
Year Installed: 1963
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000600
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000600
Tank Used for: PRODUCT
Type of Fuel: DIESEL

**PLANT OPERATIONS (Continued)** **U001611495**

Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: 1963
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: 4
Leak Detection: None

Tank Num: 003
Container Num: 3
Year Installed: 1963
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: 4
Leak Detection: None

---

**7** **HUMBOLDT STATE UNIV-PLANT** **LUST** **S101294726**
**WNW** **FOURTEENTH & B ST** **HIST CORTESE** **N/A**
**< 1/8** **ARCATA, CA 95521**
**0.011 mi.**
**58 ft.**

**Relative:**
**Lower**

**Actual:**
**85 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU405
Staff Initials: HUM

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU405

---

**B8** **HUMBOLDT STATE UNIVERSITY** **CHMIRS** **S107144745**
**NE** **1 HARPST ST** **CUPA Listings** **N/A**
**< 1/8** **ARCATA, CA 95521** **EMI**
**0.105 mi.** **ENF**
**554 ft.** **Site 1 of 2 in cluster B** **HAZNET**
**NPDES**

**Relative:**
**Higher**

**Actual:**
**128 ft.**

CHMIRS:
OES Incident Number: 12-7150
OES notification: 11/27/2012
OES Date: Not reported
OES Time: Not reported
**Date Completed:** **Not reported**
Property Use: Not reported
Agency Id Number: Not reported
Agency Incident Number: Not reported
Time Notified: Not reported
Time Completed: Not reported

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| Surrounding Area: | Not reported |
| Estimated Temperature: | Not reported |
| Property Management: | Not reported |
| More Than Two Substances Involved?: | Not reported |
| Resp Agncy Personel # Of Decontaminated: | Not reported |
| Responding Agency Personel # Of Injuries: | Not reported |
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |
| CA DOT PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | Yes |
| Waterway: | Storm Drain to College Creek |
| Spill Site: | School |
| Cleanup By: | Responsible Party |
| Containment: | Not reported |
| What Happened: | Not reported |
| Type: | Not reported |
| Measure: | Gal(s) |
| Other: | Not reported |
| Date/Time: | 1545 |
| Year: | 2012 |
| Agency: | Humboldt State University |
| Incident Date: | 11/26/2012 |
| Admin Agency: | City of Arcata |
| Amount: | Not reported |
| Contained: | Yes |
| Site Type: | Storm Drain to College Creek |
| E Date: | Not reported |
| Substance: | Raw Sewage |
| Quantity Released: | 50 |
| Unknown: | Not reported |
| Substance #2: | Not reported |
| Substance #3: | Not reported |
| Evacuations: | Not reported |
| Number of Injuries: | Not reported |
| Number of Fatalities: | Not reported |
| #1 Pipeline: | Not reported |
| #2 Pipeline: | Not reported |
| #3 Pipeline: | Not reported |
| #1 Vessel >= 300 Tons: | Not reported |
| #2 Vessel >= 300 Tons: | Not reported |
| #3 Vessel >= 300 Tons: | Not reported |
| Evacs: | Not reported |
| Injuries: | Not reported |
| Fatals: | Not reported |
| Comments: | Not reported |
| Description: | A sewer main backed up due to a debris blockage. |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| OES Incident Number: | 08-7168 |
| OES notification: | 10/03/2008 |
| OES Date: | Not reported |
| OES Time: | Not reported |
| **Date Completed:** | **Not reported** |
| Property Use: | Not reported |
| Agency Id Number: | Not reported |
| Agency Incident Number: | Not reported |
| Time Notified: | Not reported |
| Time Completed: | Not reported |
| Surrounding Area: | Not reported |
| Estimated Temperature: | Not reported |
| Property Management: | Not reported |
| More Than Two Substances Involved?: | Not reported |
| Resp Agncy Personel # Of Decontaminated: | Not reported |
| Responding Agency Personel # Of Injuries: | Not reported |
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |
| CA DOT PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | Yes |
| Waterway: | Storm Drain / Cambell Creek to Humboldt Bay |
| Spill Site: | School |
| Cleanup By: | Reporting Party |
| Containment: | Not reported |
| What Happened: | Not reported |
| Type: | Not reported |
| Measure: | Gal(s) |
| Other: | Not reported |
| Date/Time: | 1130 |
| Year: | 2008 |
| Agency: | Humboldt State University |
| Incident Date: | 10/3/2008 |
| Admin Agency: | Not reported |
| Amount: | Not reported |
| Contained: | Yes |
| Site Type: | Storm Drain / Cambell Creek to Humboldt Bay |
| E Date: | Not reported |
| Substance: | Mineral Spirits |
| Quantity Released: | 1 |
| Unknown: | Not reported |
| Substance #2: | Not reported |
| Substance #3: | Not reported |
| Evacuations: | 0 |
| Number of Injuries: | 0 |
| Number of Fatalities: | 0 |
| #1 Pipeline: | Not reported |
| #2 Pipeline: | Not reported |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| #3 Pipeline: | Not reported |
| #1 Vessel >= 300 Tons: | Not reported |
| #2 Vessel >= 300 Tons: | Not reported |
| #3 Vessel >= 300 Tons: | Not reported |
| Evacs: | Not reported |
| Injuries: | Not reported |
| Fatals: | Not reported |
| Comments: | Not reported |
| Description: | The county Sheriff's bomb squad blew up a pipe because they thought it was a pipe bomb. The Lt Governor was visiting the campus at the time. There was no threat received but a university state policemen found the device on the sidewalk outside the Behavioral Sciences building on campus. The device actually turned out to be a paint roller stored in a pipe in mineral spirits. The release entered a nearby storm drain. 300 students were temporarily evacuated from the nearby buildings as a precaution before the detonation, but they have since been cleared to return, at approximately 1600. Caller states the incident is now closed. |
| OES Incident Number: | 12-1529 |
| OES notification: | 03/15/2012 |
| OES Date: | Not reported |
| OES Time: | Not reported |
| **Date Completed:** | **Not reported** |
| Property Use: | Not reported |
| Agency Id Number: | Not reported |
| Agency Incident Number: | Not reported |
| Time Notified: | Not reported |
| Time Completed: | Not reported |
| Surrounding Area: | Not reported |
| Estimated Temperature: | Not reported |
| Property Management: | Not reported |
| More Than Two Substances Involved?: | Not reported |
| Resp Agncy Personel # Of Decontaminated: | Not reported |
| Responding Agency Personel # Of Injuries: | Not reported |
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |
| CA DOT PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | Yes |
| Waterway: | Storm drain, Jolly Giant Creek |
| Spill Site: | School |
| Cleanup By: | Reporting Party |
| Containment: | Not reported |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| What Happened: | Not reported |
| Type: | Not reported |
| Measure: | Gal(s) |
| Other: | Not reported |
| Date/Time: | 1500 |
| Year: | 2012 |
| Agency: | Humboldt State University |
| Incident Date: | 3/15/2012 |
| Admin Agency: | Humboldt County Environmental Health |
| Amount: | Not reported |
| Contained: | Yes |
| Site Type: | Storm drain, Jolly Giant Creek |
| E Date: | Not reported |
| Substance: | Latex Paint |
| Quantity Released: | 0.5 |
| Unknown: | Not reported |
| Substance #2: | Not reported |
| Substance #3: | Not reported |
| Evacuations: | Not reported |
| Number of Injuries: | Not reported |
| Number of Fatalities: | Not reported |
| #1 Pipeline: | Not reported |
| #2 Pipeline: | Not reported |
| #3 Pipeline: | Not reported |
| #1 Vessel >= 300 Tons: | Not reported |
| #2 Vessel >= 300 Tons: | Not reported |
| #3 Vessel >= 300 Tons: | Not reported |
| Evacs: | Not reported |
| Injuries: | Not reported |
| Fatals: | Not reported |
| Comments: | Not reported |
| Description: | RP states that painters were over painting graffiti on an outside wall when a rain deluge hit causing the paint to run off and enter a storm drain. |

CUPA HUMBOLDT:

| | |
|---|---|
| Local Site Id: | FA0001517 |
| Facility Address 2: | Not reported |
| Program Identifier: | CUPA - APSA Tier I |
| Program Element Code Desc: | 4005 4005 - APSA Tier I Facility |
| Permit Status: | (none) |
| Latitude: | 40.87564 |
| Longitude: | -124.0787 |
| CERS ID: | 10020475 |
| Facility Status: | 02 - INACTIVE, NON-BILLABLE |

| | |
|---|---|
| Local Site Id: | FA0001517 |
| Facility Address 2: | Not reported |
| Program Identifier: | CUPA - Hazardous Materials Facility Fee |
| Program Element Code Desc: | 4202 4202 - Hazardous Materials Facility Fee |
| Permit Status: | (none) |
| Latitude: | 40.87564 |
| Longitude: | -124.0787 |
| CERS ID: | 10020475 |
| Facility Status: | 01 - ACTIVE, BILLABLE |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

Local Site Id: FA0001517
Facility Address 2: Not reported
Program Identifier: CUPA - SQG
Program Element Code Desc: 4401 4401 - Hazardous Waste Generator (SQG)
Permit Status: 01 - Active
Latitude: 40.87564
Longitude: -124.0787
CERS ID: 10020475
Facility Status: 04 - ACTIVE, EXEMPT FROM BILLING

Local Site Id: FA0001517
Facility Address 2: Not reported
Program Identifier: CUPA - Response Team Support
Program Element Code Desc: 5056 5056 - HazMat Emergency Response Team Support
Permit Status: (none)
Latitude: 40.87564
Longitude: -124.0787
CERS ID: 10020475
Facility Status: 01 - ACTIVE, BILLABLE

EMI:
Year: 2007
County Code: 12
Air Basin: NC
Facility ID: 806
Air District Name: NCU
SIC Code: 8221
Air District Name: NORTH COAST UNIFIED AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.360148661814270347
Reactive Organic Gases Tons/Yr: .13371467428
Carbon Monoxide Emissions Tons/Yr: 5.4057902
NOX - Oxides of Nitrogen Tons/Yr: 1.4235645
SOX - Oxides of Sulphur Tons/Yr: .0263894
Particulate Matter Tons/Yr: .3012354557377049180
Part. Matter 10 Micrometers and Smllr Tons/Yr: 2.874423

Year: 2008
County Code: 12
Air Basin: NC
Facility ID: 806
Air District Name: NCU
SIC Code: 8221
Air District Name: NORTH COAST UNIFIED AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .0716136536273455240
Reactive Organic Gases Tons/Yr: .00711486258
Carbon Monoxide Emissions Tons/Yr: .2848194
NOX - Oxides of Nitrogen Tons/Yr: .0829965
SOX - Oxides of Sulphur Tons/Yr: .0035036
Particulate Matter Tons/Yr: .0162016008196721311
Part. Matter 10 Micrometers and Smllr Tons/Yr: .0155363

Year: 2011
County Code: 12

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| Air Basin: | NC |
| Facility ID: | 806 |
| Air District Name: | NCU |
| SIC Code: | 8221 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.0014077925182 |
| Reactive Organic Gases Tons/Yr: | 0.0011779 |
| Carbon Monoxide Emissions Tons/Yr: | 0.0028181 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0.0223858 |
| SOX - Oxides of Sulphur Tons/Yr: | 1.2335e-005 |
| Particulate Matter Tons/Yr: | 0.00088432377049 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0.0008631 |

| | |
|---|---|
| Year: | 2014 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 806 |
| Air District Name: | NCU |
| SIC Code: | 8221 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | A |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.0026883662194 |
| Reactive Organic Gases Tons/Yr: | 0.0023617297238 |
| Carbon Monoxide Emissions Tons/Yr: | 0.022069146676 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0.044880387426 |
| SOX - Oxides of Sulphur Tons/Yr: | 2.8082602745e-005 |
| Particulate Matter Tons/Yr: | 0.0018541473641 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0.0018096478274 |

| | |
|---|---|
| Year: | 2015 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 806 |
| Air District Name: | NCU |
| SIC Code: | 8221 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | A |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.0026883662194 |
| Reactive Organic Gases Tons/Yr: | 0.0023617297238 |
| Carbon Monoxide Emissions Tons/Yr: | 0.022069146676 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0.044880387426 |
| SOX - Oxides of Sulphur Tons/Yr: | 2.8082602745e-005 |
| Particulate Matter Tons/Yr: | 0.0018541473641 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0.0018096478274 |

ENF:

| | |
|---|---|
| Region: | 1 |
| Facility Id: | 631092 |
| Agency Name: | CSU Humboldt State University (HSU) |
| Place Type: | Utility |
| Place Subtype: | Collection_System |
| Facility Type: | Municipal/Domestic |
| Agency Type: | State Agency |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| # Of Agencies: | 1 |
| Place Latitude: | Not reported |
| Place Longitude: | Not reported |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | Not reported |
| Threat To Water Quality: | 3 |
| Complexity: | C |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | SSOMUNISML |
| Program Category1: | SSO |
| Program Category2: | SSO |
| # Of Programs: | 1 |
| WDID: | 1SSO11173 |
| Reg Measure Id: | 347528 |
| Reg Measure Type: | Enrollee |
| Region: | 1 |
| Order #: | 2006-0003-DWQ |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | 872 |
| Status: | Active |
| Status Date: | 03/30/2011 |
| Effective Date: | 06/23/2008 |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Y |
| Individual/General: | I |
| Fee Code: | 58 - Non15 Based on (TTWQ)/CPLX) |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 378310 |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| Region: | 1 |
| Order / Resolution Number: | Not reported |
| Enforcement Action Type: | Notice of Violation |
| Effective Date: | 07/20/2010 |
| Adoption/Issuance Date: | 07/20/2010 |
| Achieve Date: | Not reported |
| Termination Date: | 07/20/2010 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | NOV 07/20/2010 for CSU Humboldt State University (HSU) |
| Description: | Not reported |
| Program: | SSOMUNISML |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |

| | |
|---|---|
| Region: | 1 |
| Facility Id: | 735066 |
| Agency Name: | CSU Humboldt State University (HSU) |
| Place Type: | Utility |
| Place Subtype: | MS4 |
| Facility Type: | All other facilities |
| Agency Type: | State Agency |
| # Of Agencies: | 1 |
| Place Latitude: | Not reported |
| Place Longitude: | Not reported |
| SIC Code 1: | 8221 |
| SIC Desc 1: | Colleges, Universities, and Professional Schools |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | MNSTW2 |
| Program Category1: | NPDESSW |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| Program Category2: | NPDESSW |
| # Of Programs: | 1 |
| WDID: | 1B08183SHUM |
| Reg Measure Id: | 370440 |
| Reg Measure Type: | Unregulated |
| Region: | 1 |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Active |
| Status Date: | 08/28/2009 |
| Effective Date: | 04/30/2003 |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | I |
| Fee Code: | Not reported |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 362618 |
| Region: | 1 |
| Order / Resolution Number: | Not reported |
| Enforcement Action Type: | Notice of Violation |
| Effective Date: | 10/03/2008 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | Not reported |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Active |
| Title: | CSU Humboldt MS4 |
| Description: | Discharger failed to submit application for MS4 Phase 2 permit. |
| Program: | MNSTW2 |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |

HAZNET:

| | |
|---|---|
| envid: | S107144745 |
| Year: | 2013 |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| GEPAID: | CAH777001838 |
| Contact: | BRENT WHITENER |
| Telephone: | 7072688680 |
| Mailing Name: | Not reported |
| Mailing Address: | 1059 W HAWTHORNE ST |
| Mailing City,St,Zip: | EUREKA, CA 955012150 |
| Gen County: | Humboldt |
| TSD EPA ID: | CAH111001285 |
| TSD County: | Humboldt |
| Waste Category: | Not reported |
| Disposal Method: | Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 2.625 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Not reported |

NPDES:

| | |
|---|---|
| Npdes Number: | Not reported |
| Facility Status: | Active |
| Agency Id: | 0 |
| Region: | 1 |
| Regulatory Measure Id: | 439218 |
| Order No: | Not reported |
| Regulatory Measure Type: | Enrollee |
| Place Id: | Not reported |
| WDID: | 1 12M2000059 |
| Program Type: | Phase II Small MS4 |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 07/18/2013 |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Humboldt State University |
| Discharge Address: | 1 Harpst Street |
| Discharge City: | Arcata |
| Discharge State: | California |
| Discharge Zip: | 95521 |
| RECEIVED DATE: | Not reported |
| PROCESSED DATE: | Not reported |
| STATUS CODE NAME: | Not reported |
| STATUS DATE: | Not reported |
| PLACE SIZE: | Not reported |
| PLACE SIZE UNIT: | Not reported |
| FACILITY CONTACT NAME: | Not reported |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | Not reported |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Not reported |
| OPERATOR ADDRESS: | Not reported |
| OPERATOR CITY: | Not reported |
| OPERATOR STATE: | Not reported |
| OPERATOR ZIP: | Not reported |
| OPERATOR CONTACT NAME: | Not reported |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | Not reported |
| OPERATOR CONTACT PHONE EXT: | Not reported |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Not reported |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | Not reported |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | Not reported |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |
| | |
| Npdes Number: | Not reported |
| Facility Status: | Not reported |
| Agency Id: | Not reported |
| Region: | 1 |
| Regulatory Measure Id: | 439218 |
| Order No: | Not reported |
| Regulatory Measure Type: | Phase II Small MS4 |
| Place Id: | Not reported |
| WDID: | 1 12M2000059 |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Not reported |
| Discharge Address: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| RECEIVED DATE: | 07/01/2013 |

**HUMBOLDT STATE UNIVERSITY (Continued)** **S107144745**

| | |
|---|---|
| PROCESSED DATE: | 07/18/2013 |
| STATUS CODE NAME: | Active |
| STATUS DATE: | 07/18/2013 |
| PLACE SIZE: | Not reported |
| PLACE SIZE UNIT: | Not reported |
| FACILITY CONTACT NAME: | Sabrina Zink |
| FACILITY CONTACT TITLE: | Hazardous Materials Cord. |
| FACILITY CONTACT PHONE: | 707-826-3302 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | smb73@humboldt.edu |
| OPERATOR NAME: | Humboldt State University |
| OPERATOR ADDRESS: | 1 Harpst Street |
| OPERATOR CITY: | Arcata |
| OPERATOR STATE: | California |
| OPERATOR ZIP: | 95521 |
| OPERATOR CONTACT NAME: | Sabrina Zink |
| OPERATOR CONTACT TITLE: | EH&S Specialist |
| OPERATOR CONTACT PHONE: | 707-826-3302 |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | smb73@humboldt.edu |
| OPERATOR TYPE: | College/University |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Kimberly Comet |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | 31-AUG-17 |
| PRIMARY SIC: | Not reported |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

**B9** **HUMBOLDT STATE UNIVERSITY** **RCRA-LQG** **1000164155**
**NE** **14TH & B STREET** **PADS** **CAD981389075**
**< 1/8** **ARCATA, CA 95521** **FINDS**
**0.105 mi.** **ECHO**
**554 ft.** **Site 2 of 2 in cluster B**

**Relative:**
**Higher**

**Actual:**
**128 ft.**

RCRA-LQG:

| | |
|---|---|
| Date form received by agency: | 03/01/2014 |
| Facility name: | HUMBOLDT STATE UNIVERSITY |
| Facility address: | 1 HARPST ST<br>ARCATA, CA 95521 |
| EPA ID: | CAD981389075 |
| Mailing address: | HARPST ST<br>ARCATA, CA 95521 |
| Contact: | SABRINA M ZINK |
| Contact address: | HARPST ST<br>ARCATA, CA 95521 |
| Contact country: | Not reported |
| Contact telephone: | 707-826-3302 |
| Contact email: | SABRINA.ZINK@HUMBOLDT.EDU |
| EPA Region: | 09 |
| Land type: | State |
| Classification: | Large Quantity Generator |
| Description: | Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time |

Owner/Operator Summary:

| | |
|---|---|
| Owner/operator name: | STATE OF CALIFORNIA |
| Owner/operator address: | STATE CAPITAL BUILDING<br>SACRAMENTO, CA 95814 |
| Owner/operator country: | Not reported |
| Owner/operator telephone: | 562-951-4000 |
| Owner/operator email: | Not reported |
| Owner/operator fax: | Not reported |
| Owner/operator extension: | Not reported |
| Legal status: | State |
| Owner/Operator Type: | Owner |
| Owner/Op start date: | 06/13/1913 |
| Owner/Op end date: | Not reported |

| | |
|---|---|
| Owner/operator name: | STATE OF CALIFORNIA |
| Owner/operator address: | NOT REQUIRED<br>NOT REQUIRED, ME 99999 |
| Owner/operator country: | Not reported |
| Owner/operator telephone: | 415-555-1212 |
| Owner/operator email: | Not reported |
| Owner/operator fax: | Not reported |
| Owner/operator extension: | Not reported |
| Legal status: | State |

**HUMBOLDT STATE UNIVERSITY (Continued)** **1000164155**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: CALIFORNIA STATE UNIVERSITY
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/13/1913
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D006

**HUMBOLDT STATE UNIVERSITY (Continued)** **1000164155**

. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P030
. Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Historical Generators:
Date form received by agency: 05/12/2008
Site name: HUMBOLDT STATE UNIVERSITY
Classification: Large Quantity Generator

**HUMBOLDT STATE UNIVERSITY (Continued)** **1000164155**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U075
. Waste name: DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-

. Waste code: U188
. Waste name: PHENOL

**HUMBOLDT STATE UNIVERSITY (Continued)** **1000164155**

Date form received by agency: 09/01/1996
Site name: HUMBOLDT STATE UNIVERSITY
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: HUMBOLDT STATE UNIVERSITY
Classification: Small Quantity Generator

Date form received by agency: 02/28/1992
Site name: HUMBOLDT STATE UNIVERSITY
Classification: Large Quantity Generator

Date form received by agency: 02/19/1986
Site name: HUMBOLDT STATE UNIVERSITY
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 10/30/1990
Date achieved compliance: 05/04/1991
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 10/30/1990
Date achieved compliance: 05/04/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/27/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/30/1990
Date achieved compliance: 05/04/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/27/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

**HUMBOLDT STATE UNIVERSITY (Continued)** **1000164155**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/30/1990
Date achieved compliance: 05/04/1991
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/22/1986
Date achieved compliance: 02/25/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/21/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/30/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 05/04/1991
Evaluation lead agency: State

Evaluation date: 10/30/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/04/1991
Evaluation lead agency: State

Evaluation date: 08/22/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/25/1987
Evaluation lead agency: State

PADS:
EPAID: CAD981389075
Facility name: HUMBOLDT STATE UNIVERSITY
Facility Address: 14TH & B STREET
ARCATA, CA 95521
Facility country: US
Generator: Yes
Storer: No

**HUMBOLDT STATE UNIVERSITY (Continued)** **1000164155**

| | |
|---|---|
| Transporter: | No |
| Disposer: | No |
| Research facility: | No |
| Smelter: | No |
| Facility owner name: | STATE OF CALIFORNIA |
| Contact title: | Not reported |
| Contact name: | HOPKINS JERRY |
| Contact tel: | (707)826-3356 |
| Contact extension: | Not reported |
| Mailing address: | L. K. WOOD BLVD AND PLAZA AVE<br>ARCATA, CA 95521 |
| Mailing country: | US |
| Cert. title: | Not reported |
| Cert. name: | Not reported |
| Cert. date: | 10/01/1990 |
| Date received: | 10/18/1990 |

FINDS:

Registry ID: 110008266982

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

AIR EMISSIONS CLASSIFICATION UNKNOWN

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

| | |
|---|---|
| Envid: | 1000164155 |
| Registry ID: | 110008266982 |
| DFR URL: | http://echo.epa.gov/detailed-facility-report?fid=110008266982 |

**C10**
**WNW**
**1/8-1/4**
**0.223 mi.**
**1180 ft.**

**AT&T CALIFORNIA - TE001**
**1300 G ST**
**ARCATA, CA 95521**

**Site 1 of 2 in cluster C**

**Database(s):** UST
**EDR ID Number:** U004261662
**EPA ID Number:** N/A

**Relative:**
**Higher**

**Actual:**
**95 ft.**

UST:
Facility ID: 12-000-000055
Permitting Agency: Humboldt County Division of Environmental Health
Latitude: 40.87216
Longitude: -124.08445

---

**C11**
**WNW**
**1/8-1/4**
**0.223 mi.**
**1180 ft.**

**PACIFIC BELL**
**1300 G STREET**
**ARCATA, CA 95521**

**Site 2 of 2 in cluster C**

**Database(s):** UST, SWEEPS UST, HIST UST, RCRA NonGen / NLR, FINDS, ECHO, CUPA Listings
**EDR ID Number:** 1000251821
**EPA ID Number:** CAT080028707

**Relative:**
**Higher**

**Actual:**
**95 ft.**

UST:
Facility ID: 12-000-000055
Permitting Agency: HUMBOLDT COUNTY
Latitude: 40.873532
Longitude: -124.0828851

SWEEPS UST:
Status: Active
Comp Number: 14720
Number: 1
Board Of Equalization: 44-001027
Referral Date: 09-23-92
Action Date: 09-23-92
Created Date: 07-31-88
Owner Tank Id: 311
SWRCB Tank Id: 12-000-014720-000001
Tank Status: A
Capacity: 1000
Active Date: 05-03-93
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 1

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000014720
Facility Type: Other
Other Type: PHONE CO.
Contact Name: E.J. KOEHLER
Telephone: 4155426758
Owner Name: PACIFIC BELL
Owner Address: 370 THIRD STREET
Owner City,St,Zip: SAN FRANCISCO, CA 94107
Total Tanks: 0001

Tank Num: 001

**PACIFIC BELL (Continued)** **1000251821**

Container Num: D-76-1K
Year Installed: 1976
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: None

RCRA NonGen / NLR:
Date form received by agency: 07/06/1998
Facility name: PACIFIC BELL
Facility address: 1300 G STREET
ARCATA, CA 95521
EPA ID: CAT080028707
Mailing address: 3707 KINGS WAY SEC A-6
SACRAMENTO, CA 95821
Contact: DAVALYNN BOTELL
Contact address: P O BOX 5095 ROOM 1N200
SAN RAMON, CA 94583-0995
Contact country: US
Contact telephone: 925-867-5741
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No

**PACIFIC BELL (Continued)** **1000251821**

| | |
|---|---|
| Recycler of hazardous waste: | No |
| Transporter of hazardous waste: | No |
| Treater, storer or disposer of HW: | No |
| Underground injection activity: | No |
| On-site burner exemption: | No |
| Furnace exemption: | No |
| Used oil fuel burner: | No |
| Used oil processor: | No |
| User oil refiner: | No |
| Used oil fuel marketer to burner: | No |
| Used oil Specification marketer: | No |
| Used oil transfer facility: | No |
| Used oil transporter: | No |

Historical Generators:
Date form received by agency: 09/01/1996
Site name: PACIFIC BELL
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110055796624

Environmental Interest/Information System
STATE MASTER

Registry ID: 110002954731

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000251821
Registry ID: 110002954731
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002954731

CUPA HUMBOLDT:
Local Site Id: FA0002338
Facility Address 2: Not reported
Program Identifier: CUPA - Hazardous Materials Facility Fee

**PACIFIC BELL (Continued)** **1000251821**

Program Element Code Desc: 4202 4202 - Hazardous Materials Facility Fee
Permit Status: 02 - Inactive
Latitude: 40.87215
Longitude: -124.0844
CERS ID: 10331068
Facility Status: 01 - ACTIVE, BILLABLE

Local Site Id: FA0002338
Facility Address 2: Not reported
Program Identifier: CUPA - SQG
Program Element Code Desc: 4401 4401 - Hazardous Waste Generator (SQG)
Permit Status: 02 - Inactive
Latitude: 40.87215
Longitude: -124.0844
CERS ID: 10331068
Facility Status: 02 - INACTIVE, NON-BILLABLE

Local Site Id: FA0002338
Facility Address 2: Not reported
Program Identifier: CUPA - Response Team Support
Program Element Code Desc: 5056 5056 - HazMat Emergency Response Team Support
Permit Status: 02 - Inactive
Latitude: 40.87215
Longitude: -124.0844
CERS ID: 10331068
Facility Status: 01 - ACTIVE, BILLABLE

---

**D12** **BLOXHAMS EXXON SERV STATION** **HIST UST** **S118408025**
**WNW** **1401 G STREET** **N/A**
**1/8-1/4** **ARCATA, CA 95521**
**0.246 mi.**
**1299 ft.** **Site 1 of 7 in cluster D**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

HIST UST:
File Number: 00025F2F
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00025F2F.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

**BLOXHAMS EXXON SERV STATION (Continued)** **S118408025**

Click here for Geo Tracker PDF:

**D13** **BLOXHAM'S EXXON SERV. STATION** **HIST UST** **U001611411**
**WNW** **1401 G ST** **N/A**
**1/8-1/4** **ARCATA, CA 95521**
**0.246 mi.**
**1299 ft.** **Site 2 of 7 in cluster D**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

HIST UST:

| | |
|---|---|
| File Number: | Not reported |
| URL: | Not reported |
| Region: | STATE |
| Facility ID: | 00000018033 |
| Facility Type: | Gas Station |
| Other Type: | Not reported |
| Contact Name: | Not reported |
| Telephone: | 7078228471 |
| Owner Name: | JAMES R. BLOXHAM |
| Owner Address: | 1401 G. STREET |
| Owner City,St,Zip: | ARCATA, CA 95521 |
| Total Tanks: | 0005 |
| | |
| Tank Num: | 001 |
| Container Num: | 1 |
| Year Installed: | 1963 |
| Tank Capacity: | 00008000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 002 |
| Container Num: | 2 |
| Year Installed: | 1963 |
| Tank Capacity: | 00007500 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | UNLEADED |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 003 |
| Container Num: | 3 |
| Year Installed: | 1963 |
| Tank Capacity: | 00007500 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | REGULAR |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 004 |
| Container Num: | 4 |
| Year Installed: | 1963 |
| Tank Capacity: | 00000500 |
| Tank Used for: | WASTE |
| Type of Fuel: | WASTE OIL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |

**BLOXHAM'S EXXON SERV. STATION (Continued)** **U001611411**

| | |
|---|---|
| Tank Num: | 005 |
| Container Num: | 1 |
| Year Installed: | 1963 |
| Tank Capacity: | 00008000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |

---

**D14** **BLOXHAM'S SHELL** **SWEEPS UST** **S101627540**
**WNW** **1401 G ST** **CA FID UST** **N/A**
**1/8-1/4** **ARCATA, CA 95521**
**0.246 mi.**
**1299 ft.** **Site 3 of 7 in cluster D**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

SWEEPS UST:

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 18033 |
| Number: | Not reported |
| Board Of Equalization: | 44-004958 |
| Referral Date: | Not reported |
| Action Date: | Not reported |
| Created Date: | Not reported |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 12-000-018033-000004 |
| Tank Status: | Not reported |
| Capacity: | 500 |
| Active Date: | Not reported |
| Tank Use: | OIL |
| STG: | WASTE |
| Content: | WASTE OIL |
| Number Of Tanks: | 1 |

| | |
|---|---|
| Status: | Active |
| Comp Number: | 18033 |
| Number: | 1 |
| Board Of Equalization: | 44-004958 |
| Referral Date: | 06-10-92 |
| Action Date: | 06-10-92 |
| Created Date: | 07-31-88 |
| Owner Tank Id: | 1 |
| SWRCB Tank Id: | 12-000-018033-000001 |
| Tank Status: | A |
| Capacity: | 8000 |
| Active Date: | 06-10-92 |
| Tank Use: | M.V. FUEL |
| STG: | P |
| Content: | DIESEL |
| Number Of Tanks: | 3 |

| | |
|---|---|
| Status: | Active |
| Comp Number: | 18033 |
| Number: | 1 |
| Board Of Equalization: | 44-004958 |
| Referral Date: | 06-10-92 |
| Action Date: | 06-10-92 |
| Created Date: | 07-31-88 |
| Owner Tank Id: | 2 |

**BLOXHAM'S SHELL (Continued)** **S101627540**

SWRCB Tank Id: 12-000-018033-000002
Tank Status: A
Capacity: 7500
Active Date: 06-10-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 18033
Number: 1
Board Of Equalization: 44-004958
Referral Date: 06-10-92
Action Date: 06-10-92
Created Date: 07-31-88
Owner Tank Id: 3
SWRCB Tank Id: 12-000-018033-000003
Tank Status: A
Capacity: 7500
Active Date: 06-10-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 12000508
Regulated By: UTNKA
Regulated ID: 00018033
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7078228471
Mail To: Not reported
Mailing Address: 1401 G ST
Mailing Address 2: Not reported
Mailing City,St,Zip: ARCATA 95521
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

---

**D15** **BLOXHAM'S SHELL** **UST** **U003983996**
**WNW** **1401 G ST** **N/A**
**1/8-1/4** **ARCATA, CA 95521**
**0.246 mi.**
**1299 ft.** **Site 4 of 7 in cluster D**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

UST:
Facility ID: 12-000-000593
Permitting Agency: HUMBOLDT COUNTY
Latitude: 40.874394
Longitude: -124.083121

**D16** **BLOXHAM'S TIGER MART (SHELL)** **LUST** **S102437447**
**WNW** **1401 G STREET** **CUPA Listings** **N/A**
**1/8-1/4** **ARCATA, CA 95521** **EMI**
**0.246 mi.** **HIST CORTESE**
**1299 ft.** **Site 5 of 7 in cluster D**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300156 |
| Global Id: | T0602300156 |
| Latitude: | 40.8729288419266 |
| Longitude: | -124.084396362305 |
| Status: | Open - Site Assessment |
| Status Date: | 08/07/2015 |
| Case Worker: | MAV |
| RB Case Number: | 1THU211 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Local Agency |
| Local Case Number: | 12211 |
| Potential Media Affect: | Aquifer used for drinking water supply |
| Potential Contaminants of Concern: | Benzene, Gasoline, MTBE / TBA / Other Fuel Oxygenates, Toluene, Waste Oil / Motor / Hydraulic / L |
| Site History: | Hi |

LUST:

| | |
|---|---|
| Global Id: | T0602300156 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP LEAD |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | beth.lamb@waterboards.ca.gov |
| Phone Number: | 7075762669 |

| | |
|---|---|
| Global Id: | T0602300156 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300156 |
| Action Type: | ENFORCEMENT |
| Date: | 09/15/2011 |
| Action: | Staff Letter |

| | |
|---|---|
| Global Id: | T0602300156 |
| Action Type: | ENFORCEMENT |
| Date: | 05/14/2015 |
| Action: | Site Visit / Inspection / Sampling |

| | |
|---|---|
| Global Id: | T0602300156 |
| Action Type: | ENFORCEMENT |
| Date: | 04/19/2004 |
| Action: | Staff Letter |

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 01/07/2004
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 01/13/2004
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 09/29/2008
Action: Staff Letter

Global Id: T0602300156
Action Type: REMEDIATION
Date: 06/13/2007
Action: Soil Vapor Extraction (SVE)

Global Id: T0602300156
Action Type: Other
Date: 01/02/1990
Action: Leak Stopped

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 12/21/2015
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 05/20/2008
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 07/10/2009
Action: Staff Letter

Global Id: T0602300156
Action Type: RESPONSE
Date: 08/28/2015
Action: Request for Closure - Regulator Responded

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 02/28/2013
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 06/30/2014
Action: File review

Global Id: T0602300156
Action Type: ENFORCEMENT

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

Date: 01/25/2017
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 06/03/2009
Action: Staff Letter

Global Id: T0602300156
Action Type: Other
Date: 01/02/1990
Action: Leak Discovery

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 06/07/2010
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 03/17/2010
Action: File review

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 06/09/2003
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 05/01/2009
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 10/30/2017
Action: Site Visit / Inspection / Sampling

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 10/02/2017
Action: Verbal Communication

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 10/08/2009
Action: Staff Letter

Global Id: T0602300156
Action Type: RESPONSE
Date: 03/08/2017
Action: Well Installation Workplan - Regulator Responded

Global Id: T0602300156
Action Type: REMEDIATION
Date: 06/25/2005
Action: Soil Vapor Extraction (SVE)

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 04/24/2017
Action: Staff Letter

Global Id: T0602300156
Action Type: Other
Date: 01/02/1990
Action: Leak Reported

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 05/04/2016
Action: Staff Letter

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 02/09/2011
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0602300156
Action Type: ENFORCEMENT
Date: 09/13/2016
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

LUST:
Global Id: T0602300156
Status: Open - Case Begin Date
Status Date: 01/02/1990

Global Id: T0602300156
Status: Open - Site Assessment
Status Date: 01/10/1990

Global Id: T0602300156
Status: Open - Site Assessment
Status Date: 06/09/2003

Global Id: T0602300156
Status: Open - Site Assessment
Status Date: 01/07/2004

Global Id: T0602300156
Status: Open - Site Assessment
Status Date: 01/13/2004

Global Id: T0602300156
Status: Open - Site Assessment
Status Date: 04/19/2004

Global Id: T0602300156
Status: Open - Remediation
Status Date: 01/25/2006

Global Id: T0602300156
Status: Open - Remediation
Status Date: 11/02/2006

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

Global Id: T0602300156
Status: Open - Verification Monitoring
Status Date: 02/23/2012

Global Id: T0602300156
Status: Open - Site Assessment
Status Date: 08/07/2015

LUST REG 1:
Region: 1
Facility ID: 1THU211
Staff Initials: HUM

CUPA HUMBOLDT:
Local Site Id: FA0000311
Facility Address 2: Not reported
Program Identifier: CUPA - Hazardous Materials Facility Fee
Program Element Code Desc: 4202 4202 - Hazardous Materials Facility Fee
Permit Status: 02 - Inactive
Latitude: 40.87302
Longitude: -124.0845
CERS ID: 10020826
Facility Status: 01 - ACTIVE, BILLABLE

Local Site Id: FA0000311
Facility Address 2: Not reported
Program Identifier: CUPA - SQG
Program Element Code Desc: 4401 4401 - Hazardous Waste Generator (SQG)
Permit Status: 01 - Active
Latitude: 40.87302
Longitude: -124.0845
CERS ID: 10020826
Facility Status: 04 - ACTIVE, EXEMPT FROM BILLING

Local Site Id: FA0000311
Facility Address 2: Not reported
Program Identifier: CUPA - Response Team Support
Program Element Code Desc: 5056 5056 - HazMat Emergency Response Team Support
Permit Status: 02 - Inactive
Latitude: 40.87302
Longitude: -124.0845
CERS ID: 10020826
Facility Status: 01 - ACTIVE, BILLABLE

EMI:
Year: 2006
County Code: 12
Air Basin: NC
Facility ID: 751
Air District Name: NCU
SIC Code: 5541
Air District Name: NORTH COAST UNIFIED AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .6069564434052912341

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

| | |
|---|---|
| Reactive Organic Gases Tons/Yr: | .6039252 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2007 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .5953536972226500445 |
| Reactive Organic Gases Tons/Yr: | .5923804 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2008 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .5445647487299137400 |
| Reactive Organic Gases Tons/Yr: | .5418451 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2009 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.55733824163916701 |
| Reactive Organic Gases Tons/Yr: | 0.55455480000000001 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

| | |
|---|---|
| Year: | 2010 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.55733824163916701 |
| Reactive Organic Gases Tons/Yr: | 0.55455480000000001 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2011 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.60908598347 |
| Reactive Organic Gases Tons/Yr: | 0.606092 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2014 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | A |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1.301500782 |
| Reactive Organic Gases Tons/Yr: | 1.301500782 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2015 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 751 |
| Air District Name: | NCU |
| SIC Code: | 5541 |

**BLOXHAM'S TIGER MART (SHELL) (Continued)** **S102437447**

| | |
|---|---|
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | A |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1.301500782 |
| Reactive Organic Gases Tons/Yr: | 1.301500782 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 12 |
| Reg By: | LTNKA |
| Reg Id: | 1THU211 |

---

**D17**
**WNW**
**1/8-1/4**
**0.246 mi.**
**1299 ft.**

**BLOXHAM'S SHELL - GAS STATION** **UST** **U004261675**
**1401 G ST** **N/A**
**ARCATA, CA 95521**

**Site 6 of 7 in cluster D**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

UST:

| | |
|---|---|
| Facility ID: | 12-000-000593 |
| Permitting Agency: | Humboldt County Division of Environmental Health |
| Latitude: | 40.873016 |
| Longitude: | -124.084435 |

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**18**
**SE**
**1/4-1/2**
**0.255 mi.**
**1348 ft.**

**DOLF ESTATE** **LUST** **S105181514**
**1184 BAYVIEW AVENUE** **N/A**
**ARCATA, CA 95521**

**Relative:**
**Higher**

**Actual:**
**181 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602393587 |
| Global Id: | T0602393587 |
| Latitude: | 40.868856839 |
| Longitude: | -124.075439651 |
| Status: | Completed - Case Closed |
| Status Date: | 06/22/2004 |
| Case Worker: | MAV |
| RB Case Number: | 1THU780 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | 12780 |
| Potential Media Affect: | Under Investigation |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602393587 |
| Contact Type: | Regional Board Caseworker |

**DOLF ESTATE (Continued)** **S105181514**

Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602393587
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602393587
Action Type: Other
Date: 05/02/2001
Action: Leak Stopped

Global Id: T0602393587
Action Type: ENFORCEMENT
Date: 01/22/2004
Action: Technical Correspondence / Assistance / Other

Global Id: T0602393587
Action Type: Other
Date: 05/02/2001
Action: Leak Discovery

Global Id: T0602393587
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Staff Letter

Global Id: T0602393587
Action Type: ENFORCEMENT
Date: 09/19/2003
Action: Staff Letter

Global Id: T0602393587
Action Type: ENFORCEMENT
Date: 06/22/2004
Action: Closure/No Further Action Letter

Global Id: T0602393587
Action Type: ENFORCEMENT
Date: 06/04/2003
Action: Staff Letter

Global Id: T0602393587
Action Type: ENFORCEMENT
Date: 01/05/2004
Action: Staff Letter

**DOLF ESTATE (Continued)** **S105181514**

Global Id: T0602393587
Action Type: Other
Date: 05/03/2001
Action: Leak Reported

LUST:
Global Id: T0602393587
Status: Open - Case Begin Date
Status Date: 05/02/2001

Global Id: T0602393587
Status: Open - Site Assessment
Status Date: 05/03/2001

Global Id: T0602393587
Status: Open - Site Assessment
Status Date: 06/04/2003

Global Id: T0602393587
Status: Open - Site Assessment
Status Date: 07/15/2003

Global Id: T0602393587
Status: Open - Site Assessment
Status Date: 09/19/2003

Global Id: T0602393587
Status: Open - Site Assessment
Status Date: 01/05/2004

Global Id: T0602393587
Status: Open - Site Assessment
Status Date: 01/22/2004

Global Id: T0602393587
Status: Completed - Case Closed
Status Date: 06/22/2004

---

**D19** **SWEET, WALTER B., INC.** **LUST** **S104233783**
**WNW** **15TH STREET 760** **N/A**
**1/4-1/2** **ARCATA, CA**
**0.275 mi.**
**1453 ft.** **Site 7 of 7 in cluster D**

**Relative:**
**Lower**

**Actual:**
**88 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU695
Staff Initials: HUM

**E20** **U. S. BANK OF CALIFORNIA** **LUST** **S102439455**
**WSW** **TENTH & G ST** **HIST CORTESE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.278 mi.**
**1468 ft.** **Site 1 of 3 in cluster E**

**Relative:**
**Lower**

**Actual:**
**48 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU047
Staff Initials: Closed

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU047

---

**21** **SWEET, WALTER B., INC.** **LUST** **S104567950**
**NW** **760 15TH** **HIST CORTESE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.283 mi.**
**1494 ft.**

**Relative:**
**Lower**

**Actual:**
**87 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300493
Global Id: T0602300493
Latitude: 40.87389
Longitude: -124.08467
Status: Completed - Case Closed
Status Date: 09/19/2000
Case Worker: MAV
RB Case Number: 1THU695
Local Agency: HUMBOLDT COUNTY LOP
File Location: Local Agency
Local Case Number: 12695
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602300493
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602300493
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

**SWEET, WALTER B., INC. (Continued)** **S104567950**

LUST:
Global Id: T0602300493
Action Type: Other
Date: 12/21/1998
Action: Leak Stopped

Global Id: T0602300493
Action Type: Other
Date: 12/21/1998
Action: Leak Discovery

Global Id: T0602300493
Action Type: ENFORCEMENT
Date: 11/01/1999
Action: * Historical Enforcement

Global Id: T0602300493
Action Type: ENFORCEMENT
Date: 09/19/2000
Action: Closure/No Further Action Letter

Global Id: T0602300493
Action Type: Other
Date: 12/21/1998
Action: Leak Reported

Global Id: T0602300493
Action Type: REMEDIATION
Date: 09/19/2000
Action: Excavation

LUST:
Global Id: T0602300493
Status: Open - Case Begin Date
Status Date: 12/21/1998

Global Id: T0602300493
Status: Open - Site Assessment
Status Date: 11/01/1999

Global Id: T0602300493
Status: Completed - Case Closed
Status Date: 09/19/2000

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU695

**F22**
**NNE**
**1/4-1/2**
**0.286 mi.**
**1508 ft.**

**HUMBOLDT STATE UNIVERSITY - FOUNDER'S**
**LAUREL DRIVE & B STREET**
**ARCATA, CA 95521**

**Site 1 of 4 in cluster F**

**LUST** **S110654154**
**N/A**

**Relative:**
**Higher**

**Actual:**
**119 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300309 |
| Global Id: | T0602300309 |
| Latitude: | 40.8757549 |
| Longitude: | -124.0785491 |
| Status: | Completed - Case Closed |
| Status Date: | 09/21/2000 |
| Case Worker: | Not reported |
| RB Case Number: | 1THU409 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | 12409 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Heating Oil / Fuel Oil |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300309 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | GENERAL LOP UST CASE WORKER |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H STREET, SUITE 100 |
| City: | EUREKA |
| Email: | Not reported |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602300309 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP CLOSED SITE |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | Not reported |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300309 |
| Action Type: | ENFORCEMENT |
| Date: | 07/02/1992 |
| Action: | * Historical Enforcement |

| | |
|---|---|
| Global Id: | T0602300309 |
| Action Type: | Other |
| Date: | 06/15/1992 |
| Action: | Leak Stopped |

| | |
|---|---|
| Global Id: | T0602300309 |
| Action Type: | ENFORCEMENT |
| Date: | 09/21/2000 |
| Action: | Closure/No Further Action Letter |

**HUMBOLDT STATE UNIVERSITY - FOUNDER'S (Continued)** **S110654154**

Global Id: T0602300309
Action Type: Other
Date: 06/15/1992
Action: Leak Discovery

Global Id: T0602300309
Action Type: Other
Date: 06/15/1992
Action: Leak Reported

LUST:
Global Id: T0602300309
Status: Open - Case Begin Date
Status Date: 06/15/1992

Global Id: T0602300309
Status: Open - Site Assessment
Status Date: 07/02/1992

Global Id: T0602300309
Status: Open - Site Assessment
Status Date: 08/05/1993

Global Id: T0602300309
Status: Open - Site Assessment
Status Date: 08/18/1993

Global Id: T0602300309
Status: Open - Remediation
Status Date: 11/20/1996

Global Id: T0602300309
Status: Open - Site Assessment
Status Date: 11/20/1996

Global Id: T0602300309
Status: Open - Verification Monitoring
Status Date: 11/20/1996

Global Id: T0602300309
Status: Completed - Case Closed
Status Date: 09/21/2000

---

**F23** **HUMBOLDT STATE UNIV-FOUND** **HIST CORTESE** **S105022560**
**NNE** **LAUREL DR & B ST** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.286 mi.**
**1508 ft.** **Site 2 of 4 in cluster F**

**Relative:**
**Higher**

**Actual:**
**119 ft.**

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU409

**F24** **HUMBOLDT STATE UNIVERSITY - GIST HALL** **LUST** **S110654111**
**NNE** **B STREET & LAUREL DRIVE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.286 mi.**
**1508 ft.** **Site 3 of 4 in cluster F**

**Relative:**
**Higher**

**Actual:**
**119 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300009 |
| Global Id: | T0602300009 |
| Latitude: | 40.8766908 |
| Longitude: | -124.0830873 |
| Status: | Completed - Case Closed |
| Status Date: | 09/13/2000 |
| Case Worker: | MAV |
| RB Case Number: | 1THU009 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | 12009 |
| Potential Media Affect: | Other Groundwater (uses other than drinking water) |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300009 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP CLOSED SITE |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | Not reported |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602300009 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300009 |
| Action Type: | ENFORCEMENT |
| Date: | 12/09/1999 |
| Action: | * Historical Enforcement |

| | |
|---|---|
| Global Id: | T0602300009 |
| Action Type: | Other |
| Date: | 03/28/1989 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0602300009 |
| Action Type: | Other |
| Date: | 03/28/1989 |
| Action: | Leak Stopped |

**HUMBOLDT STATE UNIVERSITY - GIST HALL (Continued)** **S110654111**

Global Id: T0602300009
Action Type: Other
Date: 03/28/1989
Action: Leak Reported

LUST:
Global Id: T0602300009
Status: Open - Case Begin Date
Status Date: 03/28/1989

Global Id: T0602300009
Status: Open - Site Assessment
Status Date: 03/28/1989

Global Id: T0602300009
Status: Open - Site Assessment
Status Date: 12/18/1989

Global Id: T0602300009
Status: Open - Site Assessment
Status Date: 12/28/1989

Global Id: T0602300009
Status: Completed - Case Closed
Status Date: 09/13/2000

---

**F25** **HUMBOLDT STATE UNIV-FOUNDER'S** **LUST** **S101294732**
**NNE** **LAUREL DRIVE & B ST** **N/A**
**1/4-1/2** **ARCATA, CA**
**0.286 mi.**
**1508 ft.** **Site 4 of 4 in cluster F**

**Relative:**
**Higher**

**Actual:**
**119 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU409
Staff Initials: Closed

---

**E26** **U. S. BANK OF CALIFORNIA** **LUST** **S110654118**
**WSW** **TENTH & G STREETS** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.290 mi.**
**1533 ft.** **Site 2 of 3 in cluster E**

**Relative:**
**Lower**

**Actual:**
**46 ft.**

LUST:
Lead Agency: NORTH COAST RWQCB (REGION 1)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300042
Global Id: T0602300042
Latitude: 40.8696538
Longitude: -124.0854721
Status: Completed - Case Closed
Status Date: 11/16/1992
Case Worker: ZZZ
RB Case Number: 1THU047
Local Agency: HUMBOLDT COUNTY LOP

**U. S. BANK OF CALIFORNIA (Continued)** **S110654118**

File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602300042
Contact Type: Regional Board Caseworker
Contact Name: REGIONAL WATER BOARD SITE CLOSED
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: craig.hunt@waterboards.ca.gov
Phone Number: 7075762220

LUST:
Global Id: T0602300042
Action Type: ENFORCEMENT
Date: 01/18/2000
Action: * Historical Enforcement

Global Id: T0602300042
Action Type: Other
Date: 06/07/1988
Action: Leak Discovery

Global Id: T0602300042
Action Type: Other
Date: 06/07/1988
Action: Leak Stopped

Global Id: T0602300042
Action Type: Other
Date: 06/07/1988
Action: Leak Reported

LUST:
Global Id: T0602300042
Status: Open - Case Begin Date
Status Date: 06/07/1988

Global Id: T0602300042
Status: Open - Site Assessment
Status Date: 06/07/1988

Global Id: T0602300042
Status: Open - Site Assessment
Status Date: 11/13/1990

Global Id: T0602300042
Status: Open - Site Assessment
Status Date: 04/17/1991

Global Id: T0602300042
Status: Open - Remediation
Status Date: 09/05/1991

**U. S. BANK OF CALIFORNIA (Continued)** **S110654118**

Global Id: T0602300042
Status: Open - Site Assessment
Status Date: 09/05/1991

Global Id: T0602300042
Status: Open - Verification Monitoring
Status Date: 09/05/1991

Global Id: T0602300042
Status: Completed - Case Closed
Status Date: 11/16/1992

---

**E27** **UNOCAL #0885** **LUST S102424002**
**WSW** **1033 G** **HIST CORTESE N/A**
**1/4-1/2** **ARCATA, CA 95518**
**0.293 mi.**
**1549 ft.** **Site 3 of 3 in cluster E**

**Relative:**
**Lower**

**Actual:**
**48 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300412
Global Id: T0602300412
Latitude: 40.869881
Longitude: -124.08562
Status: Completed - Case Closed
Status Date: 04/28/1998
Case Worker: MAV
RB Case Number: 1THU548
Local Agency: HUMBOLDT COUNTY LOP
File Location: Not reported
Local Case Number: 12548
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T0602300412
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602300412
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602300412

**UNOCAL #0885 (Continued)** **S102424002**

Action Type: Other
Date: 02/02/1996
Action: Leak Discovery

Global Id: T0602300412
Action Type: Other
Date: 02/02/1996
Action: Leak Stopped

Global Id: T0602300412
Action Type: Other
Date: 02/02/1996
Action: Leak Reported

LUST:
Global Id: T0602300412
Status: Open - Case Begin Date
Status Date: 02/02/1996

Global Id: T0602300412
Status: Open - Site Assessment
Status Date: 02/16/1996

Global Id: T0602300412
Status: Open - Remediation
Status Date: 04/03/1998

Global Id: T0602300412
Status: Open - Site Assessment
Status Date: 04/03/1998

Global Id: T0602300412
Status: Open - Verification Monitoring
Status Date: 04/03/1998

Global Id: T0602300412
Status: Completed - Case Closed
Status Date: 04/28/1998

LUST REG 1:
Region: 1
Facility ID: 1THU548
Staff Initials: Closed

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU548

**28**
**SSW**
**1/4-1/2**
**0.299 mi.**
**1580 ft.**

**MAD RIVER HARDWOOD COMPANY**
**ARCATA, CA 0**

**SLIC** **S105180553**
**N/A**

**Relative:**
**Lower**

**Actual:**
**24 ft.**

SLIC REG 1:
Region: 1
Facility ID: 1NHU872
Staff Initials: AAA

---

**G29**
**SW**
**1/4-1/2**
**0.309 mi.**
**1629 ft.**

**ARCATA FIRE PROTECTION**
**631 NINTH STREET**
**ARCATA, CA 95521**
**Site 1 of 2 in cluster G**

**LUST** **S100223965**
**HIST UST** **N/A**
**HIST CORTESE**

**Relative:**
**Lower**

**Actual:**
**36 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300021
Global Id: T0602300021
Latitude: 40.8685617
Longitude: -124.0839456
Status: Completed - Case Closed
Status Date: 02/11/2003
Case Worker: MAV
RB Case Number: 1THU021
Local Agency: HUMBOLDT COUNTY LOP
File Location: Not reported
Local Case Number: 12021
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602300021
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602300021
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602300021
Action Type: Other
Date: 03/04/1988
Action: Leak Discovery

**ARCATA FIRE PROTECTION (Continued)** **S100223965**

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 11/01/2002
Action: Staff Letter

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 10/10/2002
Action: Technical Correspondence / Assistance / Other

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 11/01/2002
Action: Technical Correspondence / Assistance / Other

Global Id: T0602300021
Action Type: Other
Date: 03/04/1988
Action: Leak Stopped

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 11/01/2002
Action: * No Action

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 11/01/2002
Action: Technical Correspondence / Assistance / Other

Global Id: T0602300021
Action Type: Other
Date: 03/04/1988
Action: Leak Reported

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 10/24/2002
Action: Technical Correspondence / Assistance / Other

Global Id: T0602300021
Action Type: ENFORCEMENT
Date: 09/01/1988
Action: * Historical Enforcement

LUST:
Global Id: T0602300021
Status: Open - Case Begin Date
Status Date: 03/04/1988

Global Id: T0602300021
Status: Open - Site Assessment
Status Date: 03/04/1988

Global Id: T0602300021
Status: Open - Site Assessment
Status Date: 10/11/1988

**ARCATA FIRE PROTECTION (Continued)** **S100223965**

Global Id: T0602300021
Status: Open - Site Assessment
Status Date: 11/21/1988

Global Id: T0602300021
Status: Open - Site Assessment
Status Date: 01/07/1992

Global Id: T0602300021
Status: Completed - Case Closed
Status Date: 02/11/2003

LUST REG 1:
Region: 1
Facility ID: 1THU021
Staff Initials: HUM

HIST UST:
File Number: 00025C48
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00025C48.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU021

**G30**
**WSW**
**1/4-1/2**
**0.313 mi.**
**1653 ft.**

**OLD ARCATA CITY HALL**
**900 G STREET**
**ARCATA, CA 95521**

**Site 2 of 2 in cluster G**

**LUST** **S106163430**
**N/A**

**Relative:**
**Lower**

**Actual:**
**40 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602379923 |
| Global Id: | T0602379923 |
| Latitude: | 40.868924 |
| Longitude: | -124.085413 |
| Status: | Completed - Case Closed |
| Status Date: | 08/11/2004 |
| Case Worker: | BS |
| RB Case Number: | 1THU798 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Local Agency |
| Local Case Number: | 12798 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Heating Oil / Fuel Oil |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602379923 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | BOB STONE |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H STREET, SUITE 100 |
| City: | EUREKA |
| Email: | bstone@co.humboldt.ca.us |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602379923 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP CLOSED SITE |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | Not reported |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602379923 |
| Action Type: | ENFORCEMENT |
| Date: | 03/16/2004 |
| Action: | * No Action |

| | |
|---|---|
| Global Id: | T0602379923 |
| Action Type: | Other |
| Date: | 07/30/2003 |
| Action: | Leak Stopped |

| | |
|---|---|
| Global Id: | T0602379923 |
| Action Type: | ENFORCEMENT |
| Date: | 11/21/2003 |
| Action: | Technical Correspondence / Assistance / Other |

**OLD ARCATA CITY HALL (Continued)** **S106163430**

Global Id: T0602379923
Action Type: ENFORCEMENT
Date: 07/02/2004
Action: LOP Case Closure Summary to RB

Global Id: T0602379923
Action Type: Other
Date: 06/13/2003
Action: Leak Discovery

Global Id: T0602379923
Action Type: ENFORCEMENT
Date: 01/07/2004
Action: Staff Letter

Global Id: T0602379923
Action Type: ENFORCEMENT
Date: 07/26/2004
Action: Technical Correspondence / Assistance / Other

Global Id: T0602379923
Action Type: ENFORCEMENT
Date: 03/04/2004
Action: Staff Letter

Global Id: T0602379923
Action Type: ENFORCEMENT
Date: 08/11/2004
Action: Closure/No Further Action Letter

Global Id: T0602379923
Action Type: REMEDIATION
Date: 07/30/2003
Action: Excavation

Global Id: T0602379923
Action Type: Other
Date: 06/13/2003
Action: Leak Reported

Global Id: T0602379923
Action Type: ENFORCEMENT
Date: 12/17/2003
Action: Meeting

LUST:
Global Id: T0602379923
Status: Open - Case Begin Date
Status Date: 06/13/2003

Global Id: T0602379923
Status: Open - Remediation
Status Date: 07/30/2003

Global Id: T0602379923
Status: Open - Site Assessment
Status Date: 07/30/2003

**OLD ARCATA CITY HALL (Continued)** **S106163430**

| | |
|---|---|
| Global Id: | T0602379923 |
| Status: | Open - Site Assessment |
| Status Date: | 12/17/2003 |
| Global Id: | T0602379923 |
| Status: | Open - Site Assessment |
| Status Date: | 01/07/2004 |
| Global Id: | T0602379923 |
| Status: | Open - Site Assessment |
| Status Date: | 03/04/2004 |
| Global Id: | T0602379923 |
| Status: | Open - Site Assessment |
| Status Date: | 03/16/2004 |
| Global Id: | T0602379923 |
| Status: | Open - Site Assessment |
| Status Date: | 06/30/2004 |
| Global Id: | T0602379923 |
| Status: | Open - Site Assessment |
| Status Date: | 07/01/2004 |
| Global Id: | T0602379923 |
| Status: | Completed - Case Closed |
| Status Date: | 08/11/2004 |

---

**31**
**SSW**
**1/4-1/2**
**0.346 mi.**
**1825 ft.**

**ARCATA, CITY OF, CBD UNDERGROUND UTILITY** **SLIC** **S109117932**
**CENTRAL BUSINESS DISTRICT** **N/A**
**ARCATA, CA 95551**

**Relative:**
**Lower**

**Actual:**
**22 ft.**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Open - Inactive** |
| Status Date: | 12/29/2010 |
| Global Id: | T0602393463 |
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 40.8688272941625 |
| Longitude: | -124.087277045023 |
| Case Type: | Cleanup Program Site |
| Case Worker: | PBN |
| Local Agency: | HUMBOLDT COUNTY LOP |
| RB Case Number: | 1NHU628 |
| File Location: | Regional Board |
| Potential Media Affected: | Aquifer used for drinking water supply, Other Groundwater (uses other than drinking water), Soil |
| Potential Contaminants of Concern: | * Petroleum - Home heating oil |
| Site History: | Site location is in middle of city center, not a single property. This site covers an area ranging from 7th Street to 11th Street and F Street to I Street in downtown Arcata |

Click here to access the California GeoTracker records for this facility:

**H32** **SCIARONI PROPERTY** **LUST** **S100272086**
**NNW** **1800 BOTTOMS** **HIST CORTESE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.348 mi.**
**1837 ft.** **Site 1 of 6 in cluster H**

**Relative:**
**Lower**

**Actual:**
**76 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300229 |
| Global Id: | T0602300229 |
| Latitude: | 40.8760668 |
| Longitude: | -124.0835682 |
| Status: | Completed - Case Closed |
| Status Date: | 03/16/1994 |
| Case Worker: | ZZZ |
| RB Case Number: | 1THU299 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | Not reported |
| Potential Media Affect: | Aquifer used for drinking water supply |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300229 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602300229 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | REGIONAL WATER BOARD SITE CLOSED |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | craig.hunt@waterboards.ca.gov |
| Phone Number: | 7075762220 |

LUST:

| | |
|---|---|
| Global Id: | T0602300229 |
| Action Type: | Other |
| Date: | 10/04/1990 |
| Action: | Leak Stopped |

| | |
|---|---|
| Global Id: | T0602300229 |
| Action Type: | Other |
| Date: | 10/04/1990 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0602300229 |
| Action Type: | Other |
| Date: | 10/04/1990 |
| Action: | Leak Reported |

**SCIARONI PROPERTY (Continued)** **S100272086**

Global Id: T0602300229
Action Type: ENFORCEMENT
Date: 10/12/1990
Action: * Historical Enforcement

LUST:
Global Id: T0602300229
Status: Open - Case Begin Date
Status Date: 10/04/1990

Global Id: T0602300229
Status: Open - Site Assessment
Status Date: 10/12/1990

Global Id: T0602300229
Status: Open - Site Assessment
Status Date: 05/20/1991

Global Id: T0602300229
Status: Open - Site Assessment
Status Date: 07/03/1991

Global Id: T0602300229
Status: Open - Site Assessment
Status Date: 02/11/1992

Global Id: T0602300229
Status: Open - Remediation
Status Date: 03/15/1994

Global Id: T0602300229
Status: Open - Verification Monitoring
Status Date: 03/15/1994

Global Id: T0602300229
Status: Completed - Case Closed
Status Date: 03/16/1994

LUST REG 1:
Region: 1
Facility ID: 1THU299
Staff Initials: Closed

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU299

**I33** **GHERA PROPERTY** **SLIC** **S105050932**
**WSW** **987 H STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95221**
**0.352 mi.**
**1858 ft.** **Site 1 of 3 in cluster I**

**Relative:**
**Lower**

**Actual:**
**36 ft.**

SLIC REG 1:
Region: 1
Facility ID: 1NHU522
Staff Initials: KSA

---

**I34** **DELUXE CLEANERS** **SEMS-ARCHIVE** **1000818608**
**WSW** **987 H ST** **RCRA-SQG** **CAD983645094**
**1/4-1/2** **ARCATA, CA 95521** **SLIC**
**0.352 mi.** **FINDS**
**1858 ft.** **Site 2 of 3 in cluster I** **ECHO**
**ENF**

**Relative:**
**Lower** **HAZNET**

**Actual:**
**36 ft.**

SEMS Archive:
Site ID: 905260
EPA ID: CAD983645094
Cong District: 1
FIPS Code: 6023
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:
Region: 9
Site ID: 905260
EPA ID: CAD983645094
Site Name: DELUXE CLEANERS
NPL: N
FF: N
OU: 0
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1999-08-20 00:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 9
Site ID: 905260
EPA ID: CAD983645094
Site Name: DELUXE CLEANERS
NPL: N
FF: N
OU: 0
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1995-05-11 00:00:00
Finish Date: 1995-05-11 00:00:00
Qual: Not reported
Current Action Lead: St Perf

Region: 9

**DELUXE CLEANERS (Continued)** **1000818608**

Site ID: 905260
EPA ID: CAD983645094
Site Name: DELUXE CLEANERS
NPL: N
FF: N
OU: 0
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: Not reported
Finish Date: 1999-08-20 00:00:00
Qual: N
Current Action Lead: St Perf

Region: 9
Site ID: 905260
EPA ID: CAD983645094
Site Name: DELUXE CLEANERS
NPL: N
FF: N
OU: 0
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1999-08-20 00:00:00
Qual: N
Current Action Lead: St Perf

RCRA-SQG:
Date form received by agency: 07/27/1992
Facility name: DELUXE CLEANERS
Facility address: 987 H ST
ARCATA, CA 95521
EPA ID: CAD983645094
Contact: EDWARD DUNCAN
Contact address: 987 H ST
ARCATA, CA 95521
Contact country: US
Contact telephone: 707-822-2194
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: EDWARD DUNCAN
Owner/operator address: 987 H ST
ARCATA, CA 95521
Owner/operator country: Not reported
Owner/operator telephone: 707-822-2194

**DELUXE CLEANERS (Continued)** **1000818608**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

SLIC:
Region: STATE
**Facility Status:** **Open - Site Assessment**
Status Date: 10/06/2014
Global Id: T0602393218
Lead Agency: NORTH COAST RWQCB (REGION 1)
Lead Agency Case Number: Not reported
Latitude: 40.8697426424342
Longitude: -124.086742559525
Case Type: Cleanup Program Site
Case Worker: JAT
Local Agency: HUMBOLDT COUNTY LOP
RB Case Number: 1NHU522
File Location: Regional Board
Potential Media Affected: Aquifer used for drinking water supply, Under Investigation
Potential Contaminants of Concern: * Solvents, Dichloroethene (DCE), Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

FINDS:

Registry ID: 110002882346

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

**DELUXE CLEANERS (Continued)** **1000818608**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

| | |
|---|---|
| Envid: | 1000818608 |
| Registry ID: | 110002882346 |
| DFR URL: | http://echo.epa.gov/detailed-facility-report?fid=110002882346 |

ENF:

| | |
|---|---|
| Region: | 1 |
| Facility Id: | 227116 |
| Agency Name: | Not reported |
| Place Type: | Facility |
| Place Subtype: | Groundwater Cleanup Site |
| Facility Type: | All other facilities |
| Agency Type: | Not reported |
| # Of Agencies: | Not reported |
| Place Latitude: | 40.869753 |
| Place Longitude: | -124.086585 |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Enf Action |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | Not reported |
| Program Category1: | Not reported |
| Program Category2: | TANKS |
| # Of Programs: | Not reported |
| WDID: | Not reported |
| Reg Measure Id: | Not reported |
| Reg Measure Type: | Not reported |
| Region: | Not reported |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Not reported |
| Status Date: | Not reported |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Not reported |
| Individual/General: | Not reported |
| Fee Code: | Not reported |
| Direction/Voice: | Not reported |
| Enforcement Id(EID): | 225690 |
| Region: | 1 |
| Order / Resolution Number: | LT970820 |
| Enforcement Action Type: | Staff Enforcement Letter |
| Effective Date: | 08/20/1997 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 08/20/1997 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 1B1HU522NSL Ghera Property |
| Description: | REQUESTING SUBMITTAL OF ADDENDUM. |
| Program: | SLIC |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |

| | |
|---|---|
| Region: | 1 |
| Facility Id: | 227116 |
| Agency Name: | Not reported |
| Place Type: | Facility |
| Place Subtype: | Groundwater Cleanup Site |
| Facility Type: | All other facilities |
| Agency Type: | Not reported |
| # Of Agencies: | Not reported |
| Place Latitude: | 40.869753 |
| Place Longitude: | -124.086585 |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Enf Action |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | Not reported |
| Program Category1: | Not reported |
| Program Category2: | TANKS |
| # Of Programs: | Not reported |
| WDID: | Not reported |
| Reg Measure Id: | Not reported |
| Reg Measure Type: | Not reported |
| Region: | Not reported |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Not reported |
| Status Date: | Not reported |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Not reported |
| Individual/General: | Not reported |
| Fee Code: | Not reported |
| Direction/Voice: | Not reported |
| Enforcement Id(EID): | 225628 |
| Region: | 1 |
| Order / Resolution Number: | LT971017 |
| Enforcement Action Type: | Staff Enforcement Letter |
| Effective Date: | 10/17/1997 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| Termination Date: | 10/17/1997 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 1B1HU522NSL Ghera Property |
| Description: | REQUESTING SUBMITTAL OF WORKPLAN ADDENDUM. |
| Program: | SLIC |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |
| | |
| Region: | 1 |
| Facility Id: | 227116 |
| Agency Name: | Not reported |
| Place Type: | Facility |
| Place Subtype: | Groundwater Cleanup Site |
| Facility Type: | All other facilities |
| Agency Type: | Not reported |
| # Of Agencies: | Not reported |
| Place Latitude: | 40.869753 |
| Place Longitude: | -124.086585 |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Enf Action |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | Not reported |
| Program Category1: | Not reported |
| Program Category2: | TANKS |
| # Of Programs: | Not reported |
| WDID: | Not reported |
| Reg Measure Id: | Not reported |
| Reg Measure Type: | Not reported |
| Region: | Not reported |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Not reported |
| Status Date: | Not reported |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Not reported |
| Individual/General: | Not reported |
| Fee Code: | Not reported |
| Direction/Voice: | Not reported |
| Enforcement Id(EID): | 221642 |
| Region: | 1 |
| Order / Resolution Number: | LT941005 |
| Enforcement Action Type: | Staff Enforcement Letter |
| Effective Date: | 10/05/1994 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 10/05/1994 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 1B1HU522NSL Ghera Property |
| Description: | REQUESTING SUBMITTAL OF WORKPLAN. |
| Program: | SLIC |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |

| | |
|---|---|
| Region: | 1 |
| Facility Id: | 227116 |
| Agency Name: | Not reported |
| Place Type: | Facility |
| Place Subtype: | Groundwater Cleanup Site |
| Facility Type: | All other facilities |
| Agency Type: | Not reported |
| # Of Agencies: | Not reported |
| Place Latitude: | 40.869753 |
| Place Longitude: | -124.086585 |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Enf Action |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | Not reported |
| Program Category1: | Not reported |
| Program Category2: | TANKS |
| # Of Programs: | Not reported |
| WDID: | Not reported |
| Reg Measure Id: | Not reported |
| Reg Measure Type: | Not reported |
| Region: | Not reported |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Not reported |
| Status Date: | Not reported |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Not reported |
| Individual/General: | Not reported |
| Fee Code: | Not reported |
| Direction/Voice: | Not reported |
| Enforcement Id(EID): | 221280 |
| Region: | 1 |
| Order / Resolution Number: | LT950412 |
| Enforcement Action Type: | Staff Enforcement Letter |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| Effective Date: | 04/12/1995 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 04/12/1995 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 1B1HU522NSL Ghera Property |
| Description: | REQUESTING SUBMITTAL OF WORKPLAN. |
| Program: | SLIC |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |

| | |
|---|---|
| Region: | 1 |
| Facility Id: | 227116 |
| Agency Name: | Not reported |
| Place Type: | Facility |
| Place Subtype: | Groundwater Cleanup Site |
| Facility Type: | All other facilities |
| Agency Type: | Not reported |
| # Of Agencies: | Not reported |
| Place Latitude: | 40.869753 |
| Place Longitude: | -124.086585 |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Enf Action |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | Not reported |
| Program Category1: | Not reported |
| Program Category2: | TANKS |
| # Of Programs: | Not reported |
| WDID: | Not reported |

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| Reg Measure Id: | Not reported |
| Reg Measure Type: | Not reported |
| Region: | Not reported |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Not reported |
| Status Date: | Not reported |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Not reported |
| Individual/General: | Not reported |
| Fee Code: | Not reported |
| Direction/Voice: | Not reported |
| Enforcement Id(EID): | 221131 |
| Region: | 1 |
| Order / Resolution Number: | LT960118 |
| Enforcement Action Type: | Staff Enforcement Letter |
| Effective Date: | 01/18/1996 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 01/18/1996 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 1B1HU522NSL Ghera Property |
| Description: | REQUESTING SUBMITTAL OF BRIEF WORKPLAN ADDENDUM. |
| Program: | SLIC |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | 0 |
| Initial Assessed Amount: | 0 |
| Liability $ Amount: | 0 |
| Project $ Amount: | 0 |
| Liability $ Paid: | 0 |
| Project $ Completed: | 0 |
| Total $ Paid/Completed Amount: | 0 |

HAZNET:

| | |
|---|---|
| envid: | 1000818608 |
| Year: | 1998 |
| GEPAID: | CAD983645094 |
| Contact: | EDWARD DUNCAN |
| Telephone: | 7078222194 |
| Mailing Name: | Not reported |

**DELUXE CLEANERS (Continued)** **1000818608**

Mailing Address: 1901 GLENDALE DR
Mailing City,St,Zip: MCKINLEYVILLE, CA 955199212
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Transfer Station
Tons: 1.6850
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Humboldt

envid: 1000818608
Year: 1997
GEPAID: CAD983645094
Contact: EDWARD DUNCAN
Telephone: 7078222194
Mailing Name: Not reported
Mailing Address: 1901 GLENDALE DR
Mailing City,St,Zip: MCKINLEYVILLE, CA 955199212
Gen County: Not reported
TSD EPA ID: CAT000613943
TSD County: Not reported
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Transfer Station
Tons: 2.7375
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Humboldt

envid: 1000818608
Year: 1996
GEPAID: CAD983645094
Contact: EDWARD DUNCAN
Telephone: 7078222194
Mailing Name: Not reported
Mailing Address: 1901 GLENDALE DR
Mailing City,St,Zip: MCKINLEYVILLE, CA 955199212
Gen County: Not reported
TSD EPA ID: CAT000613943
TSD County: Not reported
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Transfer Station
Tons: 1.7325
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Humboldt

envid: 1000818608
Year: 1995
GEPAID: CAD983645094
Contact: EDWARD DUNCAN
Telephone: 7078222194
Mailing Name: Not reported
Mailing Address: 1901 GLENDALE DR
Mailing City,St,Zip: MCKINLEYVILLE, CA 955199212
Gen County: Not reported

**DELUXE CLEANERS (Continued)** **1000818608**

| | |
|---|---|
| TSD EPA ID: | CAT000613943 |
| TSD County: | Not reported |
| Waste Category: | Liquids with halogenated organic compounds >= 1,000 Mg./L |
| Disposal Method: | Transfer Station |
| Tons: | 1.7850 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

| | |
|---|---|
| envid: | 1000818608 |
| Year: | 1994 |
| GEPAID: | CAD983645094 |
| Contact: | EDWARD DUNCAN |
| Telephone: | 7078222194 |
| Mailing Name: | Not reported |
| Mailing Address: | 1901 GLENDALE DR |
| Mailing City,St,Zip: | MCKINLEYVILLE, CA 955199212 |
| Gen County: | Not reported |
| TSD EPA ID: | CAT000613943 |
| TSD County: | Not reported |
| Waste Category: | Liquids with halogenated organic compounds >= 1,000 Mg./L |
| Disposal Method: | Transfer Station |
| Tons: | 1.5975 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

---

**H35** **PHILLY CHEESE STEAK SHOP/FORMER CHEVRON** **LUST** **S111293373**
**NNW** **1811 G STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.353 mi.**
**1866 ft.** **Site 2 of 6 in cluster H**

**Relative:**
**Lower**

**Actual:**
**75 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003375 |
| Global Id: | T10000003375 |
| Latitude: | 40.8761503876492 |
| Longitude: | -124.083343975394 |
| Status: | Open - Site Assessment |
| Status Date: | 08/25/2014 |
| Case Worker: | MAV |
| RB Case Number: | 1THU939 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Local Agency |
| Local Case Number: | 12939 |
| Potential Media Affect: | Other Groundwater (uses other than drinking water), Soil |
| Potential Contaminants of Concern: | Diesel |
| Site History: | GW contamination discovered during site renovation. |

LUST:

| | |
|---|---|
| Global Id: | T10000003375 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP LEAD |

**PHILLY CHEESE STEAK SHOP/FORMER CHEVRON (Continued)** **S111293373**

Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: beth.lamb@waterboards.ca.gov
Phone Number: 7075762669

Global Id: T10000003375
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T10000003375
Action Type: REMEDIATION
Date: 02/24/2012
Action: Monitored Natural Attenuation

Global Id: T10000003375
Action Type: Other
Date: 11/07/2011
Action: Leak Stopped

Global Id: T10000003375
Action Type: RESPONSE
Date: 06/28/2017
Action: Request for Closure - Regulator Responded

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 11/07/2011
Action: Notice of Responsibility

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 01/09/2012
Action: Notice of Responsibility

Global Id: T10000003375
Action Type: Other
Date: 11/07/2011
Action: Leak Reported

Global Id: T10000003375
Action Type: Other
Date: 11/07/2011
Action: Leak Began

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 11/17/2015
Action: Staff Letter

Global Id: T10000003375

**PHILLY CHEESE STEAK SHOP/FORMER CHEVRON (Continued)** **S111293373**

Action Type: ENFORCEMENT
Date: 08/24/2017
Action: Staff Letter

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 06/30/2014
Action: File review

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 05/14/2015
Action: Site Visit / Inspection / Sampling

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 06/05/2015
Action: Notice of Violation - #12939.NOV1

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 03/19/2012
Action: Notice of Responsibility

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 03/19/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T10000003375
Action Type: RESPONSE
Date: 04/05/2017
Action: Request for Closure - Regulator Responded

Global Id: T10000003375
Action Type: Other
Date: 11/07/2011
Action: Leak Discovery

Global Id: T10000003375
Action Type: RESPONSE
Date: 07/11/2016
Action: Site Investigation Workplan - Regulator Responded

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 03/29/2016
Action: Staff Letter

Global Id: T10000003375
Action Type: ENFORCEMENT
Date: 05/16/2017
Action: Staff Letter

LUST:
Global Id: T10000003375
Status: Open - Assessment & Interim Remedial Action

**PHILLY CHEESE STEAK SHOP/FORMER CHEVRON (Continued)** **S111293373**

Status Date: 11/07/2011

Global Id: T10000003375
Status: Open - Case Begin Date
Status Date: 11/07/2011

Global Id: T10000003375
Status: Open - Site Assessment
Status Date: 11/07/2011

Global Id: T10000003375
Status: Open - Verification Monitoring
Status Date: 02/24/2012

Global Id: T10000003375
Status: Open - Site Assessment
Status Date: 08/25/2014

Global Id: T10000003375
Status: Open - Verification Monitoring
Status Date: 08/25/2014

---

**I36** **NELSON PROPERTY** **SLIC** **S109521453**
**WSW** **854 10TH STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.362 mi.**
**1913 ft.** **Site 3 of 3 in cluster I**

**Relative:**
**Lower**

**Actual:**
**34 ft.**

SLIC:
Region: STATE
**Facility Status:** **Completed - Case Closed**
Status Date: 06/02/2009
Global Id: T10000000731
Lead Agency: NORTH COAST RWQCB (REGION 1)
Lead Agency Case Number: Not reported
Latitude: 40.87
Longitude: -124.0871
Case Type: Cleanup Program Site
Case Worker: ZZZ
Local Agency: Not reported
RB Case Number: 1NHU972
File Location: Regional Board
Potential Media Affected: Not reported
Potential Contaminants of Concern: Diesel, Gasoline, Other Petroleum
Site History: In January 2009 a discharge of Total Petroleum Hydrocarbons (TPH) as gasoline, diesel, and motor oil was discovered in the basement of the Humboldt Brewery building during remodeling. Initial site assessment documented the presence of TPH as gasoline up to 37 parts per million (ppm), diesel at 130 ppm, and motor oil at 150 ppm in soil. A grab groundwater sample indicated the presence of TPH as gasoline at 91 parts per billion (ppb), diesel at 550 ppb, and motor oil at 240 ppb. Approximately 144 cubic yards of contaminated soil was excavated and removed from the basement of the building. A confirmation soil sample indicated Diesel at 7.3 ppm and Motor Oil at 18 ppm. Four temporary groundwater sampling points were installed for groundwater collection and analysis. Groundwater samples did not indicate the presence of analytes with the exception of one groundwater sample which indicated

**NELSON PROPERTY (Continued)** **S109521453**

Tetrachloroethene (PCE) at 4.5 ppb. As PCE is a chemical not associated with the businesses formerly located at the property, it is suspected that the finding of PCE is related to adjacent contaminated sites.

Click here to access the California GeoTracker records for this facility:

---

**H37** **HUMBOLDT STATE UNIVERSITY - FORBES** **LUST** **S110654166**
**NNW** **GYMNASIUM LANE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.374 mi.**
**1973 ft.** **Site 3 of 6 in cluster H**

**Relative:**
**Lower**

**Actual:**
**71 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300373 |
| Global Id: | T0602300373 |
| Latitude: | 40.8766908 |
| Longitude: | -124.0830873 |
| Status: | Completed - Case Closed |
| Status Date: | 12/28/1994 |
| Case Worker: | ZZZ |
| RB Case Number: | 1THU493 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | Not reported |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Diesel |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300373 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602300373 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | REGIONAL WATER BOARD SITE CLOSED |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | craig.hunt@waterboards.ca.gov |
| Phone Number: | 7075762220 |

LUST:

| | |
|---|---|
| Global Id: | T0602300373 |
| Action Type: | Other |
| Date: | 08/10/1993 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0602300373 |
| Action Type: | Other |

**HUMBOLDT STATE UNIVERSITY - FORBES (Continued)** **S110654166**

Date: 08/10/1993
Action: Leak Stopped

Global Id: T0602300373
Action Type: Other
Date: 08/10/1993
Action: Leak Reported

LUST:
Global Id: T0602300373
Status: Open - Case Begin Date
Status Date: 08/10/1993

Global Id: T0602300373
Status: Open - Site Assessment
Status Date: 09/08/1993

Global Id: T0602300373
Status: Open - Site Assessment
Status Date: 05/05/1994

Global Id: T0602300373
Status: Open - Remediation
Status Date: 12/27/1994

Global Id: T0602300373
Status: Open - Site Assessment
Status Date: 12/27/1994

Global Id: T0602300373
Status: Open - Verification Monitoring
Status Date: 12/27/1994

Global Id: T0602300373
Status: Completed - Case Closed
Status Date: 12/28/1994

---

**H38** **SIMPSON TIMBER (BRAINARD)** **LUST** **S110654112**
**NNW** **BRAINARD YARD** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.374 mi.**
**1973 ft.** **Site 4 of 6 in cluster H**

**Relative:**
**Lower**

**Actual:**
**71 ft.**

LUST:
Lead Agency: NORTH COAST RWQCB (REGION 1)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300024
Global Id: T0602300024
Latitude: 40.8766908
Longitude: -124.0830873
Status: Completed - Case Closed
Status Date: 07/13/1994
Case Worker: ZZZ
RB Case Number: 1THU024
Local Agency: HUMBOLDT COUNTY LOP
File Location: Not reported

**SIMPSON TIMBER (BRAINARD) (Continued)** **S110654112**

Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602300024
Contact Type: Regional Board Caseworker
Contact Name: REGIONAL WATER BOARD SITE CLOSED
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: craig.hunt@waterboards.ca.gov
Phone Number: 7075762220

LUST:
Global Id: T0602300024
Action Type: ENFORCEMENT
Date: 02/15/1989
Action: * Historical Enforcement

Global Id: T0602300024
Action Type: Other
Date: 03/07/1988
Action: Leak Discovery

Global Id: T0602300024
Action Type: Other
Date: 03/07/1988
Action: Leak Stopped

Global Id: T0602300024
Action Type: Other
Date: 03/07/1988
Action: Leak Reported

LUST:
Global Id: T0602300024
Status: Open - Case Begin Date
Status Date: 03/07/1988

Global Id: T0602300024
Status: Open - Site Assessment
Status Date: 03/07/1988

Global Id: T0602300024
Status: Open - Site Assessment
Status Date: 09/05/1989

Global Id: T0602300024
Status: Open - Site Assessment
Status Date: 09/14/1989

Global Id: T0602300024
Status: Open - Site Assessment
Status Date: 01/16/1990

**SIMPSON TIMBER (BRAINARD) (Continued)** **S110654112**

Global Id: T0602300024
Status: Open - Remediation
Status Date: 07/12/1994

Global Id: T0602300024
Status: Open - Verification Monitoring
Status Date: 07/12/1994

Global Id: T0602300024
Status: Completed - Case Closed
Status Date: 07/13/1994

---

**H39** **HUMBOLDT STATE UNIVERSITY - TH'R ARTS** **LUST** **S110654161**
**NNW** **HSU SEQUOIA MALL** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.374 mi.**
**1973 ft.** **Site 5 of 6 in cluster H**

**Relative:**
**Lower**

**Actual:**
**71 ft.**

LUST:
Lead Agency: NORTH COAST RWQCB (REGION 1)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300330
Global Id: T0602300330
Latitude: 40.8766908
Longitude: -124.0830873
Status: Completed - Case Closed
Status Date: 10/06/1995
Case Worker: ZZZ
RB Case Number: 1THU435
Local Agency: HUMBOLDT COUNTY LOP
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0602300330
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

Global Id: T0602300330
Contact Type: Regional Board Caseworker
Contact Name: REGIONAL WATER BOARD SITE CLOSED
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: craig.hunt@waterboards.ca.gov
Phone Number: 7075762220

LUST:
Global Id: T0602300330

**HUMBOLDT STATE UNIVERSITY - TH'R ARTS (Continued)** **S110654161**

Action Type: ENFORCEMENT
Date: 10/30/1992
Action: * Historical Enforcement

Global Id: T0602300330
Action Type: Other
Date: 09/14/1992
Action: Leak Stopped

Global Id: T0602300330
Action Type: Other
Date: 09/14/1992
Action: Leak Discovery

Global Id: T0602300330
Action Type: Other
Date: 09/14/1992
Action: Leak Reported

LUST:
Global Id: T0602300330
Status: Open - Case Begin Date
Status Date: 09/14/1992

Global Id: T0602300330
Status: Open - Site Assessment
Status Date: 10/30/1992

Global Id: T0602300330
Status: Open - Site Assessment
Status Date: 08/05/1993

Global Id: T0602300330
Status: Open - Site Assessment
Status Date: 08/18/1993

Global Id: T0602300330
Status: Open - Remediation
Status Date: 10/05/1995

Global Id: T0602300330
Status: Open - Site Assessment
Status Date: 10/05/1995

Global Id: T0602300330
Status: Open - Verification Monitoring
Status Date: 10/05/1995

Global Id: T0602300330
Status: Completed - Case Closed
Status Date: 10/06/1995

**H40** **REDWOOD EMPIRE AGGREGATES** **LUST** **S110654130**
**NNW** **HIGHWAY 101/GUINTOLI** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.374 mi.**
**1973 ft.** **Site 6 of 6 in cluster H**

**Relative:**
**Lower**

**Actual:**
**71 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300131 |
| Global Id: | T0602300131 |
| Latitude: | 40.8766908 |
| Longitude: | -124.0830873 |
| Status: | Completed - Case Closed |
| Status Date: | 12/09/1992 |
| Case Worker: | ZZZ |
| RB Case Number: | 1THU165 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | Not reported |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Diesel |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300131 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602300131 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | REGIONAL WATER BOARD SITE CLOSED |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | craig.hunt@waterboards.ca.gov |
| Phone Number: | 7075762220 |

LUST:

| | |
|---|---|
| Global Id: | T0602300131 |
| Action Type: | ENFORCEMENT |
| Date: | 09/07/1989 |
| Action: | * Historical Enforcement |

| | |
|---|---|
| Global Id: | T0602300131 |
| Action Type: | Other |
| Date: | 09/07/1989 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0602300131 |
| Action Type: | Other |
| Date: | 09/07/1989 |
| Action: | Leak Stopped |

**REDWOOD EMPIRE AGGREGATES (Continued)** **S110654130**

Global Id: T0602300131
Action Type: Other
Date: 09/07/1989
Action: Leak Reported

LUST:
Global Id: T0602300131
Status: Open - Case Begin Date
Status Date: 09/07/1989

Global Id: T0602300131
Status: Open - Site Assessment
Status Date: 09/07/1989

Global Id: T0602300131
Status: Open - Remediation
Status Date: 12/08/1992

Global Id: T0602300131
Status: Open - Site Assessment
Status Date: 12/08/1992

Global Id: T0602300131
Status: Open - Verification Monitoring
Status Date: 12/08/1992

Global Id: T0602300131
Status: Completed - Case Closed
Status Date: 12/09/1992

---

**41**
**SW**
**1/4-1/2**
**0.378 mi.**
**1995 ft.**

**LITTLE LAKES INDUSTRIES** **US BROWNFIELDS** **1012238251**
**748 F ST** **N/A**
**ARCATA, CA 95521**

**Relative:**
**Lower**

**Actual:**
**25 ft.**

US BROWNFIELDS:
Property Name: LITTLE LAKES INDUSTRIES
Recipient Name: California Trade and Commerce Agency
Grant Type: Assessment
Property Number: Not reported
Parcel size: 12
Latitude: 40.86743
Longitude: -124.085154
HCM Label: Not reported
Map Scale: Not reported
Point of Reference: Not reported
Highlights: Not reported
Datum: Not reported
Acres Property ID: 12761
IC Data Access: Not reported
Start Date: 03/31/2003 00:00:00
Redev Completition Date: Not reported
Completed Date: 03/31/2003 00:00:00
Acres Cleaned Up: Not reported
Cleanup Funding: Not reported

**LITTLE LAKES INDUSTRIES (Continued)** **1012238251**

| | |
|---|---|
| Cleanup Funding Source: | Not reported |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Grant Type: | N/A |
| Accomplishment Type: | Phase I Environmental Assessment |
| Accomplishment Count: | 0 |
| Cooperative Agreement Number: | 98913701 |
| Start Date: | 03/31/2003 00:00:00 |
| Ownership Entity: | Not reported |
| Completion Date: | 03/31/2003 00:00:00 |
| Current Owner: | Not reported |
| Did Owner Change: | Not reported |
| Cleanup Required: | Y |
| Video Available: | Not reported |
| Photo Available: | Not reported |
| Institutional Controls Required: | Not reported |
| IC Category Proprietary Controls: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| IC in place date: | Not reported |
| IC in place: | U |
| State/tribal program date: | Not reported |
| State/tribal program ID: | Not reported |
| State/tribal NFA date: | Not reported |
| Air contaminated: | Not reported |
| Air cleaned: | Not reported |
| Asbestos found: | Not reported |
| Asbestos cleaned: | Not reported |
| Controled substance found: | Not reported |
| Controled substance cleaned: | Not reported |
| Drinking water affected: | Not reported |
| Drinking water cleaned: | Not reported |
| Groundwater affected: | Not reported |
| Groundwater cleaned: | Not reported |
| Lead contaminant found: | Not reported |
| Lead cleaned up: | Not reported |
| No media affected: | Not reported |
| Unknown media affected: | Not reported |
| Other cleaned up: | Not reported |
| Other metals found: | Not reported |
| Other metals cleaned: | Not reported |
| Other contaminants found: | Not reported |
| Other contams found description: | Not reported |
| PAHs found: | Not reported |
| PAHs cleaned up: | Not reported |
| PCBs found: | Not reported |
| PCBs cleaned up: | Not reported |
| Petro products found: | Not reported |
| Petro products cleaned: | Not reported |
| Sediments found: | Not reported |

**LITTLE LAKES INDUSTRIES (Continued)** **1012238251**

| | |
|---|---|
| Sediments cleaned: | Not reported |
| Soil affected: | Not reported |
| Soil cleaned up: | Not reported |
| Surface water cleaned: | Not reported |
| VOCs found: | Not reported |
| VOCs cleaned: | Not reported |
| Cleanup other description: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| Surface Water: | Not reported |
| Past use commercial acreage: | Not reported |
| Past use industrial acreage: | Not reported |
| Future use greenspace acreage: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Future use industrial acreage: | Not reported |
| Greenspace acreage and type: | Not reported |
| Superfund Fed. landowner flag: | Not reported |
| Arsenic cleaned up: | Not reported |
| Cadmium cleaned up: | Not reported |
| Chromium cleaned up: | Not reported |
| Copper cleaned up: | Not reported |
| Iron cleaned up: | Not reported |
| mercury cleaned up: | Not reported |
| Nickel Cleaned Up: | Not reported |
| No clean up: | Not reported |
| Pesticides cleaned up: | Not reported |
| Selenium cleaned up: | Not reported |
| SVOCs cleaned up: | Not reported |
| Unknown clean up: | Not reported |
| Arsenic contaminant found: | Not reported |
| Cadmium contaminant found: | Not reported |
| Chromium contaminant found: | Not reported |
| Copper contaminant found: | Not reported |
| Iron contaminant found: | Not reported |
| Mercury contaminant found: | Not reported |
| Nickel contaminant found: | Not reported |
| No contaminant found: | Not reported |
| Pesticides contaminant found: | Not reported |
| Selenium contaminant found: | Not reported |
| SVOCs contaminant found: | Not reported |
| Unknown contaminant found: | Not reported |
| Future Use: Multistory | Not reported |
| Media affected Bluiding Material: | Not reported |
| Media affected indoor air: | Not reported |
| Building material media cleaned up: | Not reported |
| Indoor air media cleaned up: | Not reported |
| Unknown media cleaned up: | Not reported |
| Past Use: Multistory | Not reported |
| Property Description: | Not reported |
| Below Poverty Number: | 1198 |
| Below Poverty Percent: | 2.7% |
| Meidan Income: | 2943 |
| Meidan Income Number: | 1905 |
| Meidan Income Percent: | 1.7% |
| Vacant Housing Number: | 98 |

**LITTLE LAKES INDUSTRIES (Continued)** **1012238251**

Vacant Housing Percent: 32.4%
Unemployed Number: 332
Unemployed Percent: 9.6%

---

**J42** **UNIVERSAL FOREST PRODUCTS** **SLIC** **S101315964**
**SSW** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.384 mi.**
**2030 ft.** **Site 1 of 2 in cluster J**

**Relative:**
**Lower**

**Actual:**
**13 ft.**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Completed - Case Closed** |
| Status Date: | 12/01/1996 |
| Global Id: | T0602393323 |
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 40.865692 |
| Longitude: | -124.081917 |
| Case Type: | Cleanup Program Site |
| Case Worker: | ZZZ |
| Local Agency: | HUMBOLDT COUNTY LOP |
| RB Case Number: | 1NHU489 |
| File Location: | Regional Board |
| Potential Media Affected: | Soil |
| Potential Contaminants of Concern: | Waste Oil / Motor / Hydraulic / Lubricating |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

SLIC REG 1:

| | |
|---|---|
| Region: | 1 |
| Facility ID: | 1NHU489 |
| Staff Initials: | Facility Closed |

---

**J43** **MANILA ELEMENTARY SCHOOL** **SLIC** **S101315915**
**SSW** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.384 mi.**
**2030 ft.** **Site 2 of 2 in cluster J**

**Relative:**
**Lower**

**Actual:**
**13 ft.**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Completed - Case Closed** |
| Status Date: | 09/11/1991 |
| Global Id: | T0602393563 |
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 40.865692 |
| Longitude: | -124.081917 |
| Case Type: | Cleanup Program Site |
| Case Worker: | ZZZ |
| Local Agency: | HUMBOLDT COUNTY LOP |
| RB Case Number: | 1NHU373 |
| File Location: | Regional Board |
| Potential Media Affected: | Soil |

**MANILA ELEMENTARY SCHOOL (Continued)** **S101315915**

Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 1:
Region: 1
Facility ID: 1NHU373
Staff Initials: Facility Closed

---

**K44** **ARCATA UNIONTOWN 76** **LUST** **S102439941**
**SW** **724 G STREET** **CUPA Listings** **N/A**
**1/4-1/2** **ARCATA, CA 95521** **EMI**
**0.402 mi.** **HAZNET**
**2121 ft.** **Site 1 of 2 in cluster K** **HIST CORTESE**

**Relative: Lower**

**Actual: 29 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300418
Global Id: T0602300418
Latitude: 40.867336822
Longitude: -124.086126114
Status: Completed - Case Closed
Status Date: 04/08/2014
Case Worker: MAV
RB Case Number: 1THU555
Local Agency: HUMBOLDT COUNTY LOP
File Location: Local Agency
Local Case Number: 12555
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602300418
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602300418
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602300418
Action Type: REMEDIATION
Date: 05/01/2006

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

| | |
|---|---|
| Action: | Soil Vapor Extraction (SVE) |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 05/30/2012 |
| Action: | Staff Letter |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 01/27/2005 |
| Action: | Notice of Responsibility |
| Global Id: | T0602300418 |
| Action Type: | Other |
| Date: | 05/23/1996 |
| Action: | Leak Discovery |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 10/09/2013 |
| Action: | Notification - Public Participation Document |
| Global Id: | T0602300418 |
| Action Type: | Other |
| Date: | 05/23/1996 |
| Action: | Leak Stopped |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 04/22/2008 |
| Action: | Staff Letter |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 06/24/2008 |
| Action: | Staff Letter |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 07/24/2009 |
| Action: | Staff Letter |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 11/08/2006 |
| Action: | Technical Correspondence / Assistance / Other |
| Global Id: | T0602300418 |
| Action Type: | RESPONSE |
| Date: | 10/02/2012 |
| Action: | Other Workplan |
| Global Id: | T0602300418 |
| Action Type: | ENFORCEMENT |
| Date: | 03/18/2008 |
| Action: | Staff Letter |

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 11/07/2011
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 10/09/2013
Action: Letter - Notice

Global Id: T0602300418
Action Type: RESPONSE
Date: 10/02/2012
Action: Other Workplan

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 05/13/2010
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 02/06/2012
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 08/07/2003
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 08/12/2003
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 06/03/2003
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 03/10/2004
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 04/08/2009
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

Date: 08/13/2009
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 09/15/2009
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 12/04/2006
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 03/06/2008
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 05/21/2008
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 08/31/2010
Action: Staff Letter

Global Id: T0602300418
Action Type: REMEDIATION
Date: 09/15/1999
Action: Pump & Treat (P&T) Groundwater

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 11/03/2008
Action: Staff Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 04/08/2014
Action: Closure/No Further Action Letter

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 05/04/2011
Action: Staff Letter

Global Id: T0602300418
Action Type: Other
Date: 05/23/1996
Action: Leak Reported

Global Id: T0602300418
Action Type: REMEDIATION
Date: 09/02/1999
Action: Soil Vapor Extraction (SVE)

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

Global Id: T0602300418
Action Type: ENFORCEMENT
Date: 01/25/2011
Action: Staff Letter

LUST:
Global Id: T0602300418
Status: Open - Case Begin Date
Status Date: 05/23/1996

Global Id: T0602300418
Status: Open - Site Assessment
Status Date: 06/14/1996

Global Id: T0602300418
Status: Open - Site Assessment
Status Date: 06/03/2003

Global Id: T0602300418
Status: Open - Site Assessment
Status Date: 08/07/2003

Global Id: T0602300418
Status: Open - Site Assessment
Status Date: 08/12/2003

Global Id: T0602300418
Status: Open - Site Assessment
Status Date: 12/15/2003

Global Id: T0602300418
Status: Open - Site Assessment
Status Date: 03/10/2004

Global Id: T0602300418
Status: Open - Remediation
Status Date: 03/06/2008

Global Id: T0602300418
Status: Open - Remediation
Status Date: 07/24/2009

Global Id: T0602300418
Status: Open - Verification Monitoring
Status Date: 08/13/2009

Global Id: T0602300418
Status: Open - Eligible for Closure
Status Date: 08/08/2013

Global Id: T0602300418
Status: Completed - Case Closed
Status Date: 04/08/2014

LUST REG 1:

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

Region: 1
Facility ID: 1THU555
Staff Initials: HUM

CUPA HUMBOLDT:
Local Site Id: FA0000355
Facility Address 2: Not reported
Program Identifier: CUPA - Hazardous Materials Facility Fee
Program Element Code Desc: 4202 4202 - Hazardous Materials Facility Fee
Permit Status: 02 - Inactive
Latitude: 40.86734
Longitude: -124.0861
CERS ID: 10020421
Facility Status: 01 - ACTIVE, BILLABLE

Local Site Id: FA0000355
Facility Address 2: Not reported
Program Identifier: CUPA - SQG
Program Element Code Desc: 4401 4401 - Hazardous Waste Generator (SQG)
Permit Status: 01 - Active
Latitude: 40.86734
Longitude: -124.0861
CERS ID: 10020421
Facility Status: 04 - ACTIVE, EXEMPT FROM BILLING

Local Site Id: FA0000355
Facility Address 2: Not reported
Program Identifier: CUPA - Response Team Support
Program Element Code Desc: 5056 5056 - HazMat Emergency Response Team Support
Permit Status: 02 - Inactive
Latitude: 40.86734
Longitude: -124.0861
CERS ID: 10020421
Facility Status: 01 - ACTIVE, BILLABLE

EMI:
Year: 2006
County Code: 12
Air Basin: NC
Facility ID: 674
Air District Name: NCU
SIC Code: 5541
Air District Name: NORTH COAST UNIFIED AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .4912537452661910738
Reactive Organic Gases Tons/Yr: .4890375
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year: 2007
County Code: 12
Air Basin: NC

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

| | |
|---|---|
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .2825656808971914341 |
| Reactive Organic Gases Tons/Yr: | .2811545 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2008 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .2512845576092242627 |
| Reactive Organic Gases Tons/Yr: | .2500296 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2009 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.269725153108824 |
| Reactive Organic Gases Tons/Yr: | 0.26837810000000001 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2010 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

| | |
|---|---|
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.269725153108824 |
| Reactive Organic Gases Tons/Yr: | 0.26837810000000001 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2011 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.26415536503 |
| Reactive Organic Gases Tons/Yr: | 0.2628569 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2014 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | A |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.567327072 |
| Reactive Organic Gases Tons/Yr: | 0.567327072 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2015 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 674 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | A |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.567327072 |
| Reactive Organic Gases Tons/Yr: | 0.567327072 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |

**ARCATA UNIONTOWN 76 (Continued)** **S102439941**

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

HAZNET:

| | |
|---|---|
| envid: | S102439941 |
| Year: | 2013 |
| GEPAID: | CAL000297030 |
| Contact: | Judy Bones |
| Telephone: | 7078259700 |
| Mailing Name: | Not reported |
| Mailing Address: | 5670 WEST END RD STE 1 |
| Mailing City,St,Zip: | ARCATA, CA 955210000 |
| Gen County: | Humboldt |
| TSD EPA ID: | CAT080012602 |
| TSD County: | Solano |
| Waste Category: | Not reported |
| Disposal Method: | Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135) |
| Tons: | 0.02085 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Not reported |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 12 |
| Reg By: | LTNKA |
| Reg Id: | 1THU555 |

---

**45**
**West**
**1/4-1/2**
**0.403 mi.**
**2127 ft.**

**PRIVATE RESIDENCE**
**PRIVATE RESIDENCE**
**ARCATA, CA 95521**

**LUST** **S110654196**
**N/A**

**Relative:**
**Lower**

**Actual:**
**28 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602387037 |
| Global Id: | T0602387037 |
| Latitude: | 40.8703689 |
| Longitude: | -124.087922 |
| Status: | Completed - Case Closed |
| Status Date: | 03/25/2005 |
| Case Worker: | MAV |
| RB Case Number: | 1THU904 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Local Agency |
| Local Case Number: | 12904 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Heating Oil / Fuel Oil |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602387037 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP CLOSED SITE |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |

**PRIVATE RESIDENCE (Continued)** **S110654196**

Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602387037
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602387037
Action Type: ENFORCEMENT
Date: 03/25/2005
Action: Closure/No Further Action Letter

Global Id: T0602387037
Action Type: ENFORCEMENT
Date: 11/19/2004
Action: LOP Case Closure Summary to RB

Global Id: T0602387037
Action Type: Other
Date: 03/08/2004
Action: Leak Discovery

Global Id: T0602387037
Action Type: Other
Date: 03/09/2004
Action: Leak Reported

Global Id: T0602387037
Action Type: REMEDIATION
Date: 03/09/2004
Action: Not reported

LUST:
Global Id: T0602387037
Status: Open - Case Begin Date
Status Date: 03/08/2004

Global Id: T0602387037
Status: Open - Site Assessment
Status Date: 03/09/2004

Global Id: T0602387037
Status: Open - Site Assessment
Status Date: 11/19/2004

Global Id: T0602387037
Status: Completed - Case Closed
Status Date: 03/25/2005

**L46** **SCHMIDT RESIDENCE** **LUST** **S104571204**
**WNW** **1562 J** **HIST CORTESE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.403 mi.**
**2129 ft.** **Site 1 of 2 in cluster L**

**Relative:**
**Lower**

**Actual:**
**79 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300499 |
| Global Id: | T0602300499 |
| Latitude: | 40.874683 |
| Longitude: | -124.086641 |
| Status: | Completed - Case Closed |
| Status Date: | 11/22/2002 |
| Case Worker: | BS |
| RB Case Number: | 1THU710 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | 12710 |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Diesel |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300499 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | BOB STONE |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H STREET, SUITE 100 |
| City: | EUREKA |
| Email: | bstone@co.humboldt.ca.us |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602300499 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP CLOSED SITE |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | Not reported |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602300499 |
| Action Type: | ENFORCEMENT |
| Date: | 11/18/2002 |
| Action: | Technical Correspondence / Assistance / Other |

| | |
|---|---|
| Global Id: | T0602300499 |
| Action Type: | ENFORCEMENT |
| Date: | 11/12/2002 |
| Action: | Technical Correspondence / Assistance / Other |

| | |
|---|---|
| Global Id: | T0602300499 |
| Action Type: | ENFORCEMENT |
| Date: | 10/17/2002 |
| Action: | Technical Correspondence / Assistance / Other |

**SCHMIDT RESIDENCE (Continued)** **S104571204**

Global Id: T0602300499
Action Type: Other
Date: 06/07/1999
Action: Leak Stopped

Global Id: T0602300499
Action Type: Other
Date: 06/07/1999
Action: Leak Discovery

Global Id: T0602300499
Action Type: Other
Date: 06/07/1999
Action: Leak Reported

Global Id: T0602300499
Action Type: ENFORCEMENT
Date: 11/20/2002
Action: Closure/No Further Action Letter

Global Id: T0602300499
Action Type: ENFORCEMENT
Date: 11/18/2002
Action: Staff Letter

LUST:
Global Id: T0602300499
Status: Open - Case Begin Date
Status Date: 06/07/1999

Global Id: T0602300499
Status: Open - Site Assessment
Status Date: 07/08/1999

Global Id: T0602300499
Status: Completed - Case Closed
Status Date: 11/22/2002

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU710

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**M47** **NORTHCOAST ENVIRONMENTAL CENTER (NEC)** **US BROWNFIELDS** **1009569572**
**WSW** **879 NINTH STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.408 mi.**
**2152 ft.** **Site 1 of 3 in cluster M**

**Relative:**
**Lower**

**Actual:**
**29 ft.**

US BROWNFIELDS:
Property Name: NORTHCOAST ENVIRONMENTAL CENTER (NEC)
Recipient Name: R9 TBA (STAG Funded)
Grant Type: TBA
Property Number: 021-102-004, 021-102-005, 021-102-006
Parcel size: .17

**NORTHCOAST ENVIRONMENTAL CENTER (NEC) (Continued)** **1009569572**

| | |
|---|---|
| Latitude: | 40.86913 |
| Longitude: | -124.08817 |
| HCM Label: | Address Matching-House Number |
| Map Scale: | Not reported |
| Point of Reference: | Entrance Point of a Facility or Station |
| Highlights: | Not reported |
| Datum: | World Geodetic System of 1984 |
| Acres Property ID: | 23281 |
| IC Data Access: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Acres Cleaned Up: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Assessment Funding: | 39288 |
| Assessment Funding Source: | US EPA - TBA Funding |
| Redevelopment Funding: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Grant Type: | Hazardous |
| Accomplishment Type: | Phase II Environmental Assessment |
| Accomplishment Count: | 1 |
| Cooperative Agreement Number: | n/a |
| Start Date: | 05/31/2005 00:00:00 |
| Ownership Entity: | Private |
| Completion Date: | 11/30/2005 00:00:00 |
| Current Owner: | Northcoast Environmental Center (NEC) |
| Did Owner Change: | N |
| Cleanup Required: | U |
| Video Available: | N |
| Photo Available: | Not reported |
| Institutional Controls Required: | U |
| IC Category Proprietary Controls: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| IC in place date: | Not reported |
| IC in place: | U |
| State/tribal program date: | Not reported |
| State/tribal program ID: | Not reported |
| State/tribal NFA date: | Not reported |
| Air contaminated: | Not reported |
| Air cleaned: | Not reported |
| Asbestos found: | Not reported |
| Asbestos cleaned: | Not reported |
| Controled substance found: | Not reported |
| Controled substance cleaned: | Not reported |
| Drinking water affected: | Not reported |
| Drinking water cleaned: | Not reported |
| Groundwater affected: | Not reported |
| Groundwater cleaned: | Not reported |
| Lead contaminant found: | Not reported |
| Lead cleaned up: | Not reported |

**NORTHCOAST ENVIRONMENTAL CENTER (NEC) (Continued)** **1009569572**

| | |
|---|---|
| No media affected: | Not reported |
| Unknown media affected: | Not reported |
| Other cleaned up: | Not reported |
| Other metals found: | Not reported |
| Other metals cleaned: | Not reported |
| Other contaminants found: | Not reported |
| Other contams found description: | Not reported |
| PAHs found: | Not reported |
| PAHs cleaned up: | Not reported |
| PCBs found: | Not reported |
| PCBs cleaned up: | Not reported |
| Petro products found: | Not reported |
| Petro products cleaned: | Not reported |
| Sediments found: | Not reported |
| Sediments cleaned: | Not reported |
| Soil affected: | Not reported |
| Soil cleaned up: | Not reported |
| Surface water cleaned: | Not reported |
| VOCs found: | Y |
| VOCs cleaned: | Not reported |
| Cleanup other description: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| Surface Water: | Not reported |
| Past use commercial acreage: | .17 |
| Past use industrial acreage: | Not reported |
| Future use greenspace acreage: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Future use industrial acreage: | Not reported |
| Greenspace acreage and type: | Not reported |
| Superfund Fed. landowner flag: | Not reported |
| Arsenic cleaned up: | Not reported |
| Cadmium cleaned up: | Not reported |
| Chromium cleaned up: | Not reported |
| Copper cleaned up: | Not reported |
| Iron cleaned up: | Not reported |
| mercury cleaned up: | Not reported |
| Nickel Cleaned Up: | Not reported |
| No clean up: | Not reported |
| Pesticides cleaned up: | Not reported |
| Selenium cleaned up: | Not reported |
| SVOCs cleaned up: | Not reported |
| Unknown clean up: | Not reported |
| Arsenic contaminant found: | Not reported |
| Cadmium contaminant found: | Not reported |
| Chromium contaminant found: | Not reported |
| Copper contaminant found: | Not reported |
| Iron contaminant found: | Not reported |
| Mercury contaminant found: | Not reported |
| Nickel contaminant found: | Not reported |
| No contaminant found: | Not reported |
| Pesticides contaminant found: | Not reported |
| Selenium contaminant found: | Not reported |
| SVOCs contaminant found: | Not reported |
| Unknown contaminant found: | Not reported |

**NORTHCOAST ENVIRONMENTAL CENTER (NEC) (Continued)** **1009569572**

| | |
|---|---|
| Future Use: Multistory | Not reported |
| Media affected Bluiding Material: | Not reported |
| Media affected indoor air: | Not reported |
| Building material media cleaned up: | Not reported |
| Indoor air media cleaned up: | Not reported |
| Unknown media cleaned up: | Not reported |
| Past Use: Multistory | Not reported |
| Property Description: | The site has been vacant since the structures were burned in 2001. The former struction on parcel PAN:021-102-004 was believed to have been constructed in the 1930s as an office building. This building also contained various business operations including insurance and dairy offices. In the 1970s and early 1980s this building contained a dry cleaning operation. At the time of the fire in 2001 the building was occupied by NEC and used as an office and library. NEC had resided in the building since 1982 and owned only that parcel. NEC purchased the two additional adjacent property parcels (APN:021-102-005 and 021-102-006) in 2002. The former structure that was on parcels APN:021-102-005 and 021-102-006 was believed to have been built in the 1890s as a "Union Hall Building". It contained various fraternal and business operations until the 1930s, when the building was converted to a tavern with two bowling alleys and upstairs apartments. Prior to the 2001 fire the building was operated as a night club and aprtment residences. Another building on neighboring parcel APN:021-102-003 was also destroyed in the fire and dated from the 1940s. That building had been operated as an automotive paint supply business. The burned structures and related debris were removed following the fire. While excavating a concrete pad on the former NEC office property, a 750-gallon UST was discovered. The tank was removed in 2003. Soil from the excavation was stockpiled near the northwestern corner and covered. During the sampling in September 2005, the START noted that the pile is still there and covered with plastic. Excess soil from this investigation was added to the stockpiled soil. |
| Below Poverty Number: | 1114 |
| Below Poverty Percent: | 2.7% |
| Meidan Income: | 3489 |
| Meidan Income Number: | 1797 |
| Meidan Income Percent: | 1.7% |
| Vacant Housing Number: | 93 |
| Vacant Housing Percent: | 32.8% |
| Unemployed Number: | 297 |
| Unemployed Percent: | 10.3% |

---

**M48** **NORTHCOAST ENVIRONMENTAL CENTER** **LUST S106162054**
**WSW** **879 NINTH ST** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.408 mi.**
**2152 ft.** **Site 2 of 3 in cluster M**

**Relative:**
**Lower**

**Actual:**
**29 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602384739 |
| Global Id: | T0602384739 |
| Latitude: | 40.869 |
| Longitude: | -124.0876 |
| Status: | Completed - Case Closed |
| Status Date: | 05/22/2006 |
| Case Worker: | MAV |

**NORTHCOAST ENVIRONMENTAL CENTER (Continued)** **S106162054**

RB Case Number: 1THU901
Local Agency: HUMBOLDT COUNTY LOP
File Location: Not reported
Local Case Number: 12901
Potential Media Affect: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Heating Oil / Fuel Oil, * Chlorinated Hydrocarbons
Site History: Not reported

LUST:
Global Id: T0602384739
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602384739
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602384739
Action Type: ENFORCEMENT
Date: 01/09/2006
Action: Technical Correspondence / Assistance / Other

Global Id: T0602384739
Action Type: ENFORCEMENT
Date: 05/22/2006
Action: Closure/No Further Action Letter

Global Id: T0602384739
Action Type: Other
Date: 01/08/2004
Action: Leak Discovery

Global Id: T0602384739
Action Type: Other
Date: 01/13/2004
Action: Leak Reported

LUST:
Global Id: T0602384739
Status: Open - Case Begin Date
Status Date: 01/08/2004

Global Id: T0602384739
Status: Open - Site Assessment
Status Date: 01/13/2004

**NORTHCOAST ENVIRONMENTAL CENTER (Continued)** **S106162054**

Global Id: T0602384739
Status: Completed - Case Closed
Status Date: 05/22/2006

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**M49** **NORTHCOAST ENVIRONMENTAL CENTER** **SLIC** **S106855352**
**WSW** **879 NINTH STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.408 mi.**
**2152 ft.** **Site 3 of 3 in cluster M**

**Relative:**
**Lower**

**Actual:**
**29 ft.**

SLIC:
Region: STATE
**Facility Status:** **Open - Assessment & Interim Remedial Action**
Status Date: 06/22/2017
Global Id: SL0602394358
Lead Agency: NORTH COAST RWQCB (REGION 1)
Lead Agency Case Number: Not reported
Latitude: 40.8689880422339
Longitude: -124.087588688326
Case Type: Cleanup Program Site
Case Worker: JAT
Local Agency: Not reported
RB Case Number: 1NHU901
File Location: Regional Board
Potential Media Affected: Aquifer used for drinking water supply
Potential Contaminants of Concern: Tetrachloroethylene (PCE)
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

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**L50** **SCHMIDT RESIDENCE** **LUST** **S104025268**
**WNW** **J STREET 1562** **N/A**
**1/4-1/2** **ARCATA, CA**
**0.415 mi.**
**2190 ft.** **Site 2 of 2 in cluster L**

**Relative:**
**Lower**

**Actual:**
**77 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU710
Staff Initials: HUM

---

**K51** **ARCO #00421** **LUST** **S105693721**
**SW** **660 SEVENTH STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.431 mi.**
**2274 ft.** **Site 2 of 2 in cluster K**

**Relative:**
**Lower**

**Actual:**
**23 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602393548
Global Id: T0602393548
Latitude: 40.867215663
Longitude: -124.085483171

**ARCO #00421 (Continued)** **S105693721**

| | |
|---|---|
| Status: | Completed - Case Closed |
| Status Date: | 10/20/2006 |
| Case Worker: | MAV |
| RB Case Number: | 1THU736 |
| Local Agency: | HUMBOLDT COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | 12736 |
| Potential Media Affect: | Aquifer used for drinking water supply |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602393548 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | HUMBOLDT COUNTY LOP CLOSED SITE |
| Organization Name: | NORTH COAST RWQCB (REGION 1) |
| Address: | 5550 SKYLANE BOULEVARD, SUITE A |
| City: | SANTA ROSA |
| Email: | Not reported |
| Phone Number: | Not reported |

| | |
|---|---|
| Global Id: | T0602393548 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Mark Verhey |
| Organization Name: | HUMBOLDT COUNTY LOP |
| Address: | 100 H Street, Suite 100 |
| City: | Eureka |
| Email: | mverhey@co.humboldt.ca.us |
| Phone Number: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0602393548 |
| Action Type: | ENFORCEMENT |
| Date: | 05/16/2002 |
| Action: | File review |

| | |
|---|---|
| Global Id: | T0602393548 |
| Action Type: | ENFORCEMENT |
| Date: | 05/15/2006 |
| Action: | Technical Correspondence / Assistance / Other |

| | |
|---|---|
| Global Id: | T0602393548 |
| Action Type: | Other |
| Date: | 08/16/2000 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0602393548 |
| Action Type: | ENFORCEMENT |
| Date: | 10/20/2006 |
| Action: | Closure/No Further Action Letter |

| | |
|---|---|
| Global Id: | T0602393548 |
| Action Type: | REMEDIATION |
| Date: | 05/16/2002 |
| Action: | Not reported |

Global Id: T0602393548

**ARCO #00421 (Continued)** **S105693721**

Action Type: Other
Date: 08/16/2000
Action: Leak Reported

LUST:
Global Id: T0602393548
Status: Open - Case Begin Date
Status Date: 08/16/2000

Global Id: T0602393548
Status: Open - Site Assessment
Status Date: 08/24/2000

Global Id: T0602393548
Status: Open - Site Assessment
Status Date: 08/27/2002

Global Id: T0602393548
Status: Open - Site Assessment
Status Date: 03/04/2003

Global Id: T0602393548
Status: Completed - Case Closed
Status Date: 10/20/2006

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**N52** **CAHILL'S SPIRIT** **LUST** **S103065541**
**West** **1122 K STREET** **CUPA Listings** **N/A**
**1/4-1/2** **ARCATA, CA 95521** **EMI**
**0.459 mi.** **HIST CORTESE**
**2426 ft.** **Site 1 of 4 in cluster N**

**Relative:**
**Lower**

**Actual:**
**23 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300332
Global Id: T0602300332
Latitude: 40.8716137
Longitude: -124.0892812
Status: Completed - Case Closed
Status Date: 02/13/2013
Case Worker: BS
RB Case Number: 1THU437
Local Agency: HUMBOLDT COUNTY LOP
File Location: Local Agency
Local Case Number: 12437
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: propose borings to confirm gw gradient and eval for nfa

LUST:
Global Id: T0602300332
Contact Type: Local Agency Caseworker
Contact Name: BOB STONE
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H STREET, SUITE 100
City: EUREKA
Email: bstone@co.humboldt.ca.us

**CAHILL'S SPIRIT (Continued)** **S103065541**

Phone Number: Not reported

Global Id: T0602300332
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

LUST:

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 10/04/2012
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 04/07/2009
Action: Notice of Responsibility

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 04/28/2006
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 12/02/1992
Action: * Historical Enforcement

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 02/13/2013
Action: Closure/No Further Action Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 03/10/2005
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 03/16/2004
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 08/08/2005
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 03/22/2007
Action: Staff Letter

**CAHILL'S SPIRIT (Continued)** **S103065541**

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 09/18/2006
Action: File review

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 11/07/2012
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 08/31/2009
Action: Staff Letter

Global Id: T0602300332
Action Type: Other
Date: 11/09/1992
Action: Leak Stopped

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 04/06/2009
Action: Staff Letter

Global Id: T0602300332
Action Type: REMEDIATION
Date: 11/13/2008
Action: Pump & Treat (P&T) Groundwater

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 12/22/2003
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 08/23/2005
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 06/27/2006
Action: Staff Letter

Global Id: T0602300332
Action Type: RESPONSE
Date: 10/01/2009
Action: Conceptual Site Model

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: File review

Global Id: T0602300332
Action Type: ENFORCEMENT

**CAHILL'S SPIRIT (Continued)** **S103065541**

Date: 08/13/2012
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 08/13/2012
Action: LOP Case Closure Summary to RB

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 05/22/2002
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 12/29/2005
Action: File review

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 06/19/2006
Action: File review

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 03/09/2006
Action: File review

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 12/14/2006
Action: Verbal Communication

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 11/13/2008
Action: File review

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 02/08/2013
Action: File Review - Closure

Global Id: T0602300332
Action Type: Other
Date: 11/09/1992
Action: Leak Discovery

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 04/13/2011
Action: Staff Letter

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 08/13/2012
Action: Notification - Public Participation Document

**CAHILL'S SPIRIT (Continued)** **S103065541**

Global Id: T0602300332
Action Type: ENFORCEMENT
Date: 11/20/2012
Action: Staff Letter

Global Id: T0602300332
Action Type: Other
Date: 11/09/1992
Action: Leak Reported

LUST:
Global Id: T0602300332
Status: Open - Case Begin Date
Status Date: 11/09/1992

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 12/02/1992

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 03/17/1993

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 07/14/1993

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 07/25/2002

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 01/07/2003

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 02/25/2003

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 06/11/2003

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 06/13/2003

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 09/04/2003

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 12/22/2003

Global Id: T0602300332
Status: Open - Site Assessment

**CAHILL'S SPIRIT (Continued)** **S103065541**

Status Date: 03/16/2004

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 03/10/2005

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 08/08/2005

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 08/23/2005

Global Id: T0602300332
Status: Open - Remediation
Status Date: 12/29/2005

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 03/09/2006

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 04/28/2006

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 06/19/2006

Global Id: T0602300332
Status: Open - Site Assessment
Status Date: 06/27/2006

Global Id: T0602300332
Status: Open - Remediation
Status Date: 09/18/2006

Global Id: T0602300332
Status: Open - Remediation
Status Date: 12/14/2006

Global Id: T0602300332
Status: Open - Remediation
Status Date: 03/22/2007

Global Id: T0602300332
Status: Open - Remediation
Status Date: 06/11/2007

Global Id: T0602300332
Status: Open - Remediation
Status Date: 04/11/2008

Global Id: T0602300332
Status: Open - Verification Monitoring
Status Date: 07/22/2010

**CAHILL'S SPIRIT (Continued)** **S103065541**

Global Id: T0602300332
Status: Open - Eligible for Closure
Status Date: 10/29/2012

Global Id: T0602300332
Status: Completed - Case Closed
Status Date: 02/13/2013

CUPA HUMBOLDT:
Local Site Id: FA0000459
Facility Address 2: Not reported
Program Identifier: CUPA - Hazardous Materials Facility Fee
Program Element Code Desc: 4202 4202 - Hazardous Materials Facility Fee
Permit Status: 02 - Inactive
Latitude: 40.87142
Longitude: -124.0892
CERS ID: 10020808
Facility Status: 01 - ACTIVE, BILLABLE

Local Site Id: FA0000459
Facility Address 2: Not reported
Program Identifier: CUPA - SQG
Program Element Code Desc: 4401 4401 - Hazardous Waste Generator (SQG)
Permit Status: 01 - Active
Latitude: 40.87142
Longitude: -124.0892
CERS ID: 10020808
Facility Status: 04 - ACTIVE, EXEMPT FROM BILLING

Local Site Id: FA0000459
Facility Address 2: Not reported
Program Identifier: CUPA - Response Team Support
Program Element Code Desc: 5056 5056 - HazMat Emergency Response Team Support
Permit Status: 02 - Inactive
Latitude: 40.87142
Longitude: -124.0892
CERS ID: 10020808
Facility Status: 01 - ACTIVE, BILLABLE

EMI:
Year: 2006
County Code: 12
Air Basin: NC
Facility ID: 773
Air District Name: NCU
SIC Code: 5541
Air District Name: NORTH COAST UNIFIED AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .1551274326859440388
Reactive Organic Gases Tons/Yr: .1543527
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0

**CAHILL'S SPIRIT (Continued)** **S103065541**

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

| | |
|---|---|
| Year: | 2007 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 773 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .1538222143211624243 |
| Reactive Organic Gases Tons/Yr: | .153054 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2008 |
| County Code: | 12 |
| Air Basin: | NC |
| Facility ID: | 773 |
| Air District Name: | NCU |
| SIC Code: | 5541 |
| Air District Name: | NORTH COAST UNIFIED AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .1519358937014960189 |
| Reactive Organic Gases Tons/Yr: | .1511771 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 12 |
| Reg By: | LTNKA |
| Reg Id: | 1THU437 |

---

**53**
**SW**
**1/4-1/2**
**0.462 mi.**
**2437 ft.**

**Relative:**
**Lower**

**Actual:**
**20 ft.**

**ARCATA, CITY CORPORATION YARD** **SLIC** **1004441965**
**600 G STREET, SOUTH** **N/A**
**ARCATA, CA 95521**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Open - Inactive** |
| Status Date: | 12/29/2010 |
| Global Id: | T0602393537 |
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 40.8552211100439 |
| Longitude: | -124.090188879918 |

**ARCATA, CITY CORPORATION YARD (Continued)** **1004441965**

| | |
|---|---|
| Case Type: | Cleanup Program Site |
| Case Worker: | PBN |
| Local Agency: | HUMBOLDT COUNTY LOP |
| RB Case Number: | 1NHU767 |
| File Location: | Regional Board |
| Potential Media Affected: | Aquifer used for drinking water supply |
| Potential Contaminants of Concern: | Not reported |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

SLIC REG 1:

| | |
|---|---|
| Region: | 1 |
| Facility ID: | 1NHU767 |
| Staff Initials: | RRA |

---

**O54** **ARCATA PARKING LOT** **SLIC** **S110770345**
**WSW** **789 I STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.468 mi.**
**2471 ft.** **Site 1 of 2 in cluster O**

**Relative:**
**Lower**

**Actual:**
**22 ft.**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Completed - Case Closed** |
| Status Date: | 11/05/2009 |
| Global Id: | T10000002923 |
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 40.868333 |
| Longitude: | -124.08865 |
| Case Type: | Cleanup Program Site |
| Case Worker: | ZZZ |
| Local Agency: | Not reported |
| RB Case Number: | 1NHU975 |
| File Location: | Regional Board |
| Potential Media Affected: | Aquifer used for drinking water supply, Soil |
| Potential Contaminants of Concern: | Arsenic, Diesel |
| Site History: | FORMER PARKING LOT FOR CAR SALES. CURRENT PARKING LOT FOR COMMERCIAL CUSTOMERS. NO SOURCES FOR CONTAMINATION HAVE BEEN IDENTIFIED IN HISTORICAL OPERATIONS. A PHSE II ENVIRONMENTAL SITE ASSESSMENT WAS PERFORMED DUE TO THE PROXIMITY OF SEVERAL ADJACENT CONTAMINATED SITES. FOUR SOIL AND THREE GROUNDWATER SAMPLES WERE COLLECTED FROM THREE BORINGS DRILLED AT THE SITE. ONE SOIL SAMPLE CONTAINTAINED DIESEL AT 160 PARTS PER MILLION. NO CONTAMINANTS WERE IDENTIFIED IN GROUNDWATER. |

Click here to access the California GeoTracker records for this facility:

**N55** **SHELL, CAHILL** **LUST** **S101294731**
**West** **K STREET 1122** **N/A**
**1/4-1/2** **ARCATA, CA**
**0.472 mi.**
**2492 ft.** **Site 2 of 4 in cluster N**

**Relative:**
**Lower**

**Actual:**
**23 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU437
Staff Initials: HUM

---

**P56** **MARV'S ELECTRIC** **LUST** **S101294738**
**WNW** **1188 THIRTEENTH** **HIST CORTESE** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.472 mi.**
**2492 ft.** **Site 1 of 2 in cluster P**

**Relative:**
**Lower**

**Actual:**
**31 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU470
Staff Initials: KSA

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: LTNKA
Reg Id: 1THU470

---

**P57** **HITT FAMILY BYPASS TRUST** **LUST** **S105180613**
**WNW** **1188 THIRTEENTH STREET** **N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.472 mi.**
**2492 ft.** **Site 2 of 2 in cluster P**

**Relative:**
**Lower**

**Actual:**
**31 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300356
Global Id: T0602300356
Latitude: 40.8729107
Longitude: -124.0887393
Status: Completed - Case Closed
Status Date: 02/20/2003
Case Worker: BS
RB Case Number: 1THU470
Local Agency: HUMBOLDT COUNTY LOP
File Location: Local Agency
Local Case Number: 12470
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0602300356
Contact Type: Local Agency Caseworker
Contact Name: BOB STONE
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H STREET, SUITE 100

**HITT FAMILY BYPASS TRUST (Continued)** **S105180613**

City: EUREKA
Email: bstone@co.humboldt.ca.us
Phone Number: Not reported

Global Id: T0602300356
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0602300356
Action Type: ENFORCEMENT
Date: 12/20/2002
Action: Technical Correspondence / Assistance / Other

Global Id: T0602300356
Action Type: Other
Date: 06/14/1993
Action: Leak Stopped

Global Id: T0602300356
Action Type: ENFORCEMENT
Date: 12/30/2002
Action: * No Action

Global Id: T0602300356
Action Type: ENFORCEMENT
Date: 02/20/2003
Action: Closure/No Further Action Letter

Global Id: T0602300356
Action Type: ENFORCEMENT
Date: 02/14/2003
Action: Staff Letter

Global Id: T0602300356
Action Type: Other
Date: 06/14/1993
Action: Leak Discovery

Global Id: T0602300356
Action Type: Other
Date: 06/14/1993
Action: Leak Reported

LUST:
Global Id: T0602300356
Status: Open - Case Begin Date
Status Date: 06/14/1993

Global Id: T0602300356
Status: Open - Site Assessment

**HITT FAMILY BYPASS TRUST (Continued)** **S105180613**

Status Date: 06/21/1993

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 10/16/2000

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 10/23/2000

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 08/10/2001

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 11/15/2001

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 08/26/2002

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 08/27/2002

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 08/30/2002

Global Id: T0602300356
Status: Open - Site Assessment
Status Date: 10/08/2002

Global Id: T0602300356
Status: Completed - Case Closed
Status Date: 02/20/2003

---

**O58** **SACCHI PROPERTIES** **LUST S105693749**
**WSW** **865 EIGHTH STREET** **SLIC N/A**
**1/4-1/2** **ARCATA, CA 95521**
**0.477 mi.**
**2519 ft.** **Site 2 of 2 in cluster O**

**Relative:**
**Lower**

**Actual:**
**22 ft.**

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602306416
Global Id: T0602306416
Latitude: 40.868099807184
Longitude: -124.088055568123
Status: Completed - Case Closed
Status Date: 04/02/2015
Case Worker: MAV
RB Case Number: 1THU792
Local Agency: HUMBOLDT COUNTY LOP
File Location: Local Agency

**SACCHI PROPERTIES (Continued)** **S105693749**

Local Case Number: 12792
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602306416
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602306416
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 02/24/2015
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 07/20/2010
Action: Meeting

Global Id: T0602306416
Action Type: RESPONSE
Date: 11/10/2013
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 06/02/2005
Action: Staff Letter

Global Id: T0602306416
Action Type: RESPONSE
Date: 09/30/2004
Action: Soil and Water Investigation Report

Global Id: T0602306416
Action Type: REMEDIATION
Date: 12/13/2012
Action: Dual Phase Extraction

Global Id: T0602306416
Action Type: ENFORCEMENT

**SACCHI PROPERTIES (Continued)** **S105693749**

Date: 12/23/2008
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 10/12/2012
Action: Staff Letter

Global Id: T0602306416
Action Type: Other
Date: 06/01/2002
Action: Leak Stopped

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 01/23/2008
Action: Site Visit / Inspection / Sampling

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 04/02/2007
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 08/21/2008
Action: Staff Letter

Global Id: T0602306416
Action Type: RESPONSE
Date: 03/26/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0602306416
Action Type: RESPONSE
Date: 08/21/2008
Action: Soil and Water Investigation Report

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 08/14/2009
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 11/26/2014
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 04/02/2015
Action: Closure/No Further Action Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 08/31/2004
Action: Warning Letter

**SACCHI PROPERTIES (Continued)** **S105693749**

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/25/2005
Action: Notice of Responsibility

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/24/2005
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 04/05/2005
Action: Site Visit / Inspection / Sampling

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 10/05/2005
Action: * No Action

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 10/04/2007
Action: Meeting

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 08/06/2007
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 02/20/2008
Action: Staff Letter

Global Id: T0602306416
Action Type: Other
Date: 06/01/2002
Action: Leak Discovery

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/01/2012
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/23/2005
Action: Notice of Responsibility

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/05/2003
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT

**SACCHI PROPERTIES (Continued)** **S105693749**

Date: 06/03/2003
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 10/07/2003
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 02/26/2007
Action: File review

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 09/27/2013
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 08/26/2009
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 11/26/2014
Action: Notification - Public Participation Document

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/01/2011
Action: Staff Letter

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 03/17/2009
Action: File review

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 12/13/2013
Action: Staff Letter

Global Id: T0602306416
Action Type: Other
Date: 06/11/2002
Action: Leak Reported

Global Id: T0602306416
Action Type: ENFORCEMENT
Date: 09/19/2010
Action: File review

LUST:
Global Id: T0602306416
Status: Open - Case Begin Date
Status Date: 06/01/2002

**SACCHI PROPERTIES (Continued)** **S105693749**

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 06/01/2002

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 03/05/2003

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 06/03/2003

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 10/07/2003

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 03/16/2005

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 10/05/2005

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 02/26/2007

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 04/02/2007

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 08/06/2007

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 10/04/2007

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 11/13/2007

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 01/23/2008

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 02/20/2008

Global Id: T0602306416
Status: Open - Site Assessment
Status Date: 05/14/2008

Global Id: T0602306416

**SACCHI PROPERTIES (Continued)** **S105693749**

Status: Open - Site Assessment
Status Date: 07/26/2010

Global Id: T0602306416
Status: Open - Eligible for Closure
Status Date: 11/07/2014

Global Id: T0602306416
Status: Completed - Case Closed
Status Date: 04/02/2015

SLIC:
Region: STATE
**Facility Status:** **Completed - Case Closed**
Status Date: 10/11/2007
Global Id: SL0602399734
Lead Agency: NORTH COAST RWQCB (REGION 1)
Lead Agency Case Number: Not reported
Latitude: 40.8679999474354
Longitude: -124.088087296959
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: 1NHU792
File Location: Regional Board
Potential Media Affected: Aquifer used for drinking water supply
Potential Contaminants of Concern: Lead, Waste Oil / Motor / Hydraulic / Lubricating, Stoddard solvent / Mineral Spriits / Distillates
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

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**N59** **GERMAN MOTORS OF ARCATA** **LUST** **S100223964**
**West** **K STREET 1065** **N/A**
**1/4-1/2** **ARCATA, CA**
**0.480 mi.**
**2535 ft.** **Site 3 of 4 in cluster N**

**Relative:**
**Lower**

**Actual:**
**22 ft.**

LUST REG 1:
Region: 1
Facility ID: 1THU275
Staff Initials: Closed

---

**N60** **WALLACE AND HINZ** **RCRA-SQG** **1000818436**
**West** **1065 K ST** **LUST** **CAD983643081**
**1/4-1/2** **ARCATA, CA 95521** **FINDS**
**0.495 mi.** **ECHO**
**2613 ft.** **Site 4 of 4 in cluster N** **HAZNET**
**HIST CORTESE**

**Relative:**
**Lower**

**Actual:**
**22 ft.**

RCRA-SQG:
Date form received by agency: 07/14/1992
Facility name: WALLACE AND HINZ
Facility address: 1065 K ST
ARCATA, CA 95521

**WALLACE AND HINZ (Continued)** **1000818436**

EPA ID: CAD983643081
Mailing address: K ST
ARCATA, CA 95521
Contact: TOM HINZ
Contact address: 1065 K ST
ARCATA, CA 95521
Contact country: US
Contact telephone: 707-826-1729
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: TOM HINZ
Owner/operator address: 1065 K ST
ARCATA, CA 95521
Owner/operator country: Not reported
Owner/operator telephone: 707-826-1729
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

LUST:
Lead Agency: HUMBOLDT COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300207
Global Id: T0602300207
Latitude: 40.8710691
Longitude: -124.0894563

**WALLACE AND HINZ (Continued)** **1000818436**

Status: Completed - Case Closed
Status Date: 11/17/1995
Case Worker: MAV
RB Case Number: 1THU275
Local Agency: HUMBOLDT COUNTY LOP
File Location: Not reported
Local Case Number: 12275
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0602300207
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602300207
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602300207
Action Type: Other
Date: 06/30/1990
Action: Leak Stopped

Global Id: T0602300207
Action Type: Other
Date: 06/30/1990
Action: Leak Discovery

Global Id: T0602300207
Action Type: Other
Date: 06/30/1990
Action: Leak Reported

Global Id: T0602300207
Action Type: ENFORCEMENT
Date: 07/13/1990
Action: * Historical Enforcement

LUST:
Global Id: T0602300207
Status: Open - Case Begin Date
Status Date: 06/30/1990

Global Id: T0602300207

**WALLACE AND HINZ (Continued)** **1000818436**

Status: Open - Site Assessment
Status Date: 07/13/1990

Global Id: T0602300207
Status: Open - Site Assessment
Status Date: 12/11/1991

Global Id: T0602300207
Status: Open - Site Assessment
Status Date: 03/10/1992

Global Id: T0602300207
Status: Open - Remediation
Status Date: 11/16/1995

Global Id: T0602300207
Status: Open - Site Assessment
Status Date: 11/16/1995

Global Id: T0602300207
Status: Open - Verification Monitoring
Status Date: 11/16/1995

Global Id: T0602300207
Status: Completed - Case Closed
Status Date: 11/17/1995

FINDS:

Registry ID: 110002880963

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000818436
Registry ID: 110002880963
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002880963

HAZNET:
envid: 1000818436

**WALLACE AND HINZ (Continued)** **1000818436**

| | |
|---|---|
| Year: | 2005 |
| GEPAID: | CAD983643081 |
| Contact: | SAMANTHA HANI |
| Telephone: | 7078261729 |
| Mailing Name: | Not reported |
| Mailing Address: | 1065 K ST |
| Mailing City,St,Zip: | ARCATA, CA 955215544 |
| Gen County: | Not reported |
| TSD EPA ID: | CA0000084517 |
| TSD County: | Not reported |
| Waste Category: | Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) |
| Disposal Method: | Transfer Station |
| Tons: | 0.04 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

| | |
|---|---|
| envid: | 1000818436 |
| Year: | 2004 |
| GEPAID: | CAD983643081 |
| Contact: | SAMANTHA HANI |
| Telephone: | 7078261729 |
| Mailing Name: | Not reported |
| Mailing Address: | 1065 K ST |
| Mailing City,St,Zip: | ARCATA, CA 955215544 |
| Gen County: | Not reported |
| TSD EPA ID: | KYD053348108 |
| TSD County: | Not reported |
| Waste Category: | Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) |
| Disposal Method: | Transfer Station |
| Tons: | 0.2 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

| | |
|---|---|
| envid: | 1000818436 |
| Year: | 2004 |
| GEPAID: | CAD983643081 |
| Contact: | SAMANTHA HANI |
| Telephone: | 7078261729 |
| Mailing Name: | Not reported |
| Mailing Address: | 1065 K ST |
| Mailing City,St,Zip: | ARCATA, CA 955215544 |
| Gen County: | Not reported |
| TSD EPA ID: | CA0000084517 |
| TSD County: | Not reported |
| Waste Category: | Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) |
| Disposal Method: | Transfer Station |
| Tons: | 0.12 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

| | |
|---|---|
| envid: | 1000818436 |
| Year: | 2003 |
| GEPAID: | CAD983643081 |
| Contact: | SAMANTHA HANI |

**WALLACE AND HINZ (Continued)** **1000818436**

| | |
|---|---|
| Telephone: | 7078261729 |
| Mailing Name: | Not reported |
| Mailing Address: | 1065 K ST |
| Mailing City,St,Zip: | ARCATA, CA 955215544 |
| Gen County: | Not reported |
| TSD EPA ID: | CA0000084517 |
| TSD County: | Not reported |
| Waste Category: | Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) |
| Disposal Method: | Transfer Station |
| Tons: | 0.03 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

| | |
|---|---|
| envid: | 1000818436 |
| Year: | 2002 |
| GEPAID: | CAD983643081 |
| Contact: | SAMANTHA HANI |
| Telephone: | 7078261729 |
| Mailing Name: | Not reported |
| Mailing Address: | 1065 K ST |
| Mailing City,St,Zip: | ARCATA, CA 955215544 |
| Gen County: | Not reported |
| TSD EPA ID: | CA0000084517 |
| TSD County: | Not reported |
| Waste Category: | Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) |
| Disposal Method: | Transfer Station |
| Tons: | 0.02 |
| Cat Decode: | Not reported |
| Method Decode: | Not reported |
| Facility County: | Humboldt |

Click this hyperlink while viewing on your computer to access
16 additional CA_HAZNET: record(s) in the EDR Site Report.

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 12 |
| Reg By: | LTNKA |
| Reg Id: | 1THU275 |

---

**61**
**West**
**1/2-1**
**0.650 mi.**
**3434 ft.**

**ARCATA COMMUNITY RECYCLING CTR** **LUST U000069517**
**1380 NINTH STREET** **SLIC N/A**
**ARCATA, CA 93923** **HIST UST**
**Notify 65**

**Relative:**
**Lower**

**Actual:**
**18 ft.**

LUST:

| | |
|---|---|
| Lead Agency: | HUMBOLDT COUNTY LOP |
| Case Type: | LUST Cleanup Site |
| Geo Track: | http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300054 |
| Global Id: | T0602300054 |
| Latitude: | 40.8708769 |
| Longitude: | -124.0914066 |
| Status: | Completed - Case Closed |
| Status Date: | 08/02/2010 |
| Case Worker: | MAV |

**ARCATA COMMUNITY RECYCLING CTR (Continued)** **U000069517**

RB Case Number: 1THU060
Local Agency: HUMBOLDT COUNTY LOP
File Location: Local Agency
Local Case Number: 12060
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel, Gasoline, * Petroleum - Waste Oil
Site History: Excavation has been concurred with (5/2010)

LUST:
Global Id: T0602300054
Contact Type: Regional Board Caseworker
Contact Name: HUMBOLDT COUNTY LOP CLOSED SITE
Organization Name: NORTH COAST RWQCB (REGION 1)
Address: 5550 SKYLANE BOULEVARD, SUITE A
City: SANTA ROSA
Email: Not reported
Phone Number: Not reported

Global Id: T0602300054
Contact Type: Local Agency Caseworker
Contact Name: Mark Verhey
Organization Name: HUMBOLDT COUNTY LOP
Address: 100 H Street, Suite 100
City: Eureka
Email: mverhey@co.humboldt.ca.us
Phone Number: Not reported

LUST:
Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 10/28/2003
Action: Meeting

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 12/10/2003
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 10/26/2007
Action: Technical Correspondence / Assistance / Other

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 07/31/2009
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 06/24/2010
Action: LOP Case Closure Summary to RB

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 10/10/2008
Action: Staff Letter

**ARCATA COMMUNITY RECYCLING CTR (Continued)** **U000069517**

Global Id: T0602300054
Action Type: Other
Date: 10/04/1988
Action: Leak Discovery

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 03/03/2009
Action: Staff Letter

Global Id: T0602300054
Action Type: Other
Date: 10/04/1988
Action: Leak Stopped

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 04/07/2008
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 04/13/2010
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 04/23/2004
Action: File review

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 02/19/2009
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 07/10/2009
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 04/08/2005
Action: Notice of Responsibility

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 03/23/2004
Action: * No Action

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 06/24/2010
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT

**ARCATA COMMUNITY RECYCLING CTR (Continued)** **U000069517**

Date: 06/24/2010
Action: Notification - Public Participation Document

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 12/16/2008
Action: Staff Letter

Global Id: T0602300054
Action Type: Other
Date: 10/04/1988
Action: Leak Reported

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 08/02/2010
Action: Closure/No Further Action Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 05/21/2008
Action: Staff Letter

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 01/04/2000
Action: * Historical Enforcement

Global Id: T0602300054
Action Type: ENFORCEMENT
Date: 04/20/2007
Action: Staff Letter

LUST:
Global Id: T0602300054
Status: Open - Case Begin Date
Status Date: 02/07/1987

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 02/07/1987

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 10/04/1988

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 03/02/1995

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 03/06/1995

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 08/20/2002

**ARCATA COMMUNITY RECYCLING CTR (Continued)** **U000069517**

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 10/24/2002

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 02/27/2003

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 03/04/2003

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 05/14/2003

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 10/28/2003

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 12/10/2003

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 03/23/2004

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 04/23/2004

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 11/13/2006

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 09/16/2007

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 10/26/2007

Global Id: T0602300054
Status: Completed - Case Closed
Status Date: 05/19/2010

Global Id: T0602300054
Status: Open - Site Assessment
Status Date: 05/19/2010

Global Id: T0602300054
Status: Completed - Case Closed
Status Date: 08/02/2010

**ARCATA COMMUNITY RECYCLING CTR (Continued)** **U000069517**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Open - Assessment & Interim Remedial Action** |
| Status Date: | 12/23/2010 |
| Global Id: | T10000002709 |
| Lead Agency: | NORTH COAST RWQCB (REGION 1) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 40.870528 |
| Longitude: | -124.092514 |
| Case Type: | Cleanup Program Site |
| Case Worker: | BML |
| Local Agency: | Not reported |
| RB Case Number: | 1NHU060 |
| File Location: | Regional Board |
| Potential Media Affected: | Aquifer used for drinking water supply, Soil |
| Potential Contaminants of Concern: | Diesel, Gasoline |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

HIST UST:

| | |
|---|---|
| File Number: | 00025F27 |
| URL: | http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00025F27.pdf |
| Region: | Not reported |
| Facility ID: | Not reported |
| Facility Type: | Not reported |
| Other Type: | Not reported |
| Contact Name: | Not reported |
| Telephone: | Not reported |
| Owner Name: | Not reported |
| Owner Address: | Not reported |
| Owner City,St,Zip: | Not reported |
| Total Tanks: | Not reported |

| | |
|---|---|
| Tank Num: | Not reported |
| Container Num: | Not reported |
| Year Installed: | Not reported |
| Tank Capacity: | Not reported |
| Tank Used for: | Not reported |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Not reported |

Click here for Geo Tracker PDF:

NOTIFY 65:

| | |
|---|---|
| Date Reported: | Not reported |
| Staff Initials: | Not reported |
| Board File Number: | Not reported |
| Facility Type: | Not reported |
| Discharge Date: | Not reported |
| Issue Date: | Not reported |
| Incident Description: | Not reported |

**62**
**WSW**
**1/2-1**
**0.728 mi.**
**3844 ft.**

**WING INFLATABLES, INC.**
**1220 5TH ST**
**ARCATA, CA 95521**

**ENVIROSTOR**
**CUPA Listings**
**HIST CORTESE**

**S102808640**
**N/A**

**Relative:**
**Lower**

**Actual:**
**15 ft.**

ENVIROSTOR:

| | |
|---|---|
| Facility ID: | 12240117 |
| Status: | Refer: RWQCB |
| Status Date: | 09/27/1993 |
| Site Code: | Not reported |
| Site Type: | Historical |
| Site Type Detailed: | * Historical |
| Acres: | Not reported |
| NPL: | NO |
| Regulatory Agencies: | NONE SPECIFIED |
| Lead Agency: | NONE SPECIFIED |
| Program Manager: | Not reported |
| Supervisor: | Referred - Not Assigned |
| Division Branch: | Cleanup Berkeley |
| Assembly: | 02 |
| Senate: | 02 |
| Special Program: | Not reported |
| Restricted Use: | NO |
| Site Mgmt Req: | NONE SPECIFIED |
| Funding: | Not reported |
| Latitude: | 40.86725 |
| Longitude: | -124.0925 |
| APN: | NONE SPECIFIED |
| Past Use: | NONE SPECIFIED |
| Potential COC: | Polychlorinated biphenyls (PCBs |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | NONE SPECIFIED |
| Alias Name: | ARCATA REDWOOD |
| Alias Type: | Alternate Name |
| Alias Name: | 12240117 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Site Screening |
| Completed Date: | 03/17/1988 |
| Comments: | Not reported |
| Future Area Name: | Not reported |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Not reported |
| Future Due Date: | Not reported |
| Schedule Area Name: | Not reported |
| Schedule Sub Area Name: | Not reported |
| Schedule Document Type: | Not reported |
| Schedule Due Date: | Not reported |
| Schedule Revised Date: | Not reported |

CUPA HUMBOLDT:

| | |
|---|---|
| Local Site Id: | FA0003676 |
| Facility Address 2: | Not reported |
| Program Identifier: | CUPA - Hazardous Materials Facility Fee |

**WING INFLATABLES, INC. (Continued)** **S102808640**

Program Element Code Desc: 4202 4202 - Hazardous Materials Facility Fee
Permit Status: 02 - Inactive
Latitude: 40.86684
Longitude: -124.0925
CERS ID: 10021312
Facility Status: 01 - ACTIVE, BILLABLE

Local Site Id: FA0003676
Facility Address 2: Not reported
Program Identifier: CUPA - SQG
Program Element Code Desc: 4401 4401 - Hazardous Waste Generator (SQG)
Permit Status: 01 - Active
Latitude: 40.86684
Longitude: -124.0925
CERS ID: 10021312
Facility Status: 04 - ACTIVE, EXEMPT FROM BILLING

Local Site Id: FA0003676
Facility Address 2: Not reported
Program Identifier: Not reported
Program Element Code Desc: 4900 4900 - Waste Generating Recycler General
Permit Status: (none)
Latitude: 40.86684
Longitude: -124.0925
CERS ID: 10021312
Facility Status: 04 - ACTIVE, EXEMPT FROM BILLING

Local Site Id: FA0003676
Facility Address 2: Not reported
Program Identifier: CUPA - Response Team Support
Program Element Code Desc: 5056 5056 - HazMat Emergency Response Team Support
Permit Status: 02 - Inactive
Latitude: 40.86684
Longitude: -124.0925
CERS ID: 10021312
Facility Status: 01 - ACTIVE, BILLABLE

HIST CORTESE:
Region: CORTESE
Facility County Code: 12
Reg By: WBC&D
Reg Id: 1B870070NSL

Count: 4 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| ARCATA | S104857214 | S&H AUTO WRECKERS | ALLIANCE ROAD 3028 | | LUST |
| ARCATA | S104857246 | ARCO STATION (FORMER) | SEVENTH STREET 660 | | LUST |
| ARCATA | S101294716 | HUMBOLDT STATE UNIV-GIST HALL | B STREET & PINE ST. | | LUST |
| EUREKA | 1003880050 | HUMBOLDT CIVIC CENTER | FIFTH ST AT J ST. | 95521 | SEMS-ARCHIVE |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal NPL site list***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/05/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/17/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Quarterly

***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/17/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Quarterly

***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

***Federal institutional controls / engineering controls registries***

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017
Date Data Arrived at EDR: 06/13/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 94

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/08/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/27/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/27/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/13/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 23

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Quarterly

***State and tribal leaking storage tank lists***

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 31
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 11/07/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 31
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

***State and tribal registered storage tank lists***

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 36
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

***State and tribal voluntary cleanup sites***

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/20/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Varies

***State and tribal Brownfields sites***

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 11/09/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 08/21/2017
Date Data Arrived at EDR: 09/20/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 36

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 05/31/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 76

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/09/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/20/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/03/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/08/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Quarterly

***Local Lists of Registered Storage Tanks***

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 11/27/2017
Date Data Arrived at EDR: 11/29/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 19

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Local Land Records***

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 37

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 57

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 30

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/22/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/17/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/17/2017
Date Data Arrived at EDR: 11/01/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 37
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/09/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/12/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/08/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 10/26/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 63

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/02/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/22/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/10/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 10/29/2017
Date Data Arrived at EDR: 11/28/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 45

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/01/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/01/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 24

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 9

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/27/2017
Date Data Arrived at EDR: 11/21/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/02/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 53

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 34

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 10/24/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 52

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/09/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/08/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 37

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/10/2017
Date Data Arrived at EDR: 10/10/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 31

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/29/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/13/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 42

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 35
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 12/15/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 32
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 36
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/12/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EDR HIGH RISK HISTORICAL RECORDS

### *EDR Exclusive Records*

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**COUNTY RECORDS**

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 09/22/2017
Date Data Arrived at EDR: 09/22/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 18

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 12/08/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 15

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 08/31/2017
Date Data Arrived at EDR: 09/05/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 64

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/20/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/17/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 10/31/2017
Date Data Arrived at EDR: 11/01/2017
Date Made Active in Reports: 11/14/2017
Number of Days to Update: 13

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/06/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 21

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 40

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 10/25/2017
Date Data Arrived at EDR: 10/27/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 19

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/03/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 10/24/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 22

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/20/2017
Number of Days to Update: 43

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 28

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/09/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 5

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 07/24/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 82

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 5
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 10/17/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 51
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 171
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 31
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/17/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/14/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 69

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 10/26/2017
Date Data Arrived at EDR: 10/27/2017
Date Made Active in Reports: 11/06/2017
Number of Days to Update: 10

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 12

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 01/02/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 14

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 11/21/2017
Date Data Arrived at EDR: 11/27/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 30

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2017
Date Data Arrived at EDR: 09/15/2017
Date Made Active in Reports: 11/28/2017
Number of Days to Update: 74

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 11/22/2017
Date Data Arrived at EDR: 11/27/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 8

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/09/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 28

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/09/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 36

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/07/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/05/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 63

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 12

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 11/09/2017
Number of Days to Update: 28

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/15/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/15/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 3

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/03/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 44

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/03/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/17/2017
Number of Days to Update: 14

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 37

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/29/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 4
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 12/12/2017
Date Data Arrived at EDR: 12/14/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 28
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/06/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2017
Date Data Arrived at EDR: 12/14/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 29
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/06/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/16/2017
Date Made Active in Reports: 01/04/2018
Number of Days to Update: 49
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 12/15/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 28

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/08/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/26/2017
Date Data Arrived at EDR: 09/27/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 42

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/08/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/27/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 50

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 11/10/2017
Number of Days to Update: 35

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 6

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/01/2017
Date Data Arrived at EDR: 12/04/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 15

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/01/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 10/24/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 09/27/2017
Date Data Arrived at EDR: 09/28/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 18

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 12/18/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 10/25/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 22

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2017
Date Data Arrived at EDR: 10/25/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 43

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/08/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2017
Date Data Arrived at EDR: 10/25/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 43

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/28/2017
Date Data Arrived at EDR: 09/12/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 9
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/11/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/27/2017
Date Data Arrived at EDR: 10/02/2017
Date Made Active in Reports: 11/14/2017
Number of Days to Update: 43
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/02/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 11/08/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 6
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 34
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/05/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/01/2017
Date Data Arrived at EDR: 11/01/2017
Date Made Active in Reports: 11/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/16/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/11/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

TRINITY ANNEX
1305 C STREET
ARCATA, CA 95521

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 40.871371 - 40° 52' 16.94'' |
| Longitude (West): | 124.079735 - 124° 4' 47.05'' |
| Universal Tranverse Mercator: | Zone 10 |
| UTM X (Meters): | 409013.1 |
| UTM Y (Meters): | 4524827.5 |
| Elevation: | 89 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 5609276 ARCATA SOUTH, CA |
| Version Date: | 2012 |
| North Map: | 5629078 ARCATA NORTH, CA |
| Version Date: | 2012 |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

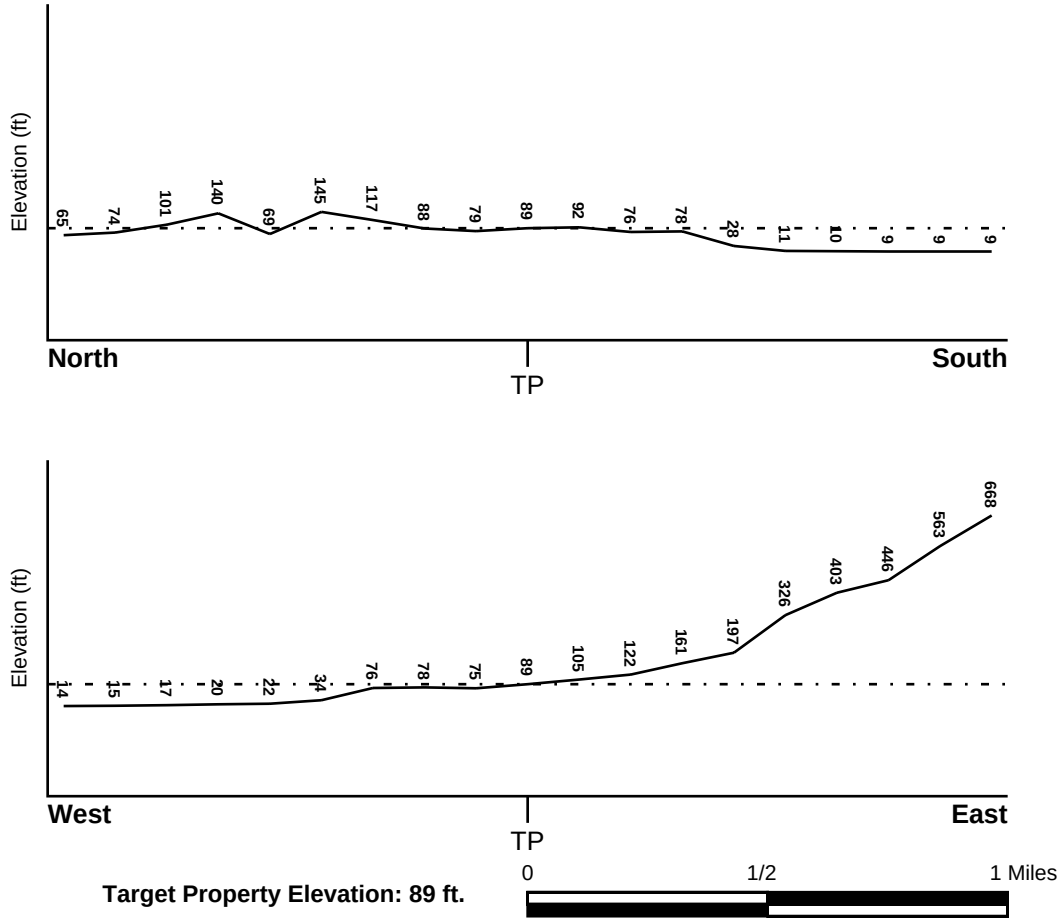
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General West

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




**Target Property Elevation: 89 ft.**

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 0600610004D | FEMA Q3 Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 0600600615C | FEMA Q3 Flood data |
| 0600610002D | FEMA Q3 Flood data |
| 0600600785B | FEMA Q3 Flood data |
| 0600600780B | FEMA Q3 Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| ARCATA SOUTH | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

| | |
|---|---|
| Era: | Cenozoic |
| System: | Quaternary |
| Series: | Quaternary |
| Code: | Q *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

| | |
|---|---|
| Soil Component Name: | HOOKTON |
| Soil Surface Texture: | silty clay loam |
| Hydrologic Group: | Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. |
| Soil Drainage Class: | Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is 1 to 3 feet. |

Hydric Status: Soil does not meet the requirements for a hydric soil.

| | |
|---|---|
| Corrosion Potential - Uncoated Steel: | HIGH |
| Depth to Bedrock Min: | > 60 inches |
| Depth to Bedrock Max: | > 60 inches |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | | |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | Permeability Rate (in/hr) | Soil Reaction (pH) |
| 1 | 0 inches | 19 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 0.60<br>Min: 0.20 | Max: 6.00<br>Min: 5.60 |
| 2 | 19 inches | 42 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 0.60<br>Min: 0.20 | Max: 6.00<br>Min: 5.10 |
| 3 | 42 inches | 60 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 0.20<br>Min: 0.06 | Max: 5.50<br>Min: 4.50 |

**OTHER SOIL TYPES IN AREA**

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam
fine sandy loam
silt loam
very gravelly - sand

Surficial Soil Types: loam
fine sandy loam
silt loam
very gravelly - sand

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: silt loam
sand and gravel
fine sandy loam
loamy fine sand
stratified
sandy clay loam

**LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**WELL SEARCH DISTANCE INFORMATION**

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 0.001 miles |
| State Database | 1.000 |

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | USGS40000194697 | 1/2 - 1 Mile SW |

**FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

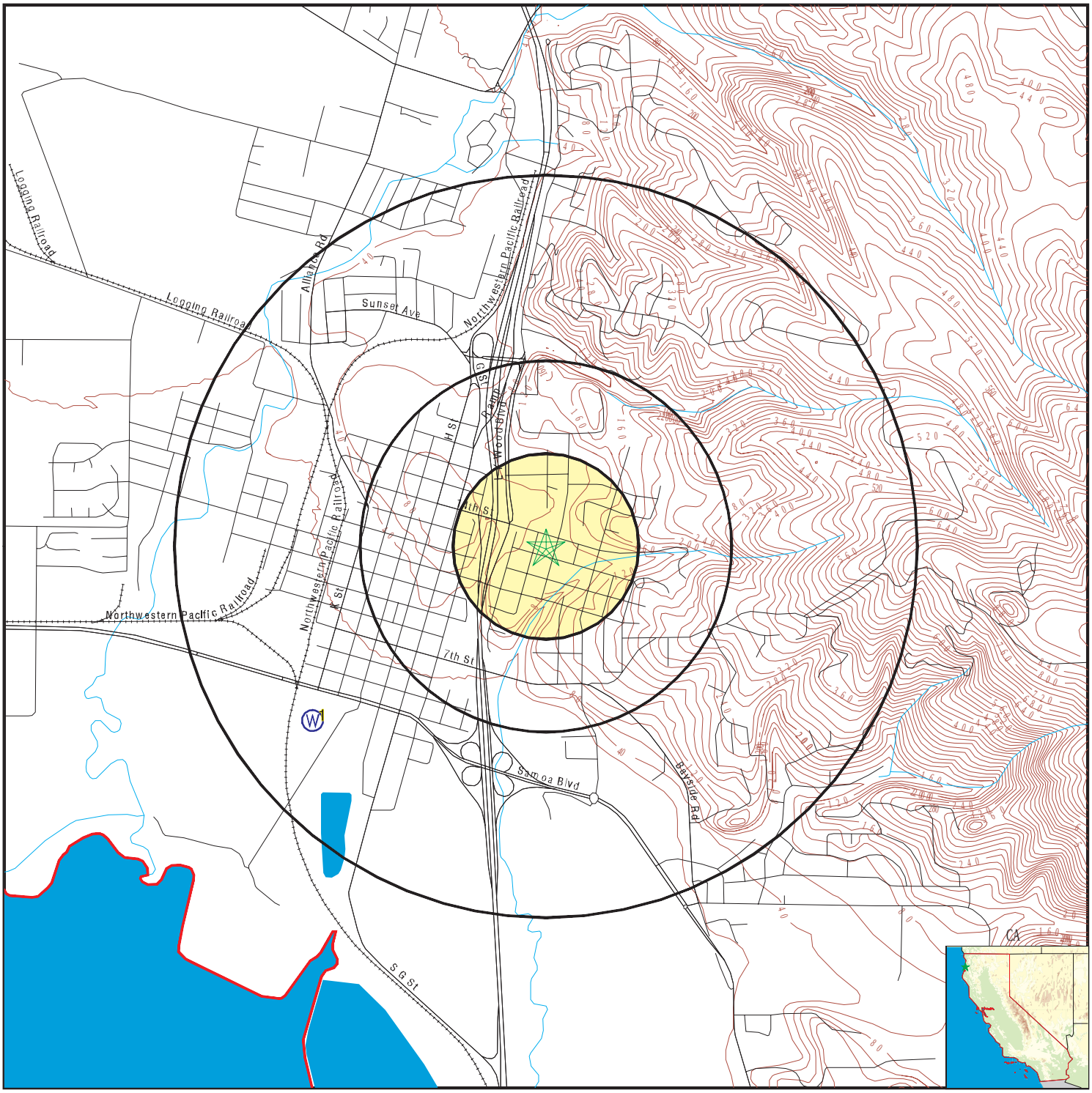
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No PWS System Found | | |

Note: PWS System location is not always the same as well location.

**STATE DATABASE WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No Wells Found | | |

# PHYSICAL SETTING SOURCE MAP - 05163100.2r




- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

| | |
|---|---|
| SITE NAME: Trinity Annex | CLIENT: Rincon |
| ADDRESS: 1305 C Street<br>Arcata CA 95521 | CONTACT: Meghan Hearne |
| LAT/LONG: 40.871371 / 124.079735 | INQUIRY #: 05163100.2r<br>DATE: January 18, 2018 7:43 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

| | Database | EDR ID Number |
|---|---|---|
| **1**<br>**SW**<br>**1/2 - 1 Mile**<br>**Lower** | **FED USGS** | **USGS40000194697** |

| | | | |
|---|---|---|---|
| Org. Identifier: | USGS-CA | | |
| Formal name: | USGS California Water Science Center | | |
| Monloc Identifier: | USGS-405153124052601 | | |
| Monloc name: | 006N001E32F001H | | |
| Monloc type: | Well | | |
| Monloc desc: | Not Reported | | |
| Huc code: | 18010102 | Drainagearea value: | Not Reported |
| Drainagearea Units: | Not Reported | Contrib drainagearea: | Not Reported |
| Contrib drainagearea units: | Not Reported | Latitude: | 40.864572 |
| Longitude: | -124.0917286 | Sourcemap scale: | 024000 |
| Horiz Acc measure: | 5 | Horiz Acc measure units: | seconds |
| Horiz Collection method: | Interpolated from map | | |
| Horiz coord refsys: | NAD83 | Vert measure val: | 8.00 |
| Vert measure units: | feet | Vertacc measure val: | 005 |
| Vert accmeasure units: | feet | | |
| Vertcollection method: | Interpolated from topographic map | | |
| Vert coord refsys: | NGVD29 | Countrycode: | US |
| Aquifername: | California Coastal Basin aquifers | | |
| Formation type: | Not Reported | | |
| Aquifer type: | Not Reported | | |
| Construction date: | 19510101 | Welldepth: | 600 |
| Welldepth units: | ft | Wellholedepth: | 640 |
| Wellholedepth units: | ft | | |

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---|---|---|
| 95521 | 16 | 0 |

Federal EPA Radon Zone for HUMBOLDT County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for Zip Code: 95521

Number of sites tested: 8

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area - 1st Floor | 0.288 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | Not Reported | Not Reported | Not Reported | Not Reported |
| Basement | Not Reported | Not Reported | Not Reported | Not Reported |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

**STREET AND ADDRESS INFORMATION**

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# Appendix C

Historical Research Documentation

Trinity Annex
1305 C Street
Arcata, CA 95521

Inquiry Number: 5163100.3
January 19, 2018

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

01/19/18

**Site Name:**

Trinity Annex
1305 C Street
Arcata, CA 95521
EDR Inquiry # 5163100.3

**Client Name:**

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Meghan Hearne

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Rincon were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## *Certified Sanborn Results:*

**Certification #** C3C9-4E34-AD3E

**PO #** 17-04856

**Project** Trinity Annex

**Maps Provided:**

1961
1951
1941
1928
1919

Sanborn® Library search results

Certification #: C3C9-4E34-AD3E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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## *Sanborn Sheet Key*

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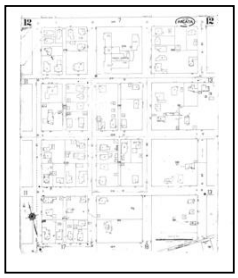
### 1961 Source Sheets

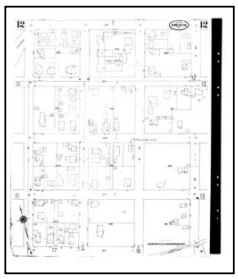
Volume 1, Sheet 7
1961



Volume 1, Sheet 12
1961

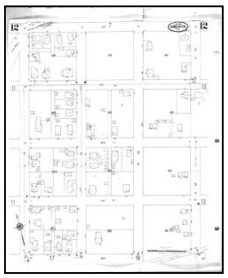
### 1951 Source Sheets

Volume 1, Sheet 7
1951



Volume 1, Sheet 12
1951

### 1941 Source Sheets

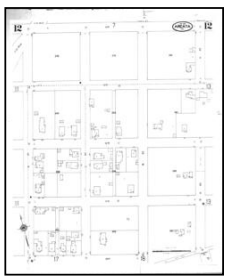


Volume 1, Sheet 12
1941

Volume 1, Sheet 7
1941

### 1928 Source Sheets

Volume 1, Sheet 7
1928



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1928

## *Sanborn Sheet Key*

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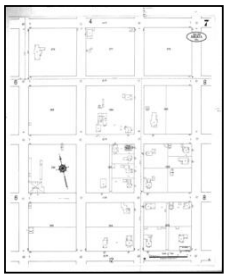
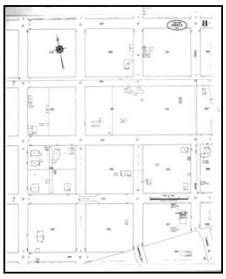
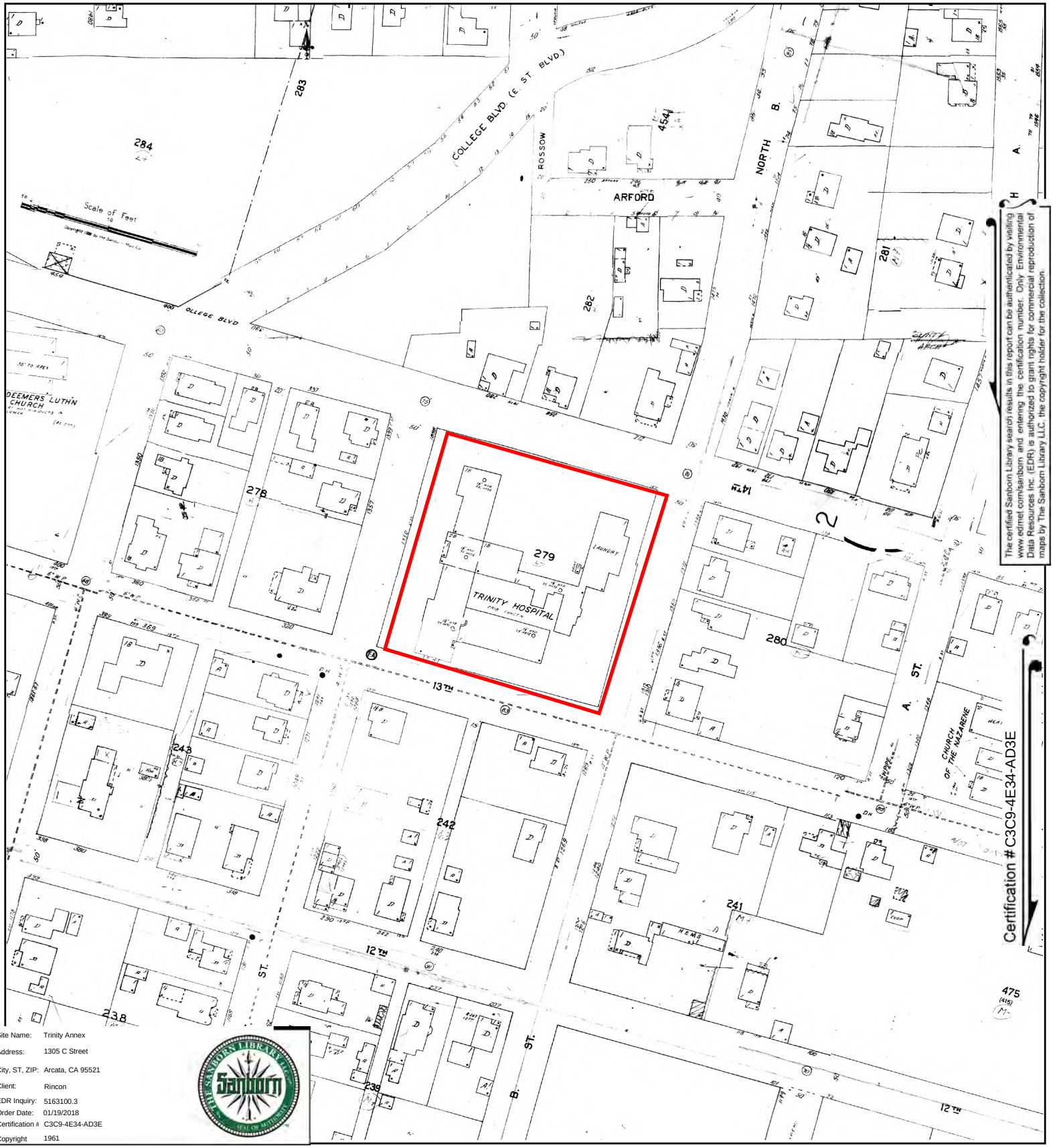


Volume 1, Sheet 7
1919



Volume 1, Sheet 8
1919




| | |
|---|---|
| Site Name: | Trinity Annex |
| Address: | 1305 C Street |
| City, ST, ZIP: | Arcata, CA 95521 |
| Client: | Rincon |
| EDR Inquiry: | 5163100.3 |
| Order Date: | 01/19/2018 |
| Certification #: | C3C9-4E34-AD3E |
| Copyright | 1961 |

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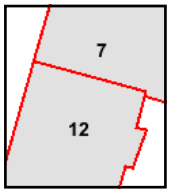
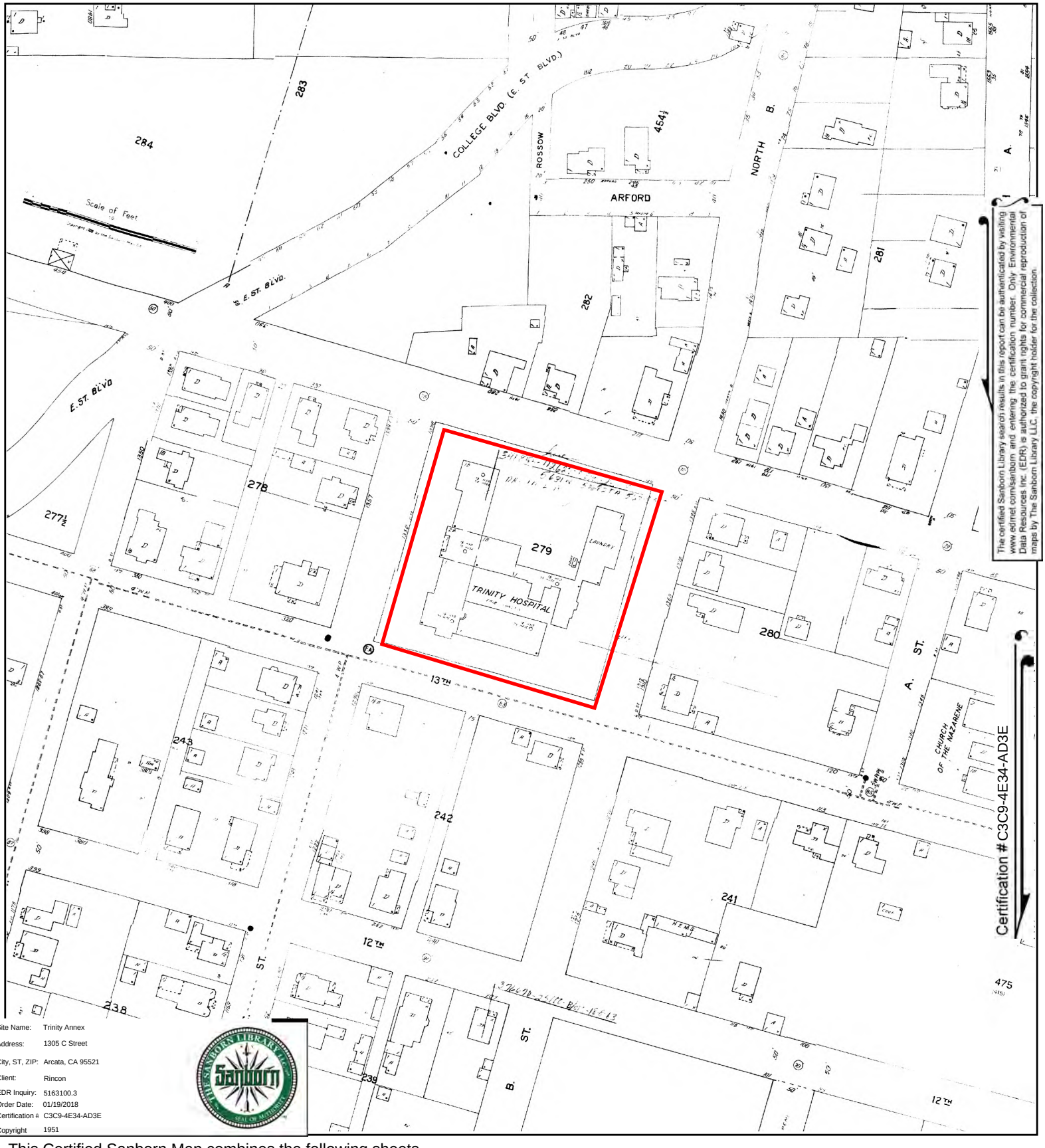
0 Feet 150 300 600




Volume 1, Sheet 12
Volume 1, Sheet 7

N




Site Name: Trinity Annex
Address: 1305 C Street
City, ST, ZIP: Arcata, CA 95521
Client: Rincon
EDR Inquiry: 5163100.3
Order Date: 01/19/2018
Certification #: C3C9-4E34-AD3E
Copyright: 1951

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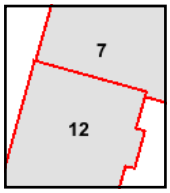
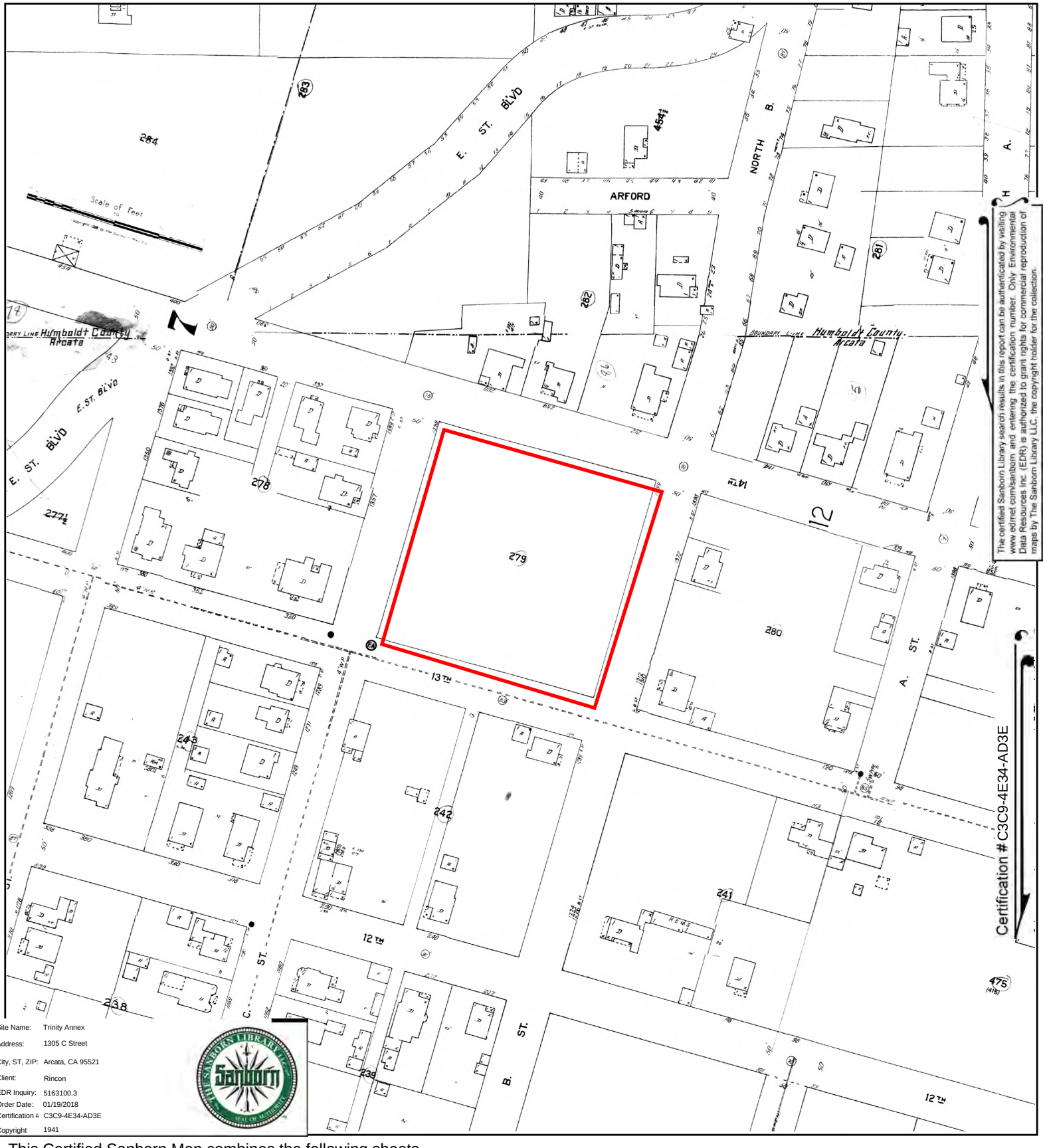



Volume 1, Sheet 12
Volume 1, Sheet 7

N

# Certified Sanborn® Map

1941

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| | |
|---|---|
| Site Name: | Trinity Annex |
| Address: | 1305 C Street |
| City, ST, ZIP: | Arcata, CA 95521 |
| Client: | Rincon |
| EDR Inquiry: | 5163100.3 |
| Order Date: | 01/19/2018 |
| Certification #: | C3C9-4E34-AD3E |
| Copyright | 1941 |

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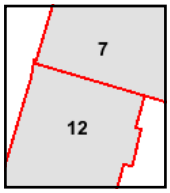
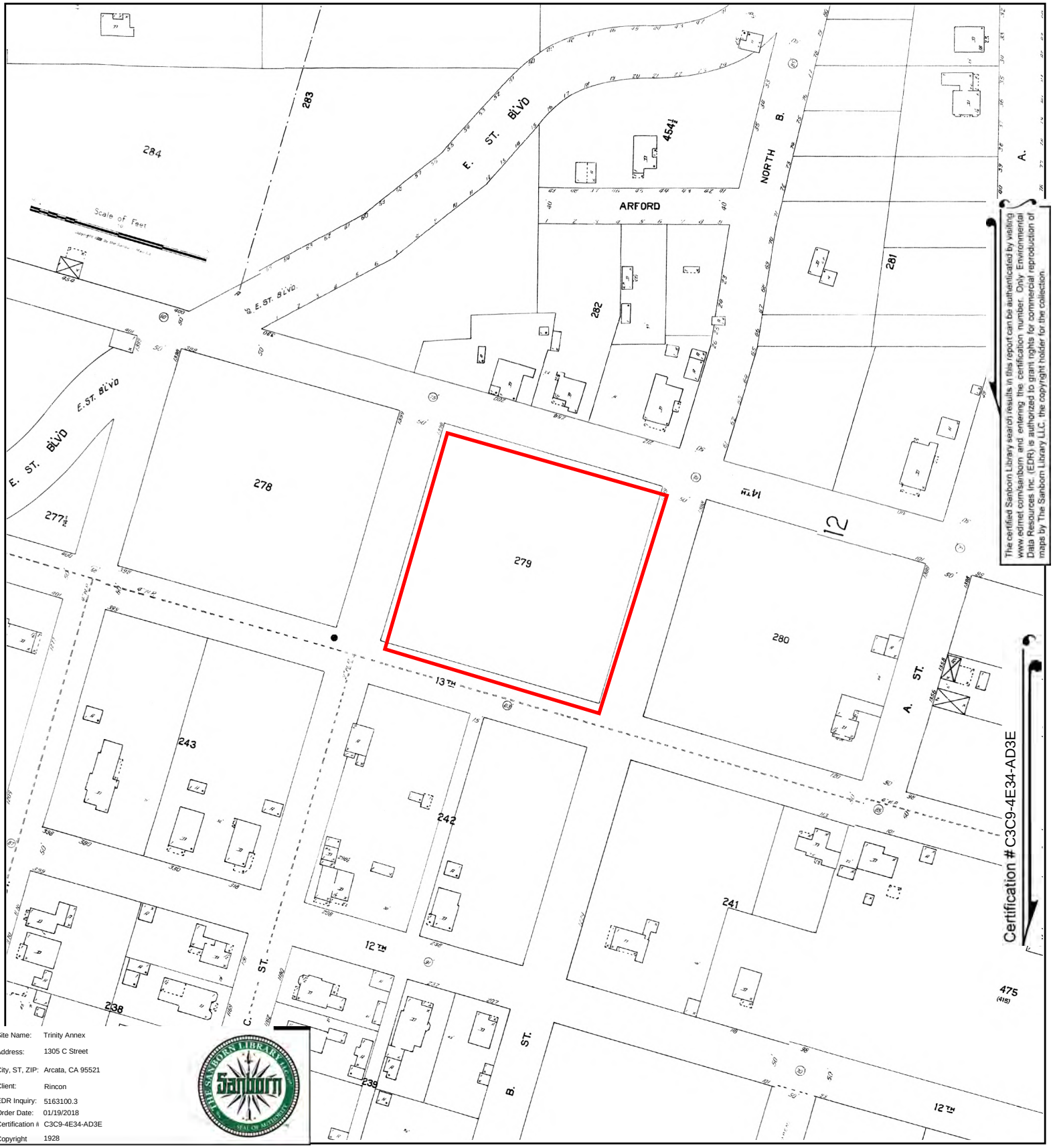



Volume 1, Sheet 7
Volume 1, Sheet 12

0 Feet 150 300 600

N

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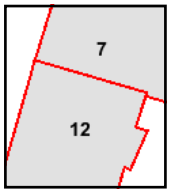
| | |
|---|---|
| Site Name: | Trinity Annex |
| Address: | 1305 C Street |
| City, ST, ZIP: | Arcata, CA 95521 |
| Client: | Rincon |
| EDR Inquiry: | 5163100.3 |
| Order Date: | 01/19/2018 |
| Certification #: | C3C9-4E34-AD3E |
| Copyright | 1928 |

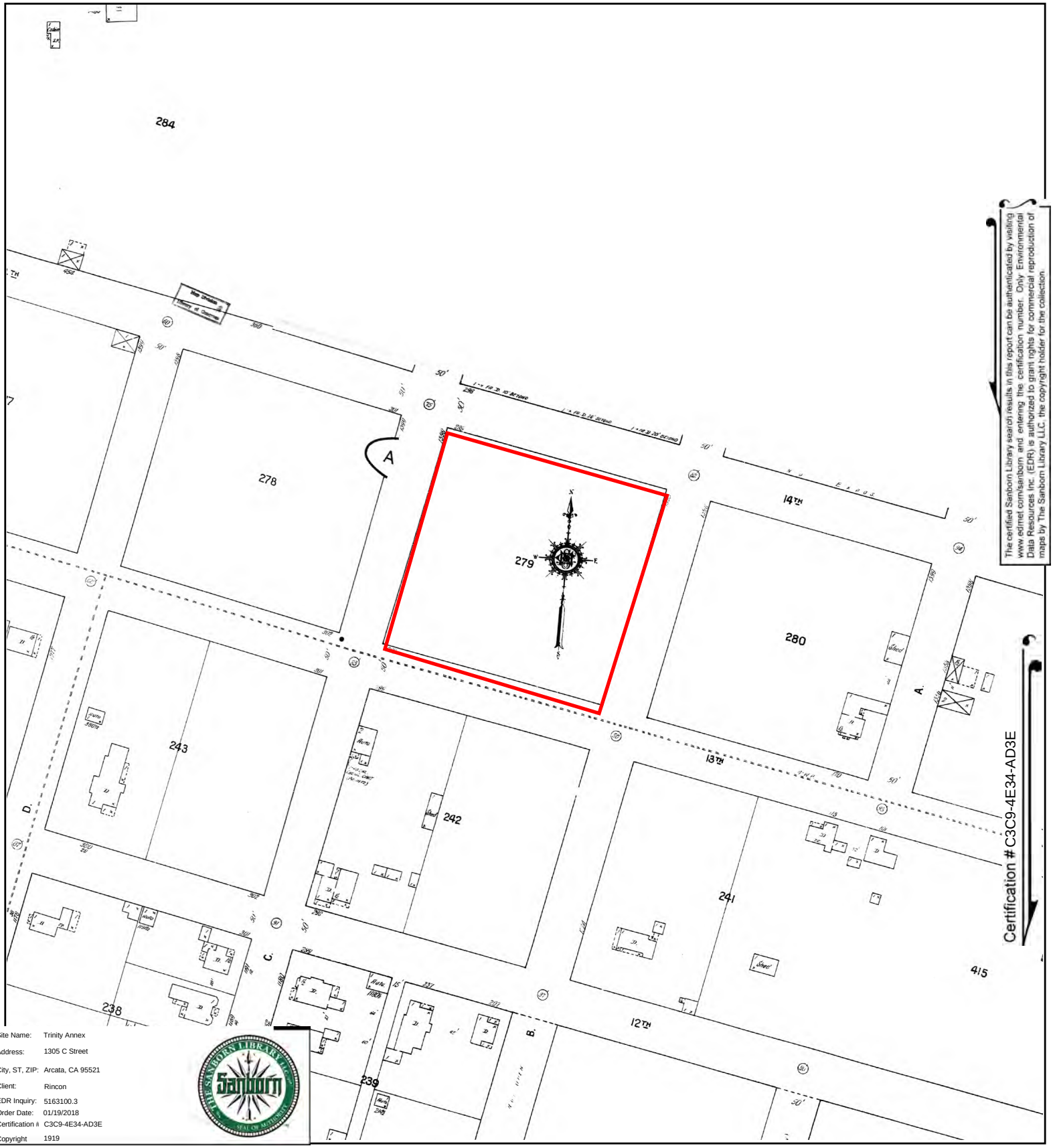
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600




Volume 1, Sheet 12
Volume 1, Sheet 7

N

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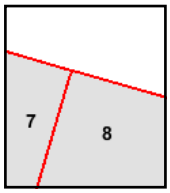
| | |
|---|---|
| Site Name: | Trinity Annex |
| Address: | 1305 C Street |
| City, ST, ZIP: | Arcata, CA 95521 |
| Client: | Rincon |
| EDR Inquiry: | 5163100.3 |
| Order Date: | 01/19/2018 |
| Certification # | C3C9-4E34-AD3E |
| Copyright | 1919 |

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600




Volume 1, Sheet 8
Volume 1, Sheet 7

N

Trinity Annex
1305 C Street
Arcata, CA 95521

Inquiry Number: 5163100.4
January 18, 2018

# EDR Historical Topo Map Report

## with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Historical Topo Map Report

01/18/18

| Site Name: | Client Name: |
|---|---|
| Trinity Annex | Rincon |
| 1305 C Street | 180 North Ashwood Avenue |
| Arcata, CA 95521 | Ventura, CA 93003-0000 |
| EDR Inquiry # 5163100.4 | Contact: Meghan Hearne |

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Rincon were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

| *Search Results:* | | *Coordinates:* | |
|---|---|---|---|
| **P.O.#** | 17-04856 | **Latitude:** | 40.871371 40° 52' 17" North |
| **Project:** | Trinity Annex | **Longitude:** | -124.079735 -124° 4' 47" West |
| | | **UTM Zone:** | Zone 10 North |
| | | **UTM X Meters:** | 409015.54 |
| | | **UTM Y Meters:** | 4525039.20 |
| | | **Elevation:** | 88.97' above sea level |

**Maps Provided:**

2012
1972
1959
1951
1947
1942
1933

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## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

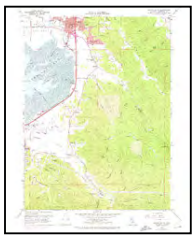
### 2012 Source Sheets

Arcata South
2012
7.5-minute, 24000

Arcata North
2012
7.5-minute, 24000

### 1972 Source Sheets

Arcata North
1972
7.5-minute, 24000
Aerial Photo Revised 1970



Arcata South
1972
7.5-minute, 24000
Aerial Photo Revised 1972

### 1959 Source Sheets

Arcata North
1959
7.5-minute, 24000
Aerial Photo Revised 1956

Arcata South
1959
7.5-minute, 24000
Aerial Photo Revised 1956

### 1951 Source Sheets

Eureka
1951
15-minute, 62500

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1947 Source Sheets

EUREKA
1947
15-minute, 62500

### 1942 Source Sheets

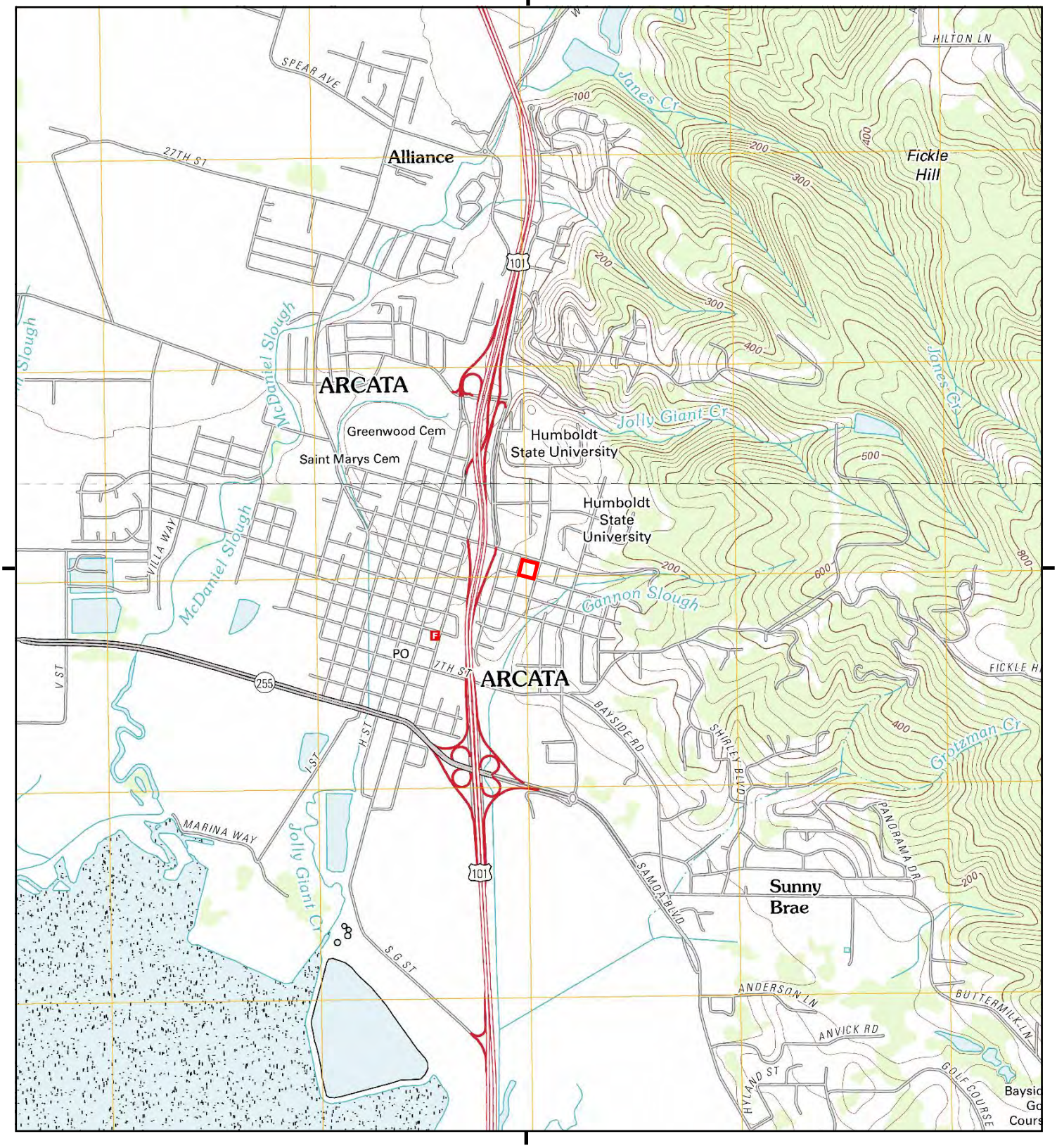
Eureka
1942
15-minute, 62500

### 1933 Source Sheets

Eureka
1933
15-minute, 48000

# Historical Topo Map

2012




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

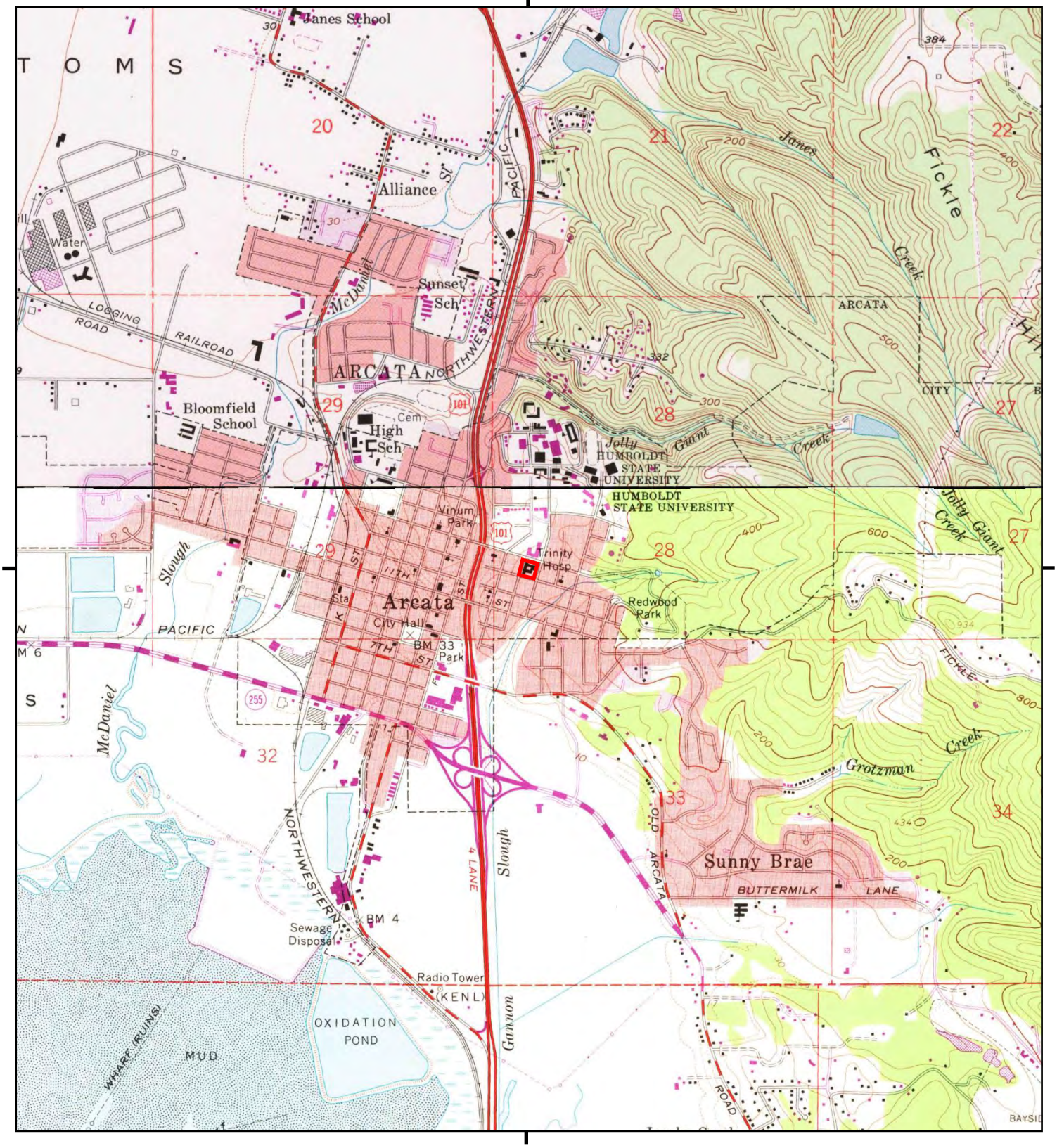
TP, Arcata South, 2012, 7.5-minute
N, Arcata North, 2012, 7.5-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N

# Historical Topo Map

1972




This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

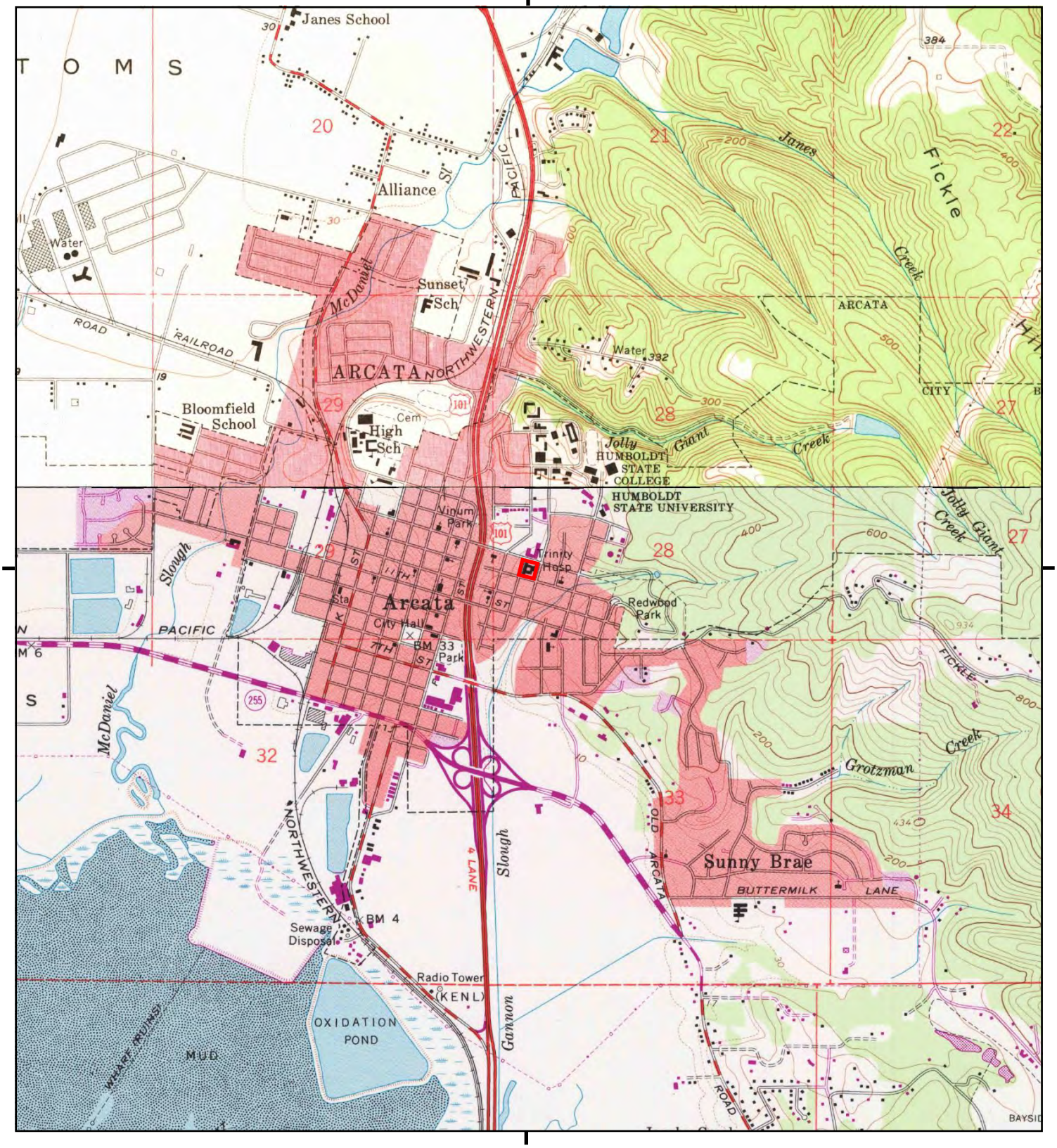
TP, Arcata South, 1972, 7.5-minute
N, Arcata North, 1972, 7.5-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N

# Historical Topo Map

1959




This report includes information from the following map sheet(s).

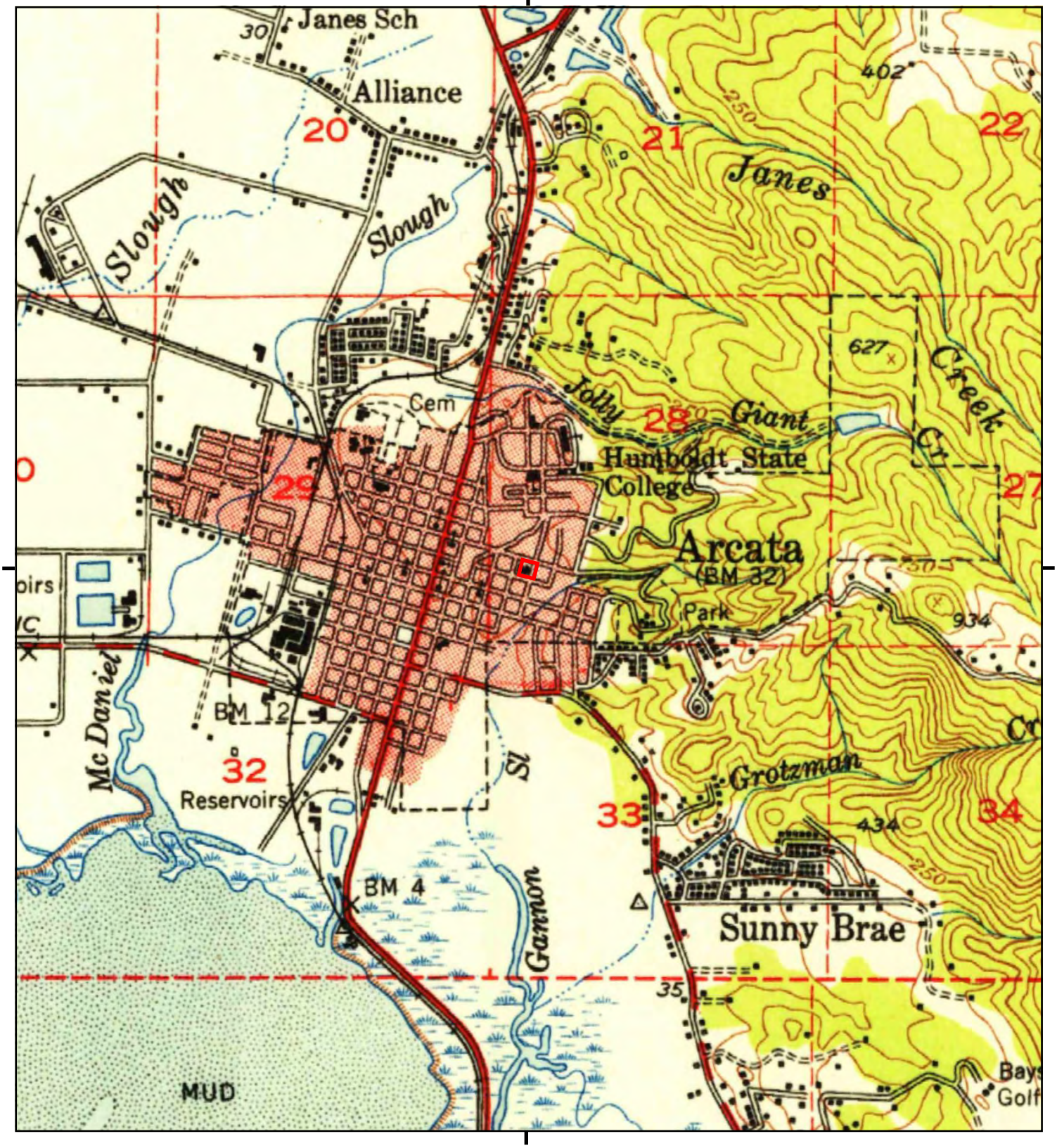
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Arcata South, 1959, 7.5-minute
N, Arcata North, 1959, 7.5-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

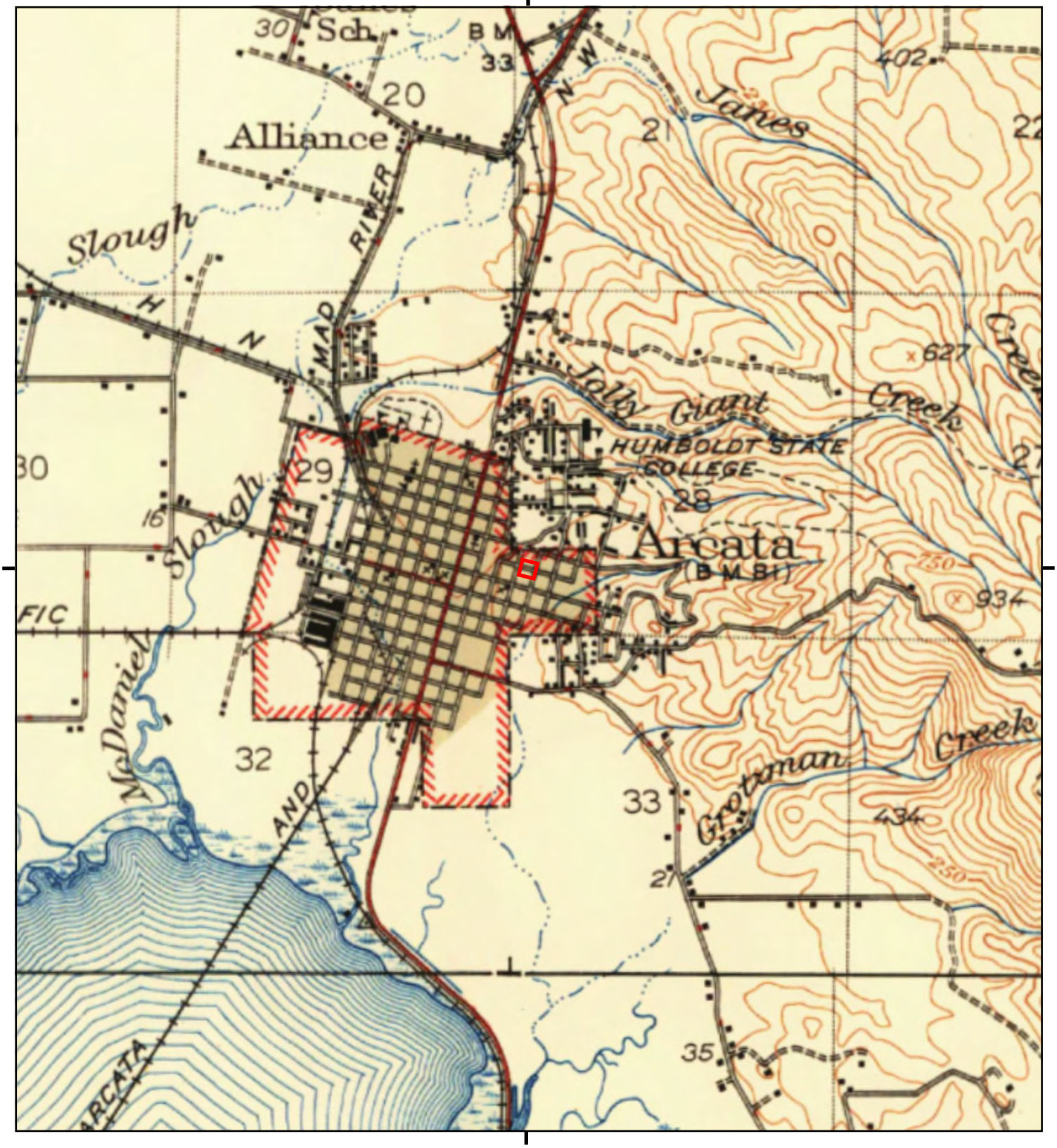
TP, Eureka, 1951, 15-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N

# Historical Topo Map

1947




This report includes information from the following map sheet(s).

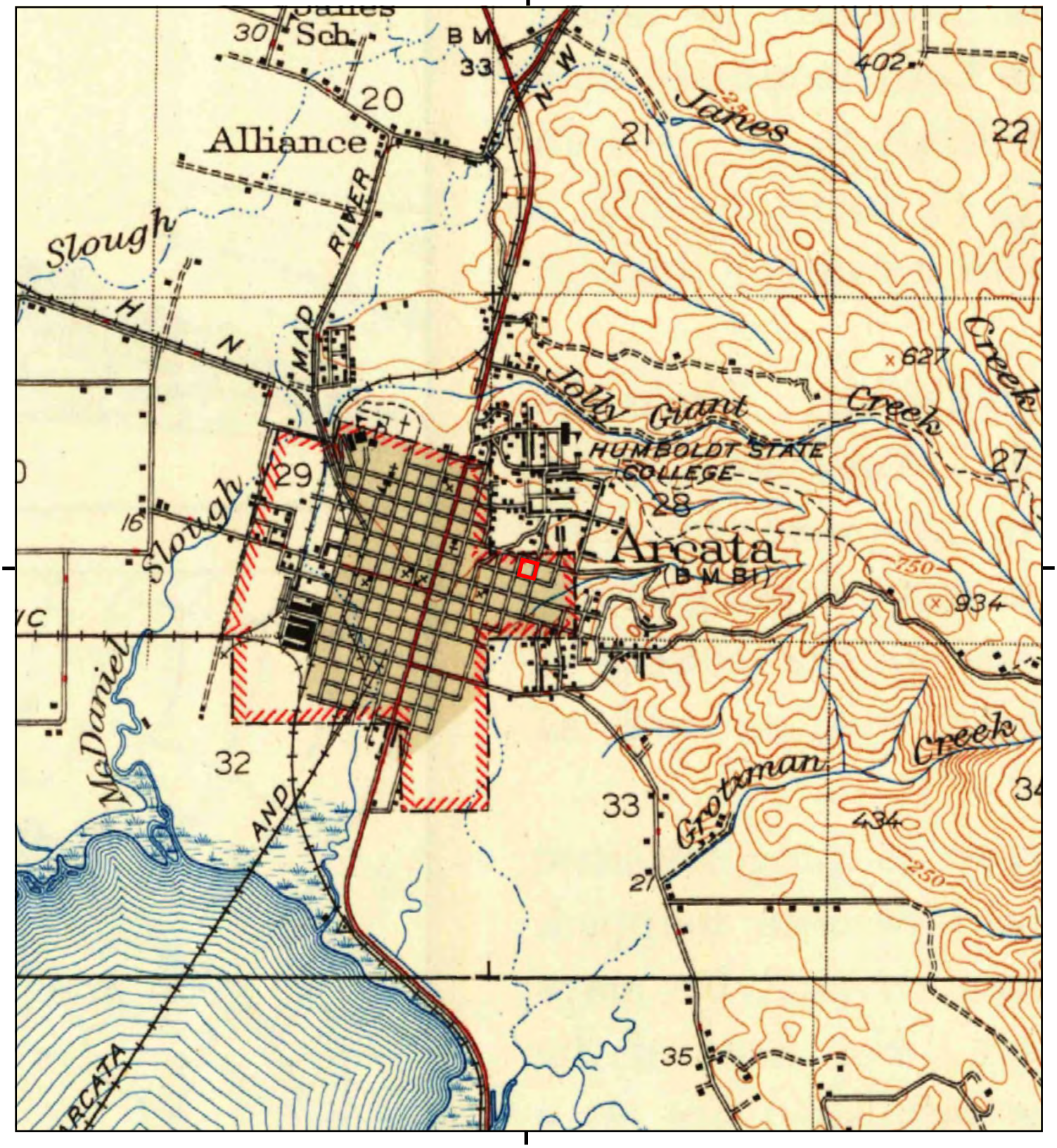
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, EUREKA, 1947, 15-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

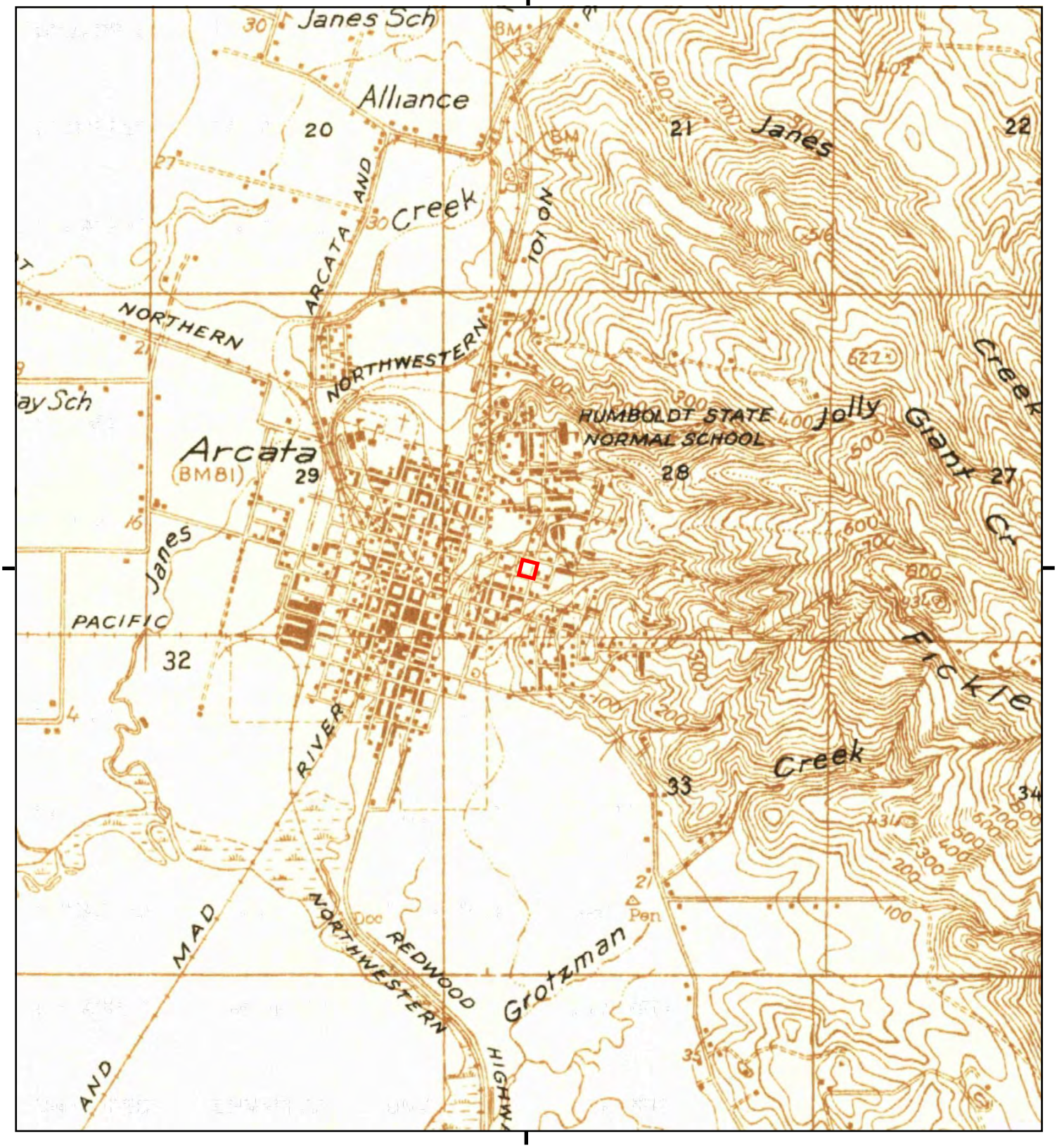
TP, Eureka, 1942, 15-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N

# Historical Topo Map

1933




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Eureka, 1933, 15-minute

SITE NAME: Trinity Annex
ADDRESS: 1305 C Street
Arcata, CA 95521
CLIENT: Rincon

N

**Trinity Annex**

1305 C Street

Arcata, CA 95521

Inquiry Number: 5163100.9

January 23, 2018

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

01/23/18

**Site Name:**

Trinity Annex
1305 C Street
Arcata, CA 95521
EDR Inquiry # 5163100.9

**Client Name:**

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Meghan Hearne

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***Search Results:***

| Year | Scale | Details | Source |
|---|---|---|---|
| 2012 | 1"=500' | Flight Year: 2012 | USDA/NAIP |
| 2010 | 1"=500' | Flight Year: 2010 | USDA/NAIP |
| 2009 | 1"=500' | Flight Year: 2009 | USDA/NAIP |
| 2005 | 1"=500' | Flight Year: 2005 | USDA/NAIP |
| 1993 | 1"=500' | Acquisition Date: June 12, 1993 | USGS/DOQQ |
| 1983 | 1"=500' | Flight Date: August 15, 1983 | USGS |
| 1972 | 1"=500' | Flight Date: January 01, 1972 | USGS |
| 1957 | 1"=500' | Flight Date: January 01, 1957 | USDA |
| 1954 | 1"=500' | Flight Date: August 03, 1954 | USGS |
| 1941 | 1"=500' | Flight Date: November 25, 1941 | USDA |

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INQUIRY #: 5163100.9
YEAR: 2012
= 500'
N
EDR

INQUIRY #: 5163100.9
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 5163100.9
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 5163100.9
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 5163100.9
YEAR: 1993
= 500'
N
EDR

INQUIRY #: 5163100.9
YEAR: 1983
= 500'
N
EDR

INQUIRY #: 5163100.9

YEAR: 1972

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5163100.9

YEAR: 1957

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5163100.9
YEAR: 1954
= 500'
N
EDR

INQUIRY #: 5163100.9
YEAR: 1941
= 500'
N
EDR

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Polk's City Directory |

**C ST 1977**

E.W. PIER
Featuring "The Ri
Complete Contractor Suppl
940 Broadway St., Eureka

75

**C STREET (A)—Contd**
1049 Love Sandra G 822-2251
1063 Monroe Sara N Mrs ◎
1086 Waldvogel James B 822-6297
1090★Cipolla Cynthia 822-5501
1091 Fisher Margt E 822-3940
11TH ST INTERSECTS
1108 Heinle Charles C ◎ 822-0100
1111 Larson Dagny M Mrs ◎ 822-1337
1141 Clark Thos J 822-6092
1144 Larson Mary L Mrs 822-3222
1162 Van Kirk Robt R 822-6066
1169 Thurston Maxine M Mrs ◎ 822-0298
1180★Lindsay Richd G ◎ 822-4026
1191 No Return
12TH ST INTERSECTS
1249 No Return
1250★Grytness Chuck 822-2283
1271 Ladefoged Gunnar 822-2860
1288 Relac Mary L Mrs ◎ 822-2212
1291 Cates Paul W ◎ 822-0555
13TH ST INTERSECTS
1350 Administration Building 826-3521
1357 Irish Ed B ◎ 822-2220
1399 Bertrand Ilie Mrs ◎ 822-2907
14TH ST INTERSECTS

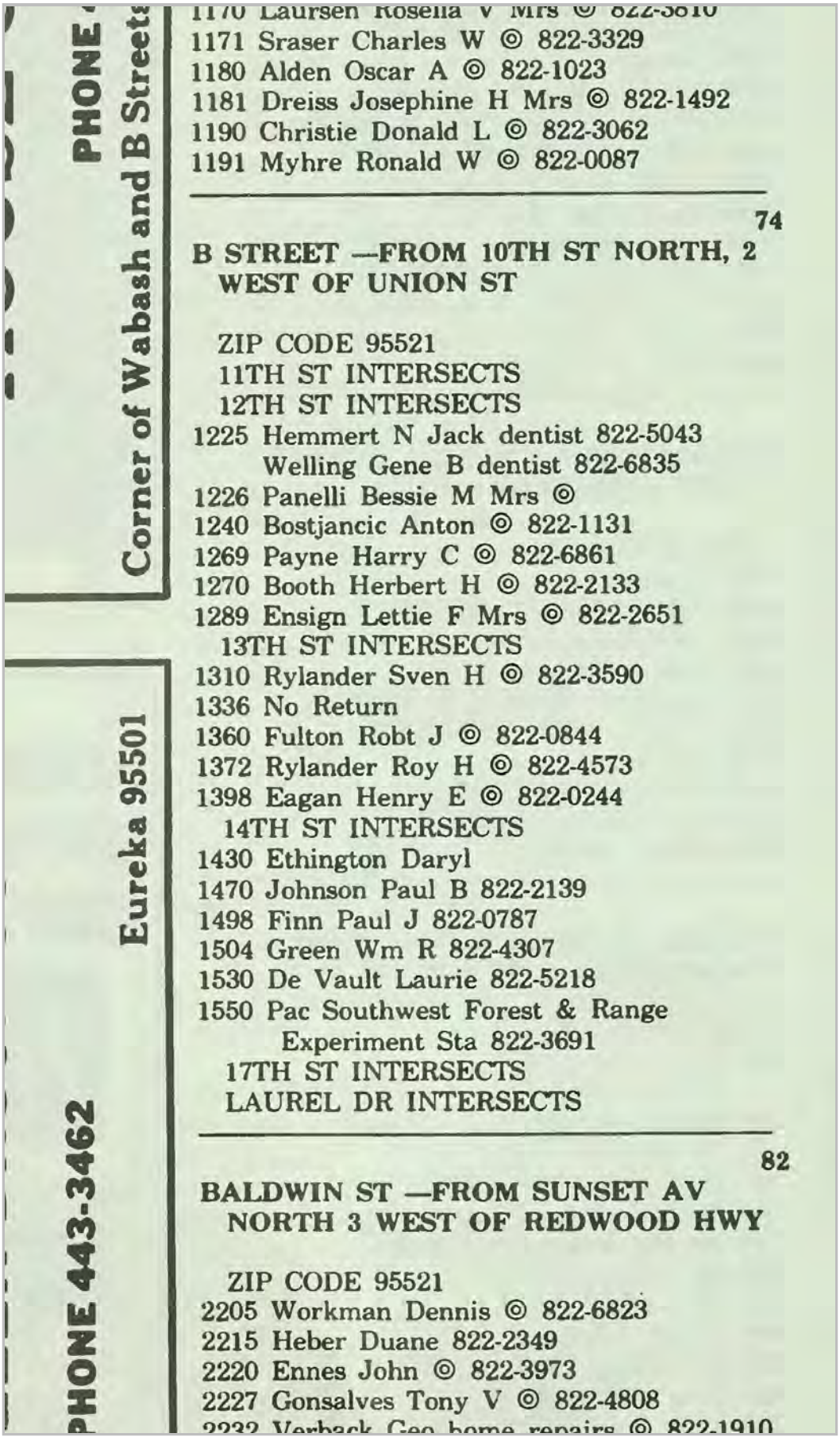
74

**CALIFORNIA AV (ARCATA)—FROM 2558 PACIFIC AV EAST**

ZIP CODE 95521
14 Hansen Gerald O ◎ 822-0763
25 Mc Dowell Robt D ◎ 822-1558

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Polk's City Directory |

**B ST 1972**



PHONE
Corner of Wabash and B Streets
Eureka 95501
PHONE 443-3462

1170 Laursen Rosella V Mrs ◎ 822-3810
1171 Sraser Charles W ◎ 822-3329
1180 Alden Oscar A ◎ 822-1023
1181 Dreiss Josephine H Mrs ◎ 822-1492
1190 Christie Donald L ◎ 822-3062
1191 Myhre Ronald W ◎ 822-0087

74

**B STREET —FROM 10TH ST NORTH, 2 WEST OF UNION ST**

ZIP CODE 95521
11TH ST INTERSECTS
12TH ST INTERSECTS
1225 Hemmert N Jack dentist 822-5043
Welling Gene B dentist 822-6835
1226 Panelli Bessie M Mrs ◎
1240 Bostjancic Anton ◎ 822-1131
1269 Payne Harry C ◎ 822-6861
1270 Booth Herbert H ◎ 822-2133
1289 Ensign Lettie F Mrs ◎ 822-2651
13TH ST INTERSECTS
1310 Rylander Sven H ◎ 822-3590
1336 No Return
1360 Fulton Robt J ◎ 822-0844
1372 Rylander Roy H ◎ 822-4573
1398 Eagan Henry E ◎ 822-0244
14TH ST INTERSECTS
1430 Ethington Daryl
1470 Johnson Paul B 822-2139
1498 Finn Paul J 822-0787
1504 Green Wm R 822-4307
1530 De Vault Laurie 822-5218
1550 Pac Southwest Forest & Range Experiment Sta 822-3691
17TH ST INTERSECTS
LAUREL DR INTERSECTS

82

**BALDWIN ST —FROM SUNSET AV NORTH 3 WEST OF REDWOOD HWY**

ZIP CODE 95521
2205 Workman Dennis ◎ 822-6823
2215 Heber Duane 822-2349
2220 Ennes John ◎ 822-3973
2227 Gonsalves Tony V ◎ 822-4808
2232 Verback Geo home repairs ◎ 822-1910

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Polk's City Directory |

# C ST 1972

3451 Smullin Wm B ◎ 442-6212
3509 Johnson Robert E ◎ 822-1645
3539 Anderson Geo E ◎ 822-4014
CRESTWOOD DR INTERSECTS
3555 Mather Deane ◎ 822-4503

---

76

## C STREET —FROM 325 10TH ST NORTH

ZIP CODE 95521

74

10TH ST INTERSECTS
1030 Misbach Graham H ◎ 822-2814
1049 No Return
1063 Monroe H Perry ◎ 822-3356
1086 No Return
1090 Kretzinger Rick
1091 Gustafson John D 822-2183
11TH ST INTERSECTS
1108 Rees Frances L Mrs ◎ 822-3518
1111 Larson Arthur O ◎ 822-1337
1141 No Return
1144 Larson Mary L Mrs 822-3222
1162 Van Kirk Robt R 822-6066
1169 Thurston Maxine Mrs ◎ 822-0298
1180 Lu Jonathan ◎ 822-6926
1191 Sawyer Wm E ◎ 822-3057
12TH ST INTERSECTS
1249 Todd Max A ◎ 822-0815
1250 Hollis Cristi E 822-6676
1271 Ladefoged Gunnar 822-2860
1288 Relac Mary L Mrs ◎ 822-2212
1291 Cates Paul W ◎ 822-0555
13TH ST INTERSECTS
1350 Trinity Hospital Of Arcata 822-3621
1357 Irish Ed B ◎ 822-2220
1399 Bertrand Ilie Mrs Mrs ◎ 822-2907
14TH ST INTERSECTS

---

74

## CALIFORNIA AV —FROM 2558 PACIFIC AV EAST

ZIP CODE 95521
25 Mc Dowell Robt ◎ 822-1558

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Polk's City Directory |

# B ST 1968



74

ARCATA BLVD -FROM 101 HIGHWAY NORTHEAST

---ZIP CODE 95521
420 DE HAVEN LAURENCE 822-4802
433 LAMB WM R • 822-2364
451 ROSS ROBT 822-3367
511 MERLO PAUL 822-5335
515 HERMAN GERALD 822-6680
543 PECOLATTO ALBINO • 822-4301
573 GODDARD LLOYD • 822-2554
580 BABCOCK LESSLEY
588 VACANT
590 KROWTLER GARY
592 DANIELSON RICHD
610 POOR CHARLES F 822-1297
615 VACANT
627 JIMENEZ MANUEL 822-4723

82

ARLINGTON WAY -FROM 1105 LOUIS RD NORTHEAST

---ZIP CODE 95521
3235 ROSSIG ELMER V • 822-3524
3240 BURROW WM 822-0209
3245 STEWART L B • 822-0597
3260 HARRIS SAM • 822-0488
3277 WADE CHESTER E •
3280 VACANT
3300 RALEY TOMMY R • 822-5575
3320-3420 VACANT
3425 NEWELL JOHN F 822-3054

78

AUSTIN WAY -FROM 1875 11TH

---ZIP CODE 95521
1110 BROWN DARRELL H • 822-2663
1111 VACANT
1120 RODRIGUES MARY L MRS • 822-0759
1121 WOMACK WATSON • 822-2812
1130 VACANT
1131 GRIFFITH DAYTON E • 822-5292
1140 HACKETT VINCENT L 822-6683
1141 MILLER OMER • 822-5150
1150 CLEMONS OSCAR R • 822-0697
1151 GRISWOLD CARL N •
1160 LEDBETTER DRYDEN C • 822-2140
1161 BANDUCCI FRED • 822-2230
1170 LAURSEN ROSELLA MRS • 822-3810
1171 FRASER CHARLES W • 822-3329
1180 ALDEN OSCAR A • 822-1023
1181 DREISS JOSEPHINE H MRS • 822-1492
1190 CHRISTIE DONALD L • 822-3062
1191 VAUGHN JACK •

74

B STREET -FROM 10TH NORTH, 2 WEST OF UNION

---ZIP CODE 95521
---11TH INTERSECTS
---12TH INTERSECTS
1225 HEMMERT N JACK DENTIST 822-5043
WILLING GENE B DENTIST 822-6835
1226 PANELLI BESSIE M MRS •
1240 BOSTYANCIC ANTON
1269 WISSINGER C L 822-6645
1270 BOOTH HERBERT H • 822-2133
1289 ENSIGN LETTIE F MRS • 822-2651
---13TH INTERSECTS
1310 RYLANDER SVEN H • 822-3590
1336 ISKRA HALLYANN MRS • 822-5012
1360 FULTON ROBT J • 822-0844
1372 RYLANDER ROY H • 822-4573
1398 EAGAN HENRY E • 822-0244
---14TH INTERSECTS
1430 WERNER HENRY • 822-5030
1470 VACANT
1498 STICKEL FRED R
1504 CHANDLER EDGAR M JR 822-4295
1530 EUBANKS WM D 822-4959
1550 VACANT
1680 JOHNSON WM T • 822-1368
---17TH INTERSECTS
---LAUREL DR INTERSECTS

82

BALDWIN ST -FROM SUNSET AV NORTH 3 WEST OF REDWOOD HWY

---ZIP CODE 95521
2205 WORKMAN DENNIS • 822-6823
2215 DURANT KEN 822-6986
2220 ENNES JOHN • 822-3973
2227 VACANT
2232 VERBACK GEO • 822-1910
2240 HAMILTON JACK • 822-2260
2245 RASSBACH ROBT 822-1161
2247 BOWMAN NED 822-1690
2252 VALLERGA BENJ J • 822-4608
2255 OLSON ERIK E •
2265 WOOD VALYA S MRS • 822-0107
2268 DEGI ALBINO • 822-4982
2276 NOBLE GARY • 822-4497
2270 GRIFFIN H MRS MRS 822-3277
2284 COSTA TONY C • 822-1185
2287 BLAIR NELLIE M MRS • 822-2681
2290 MATTERI LINCOLN R • 822-0709
2291 BALSANO JAMES
2293 EAST RICHD
2295 GIOTI ROBT
2299 VACANT
2299½ SOPHER TERRY
2300 SUNSET SCHOOL 822-4858
2301 POWERS FRANK M • 822-2623
2303 SANDERSON JOHN E • 822-2750
2325 HENRY ELLIOTT • 822-4206
2327 SUNSET STAR APARTMENTS 822-4781
2363 GALETT KENNETH
2367 SUTTER FRED
2371 FALKINS CHARLES
2375 BRYANT DAVID
2379 BERNARDI MARVIN
2383 MEYERS DAVID
2387 BERSAGLIERA ALLEN 822-4171
2391 PLESSAS DAVID J •
2400 NO RETURN
2544 STONE CARL JR • 822-3380
2549 CLARK GEO E • 822-1107
2559 ISAACSON RAYMOND W • 822-1203
---MADRONE INTERSECTS
2569 RHOADES THEO • 822-0622
2578 MC AULEY JAMES A 822-5884
2579 LOSEY THOS R • 822-5065
2589 TREGONING WM 822-3900

84

BAYSIDE RD -FROM END OF UNION AV SOUTHEAST CONTINUATION OF 7TH

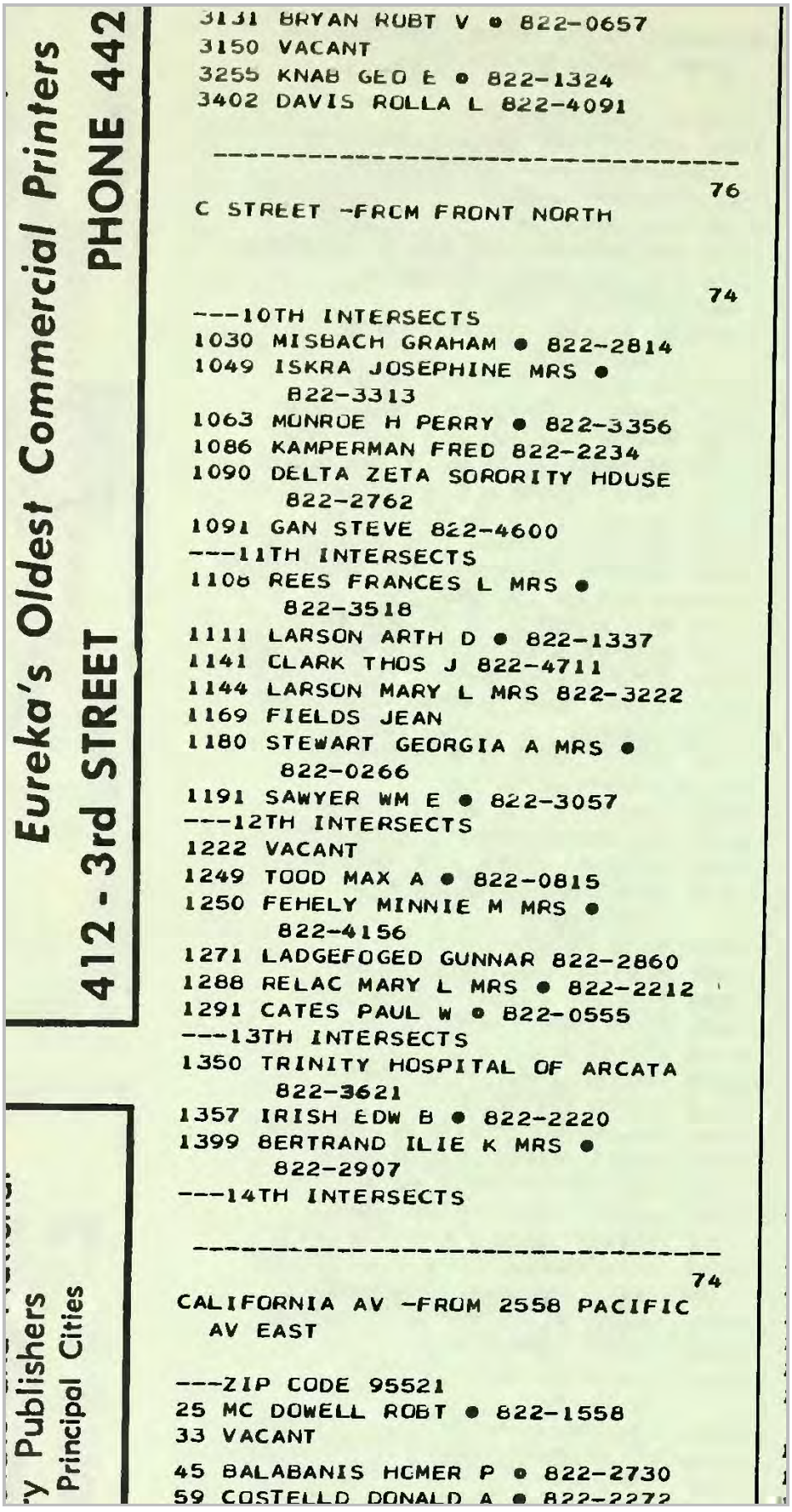
---ZIP CODE 95521
240 ROPER JOHN D • 822-4119
250 BALL PETER W 822-3390
329 STEARNS JACK R 822-2880
350 SIMONSEN IVER • 822-1536
430 FALLON MITCHEL
434 PETERSON DONALD F 822-6065
533 HOLT KENNETH O 822-6610
535 EARNEST KENNETH O 822-2151
537 JAMISON LORAN O 822-4126
540 ASHCROFT ERNEST • 822-3940
547 PAUL LYLE B REV 822-0511

REALSMITH REALTY
M. L. SMITH
RESIDENTIAL
RANCHES
INDUSTRIAL
COMMERCIAL
Exchange Specialists
PHONE 443-2245
2926 E. Street Eureka

BAKER & STANTON OF EUREKA
WAREHOUSE SALES ROOM
FURNITURE - CARPETS - APPLIANCES - COLOR TV
37 W. 2nd, Corner A Eureka Phone 443-3161

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Polk's City Directory |

# C ST 1968



Eureka's Oldest Commercial Printers
PHONE 442
412 - 3rd STREET

3131 BRYAN ROBT V • 822-0657
3150 VACANT
3255 KNAB GEO E • 822-1324
3402 DAVIS ROLLA L 822-4091

---

76

C STREET -FROM FRONT NORTH

74

---10TH INTERSECTS
1030 MISBACH GRAHAM • 822-2814
1049 ISKRA JOSEPHINE MRS • 822-3313
1063 MONROE H PERRY • 822-3356
1086 KAMPERMAN FRED 822-2234
1090 DELTA ZETA SORORITY HOUSE 822-2762
1091 GAN STEVE 822-4600
---11TH INTERSECTS
1106 REES FRANCES L MRS • 822-3518
1111 LARSON ARTH D • 822-1337
1141 CLARK THOS J 822-4711
1144 LARSON MARY L MRS 822-3222
1169 FIELDS JEAN
1180 STEWART GEORGIA A MRS • 822-0266
1191 SAWYER WM E • 822-3057
---12TH INTERSECTS
1222 VACANT
1249 TOOD MAX A • 822-0815
1250 FEHELY MINNIE M MRS • 822-4156
1271 LADGEFOGED GUNNAR 822-2860
1288 RELAC MARY L MRS • 822-2212
1291 CATES PAUL W • 822-0555
---13TH INTERSECTS
1350 TRINITY HOSPITAL OF ARCATA 822-3621
1357 IRISH EDW B • 822-2220
1399 BERTRAND ILIE K MRS • 822-2907
---14TH INTERSECTS

---

74

CALIFORNIA AV -FROM 2558 PACIFIC AV EAST

---ZIP CODE 95521
25 MC DOWELL ROBT • 822-1558
33 VACANT
45 BALABANIS HOMER P • 822-2730
59 COSTELLO DONALD A • 822-2272

Principal Cities

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Polk's City Directory |

## B ST 1964

822-1492
1190 CHRISTIE DONALD L • 822-3062
1191 SIMPSON AUDREY K MRS •
822-4084

---

74

B STREET (ARCATA)-FROM 10TH NORTH
2 WEST OF UNION

---11TH INTERSECTS

Styles and Sizes
Steel Buildings
Free Estimates

520 SUMMER
EUREKA

PHONE
443-5518

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Polk's City Directory |

**B ST 1964**

Who Sells It?

Is Answered by the Classified Business Lists in this Directory

ART

DALY'S

Humbol

E

C

15

R. L. POLK

B STREET (A)--CONTD
---12TH INTERSECTS
1226 PANELLI BESSIE M MRS ●
822-1550
1240 BOSTYANCIC ANTON
1269 VACANT
1270 BOOTH HERBERT H ● 822-2133
1289 ENSIGN LETTIE F MRS ●
822-2651
---13TH INTERSECTS
1310 RYLANDER SVEN H ● 822-3590
1336 ISKRA ROY J ● 822-5012
1360 FULTON ROBT J ● 822-0844
1372 RYLANDER ROY H ● 822-4573
1398 EAGAN HENRY E ● 822-0244
---14TH INTERSECTS
1430 WERNER HENRY ● 822-5030
1470 HORSTMAN ROBT R ●
1498 MC CREADY PETER H 822-4179
1504 CHANDLER EDGAR M JR 822-4295
1530 EUBANKS WM D 822-4959
1590 BAIOCCHI EDW R
1680 JOHNSON WM T ● 822-1368
---17TH INTERSECTS
---LAUREL DR INTERSECTS

---

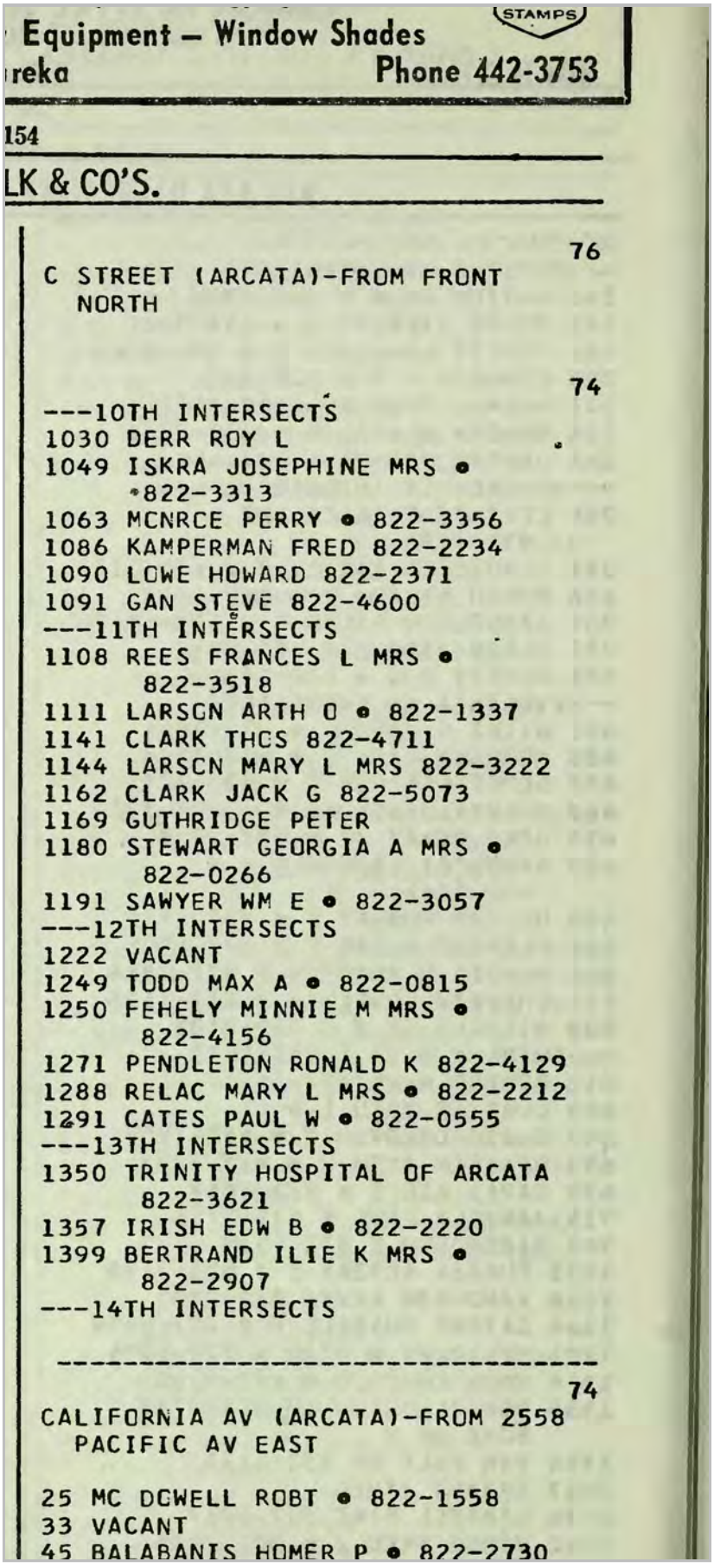
82

BALDWIN ST (ARCATA)-FROM SUNSET AV N 3 W OF REDWOOD HWY

2205 NEWBILL HOMER ● 822-3241
2215 ANFINSON CARL ● 822-1991
2220 ENNES JOHN ● 822-3973
2227 CHEZEM DAVID M ● 822-0588
2232 HARTMAN GRANVILLE D ●

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Polk's City Directory |

# C ST 1964



Equipment — Window Shades
reka Phone 442-3753

154

LK & CO'S.

76

C STREET (ARCATA)-FROM FRONT
NORTH

74

---10TH INTERSECTS
1030 DERR ROY L
1049 ISKRA JOSEPHINE MRS •
*822-3313
1063 MCNRCE PERRY • 822-3356
1086 KAMPERMAN FRED 822-2234
1090 LOWE HOWARD 822-2371
1091 GAN STEVE 822-4600
---11TH INTERSECTS
1108 REES FRANCES L MRS •
822-3518
1111 LARSCN ARTH O • 822-1337
1141 CLARK THCS 822-4711
1144 LARSCN MARY L MRS 822-3222
1162 CLARK JACK G 822-5073
1169 GUTHRIDGE PETER
1180 STEWART GEORGIA A MRS •
822-0266
1191 SAWYER WM E • 822-3057
---12TH INTERSECTS
1222 VACANT
1249 TODD MAX A • 822-0815
1250 FEHELY MINNIE M MRS •
822-4156
1271 PENDLETON RONALD K 822-4129
1288 RELAC MARY L MRS • 822-2212
1291 CATES PAUL W • 822-0555
---13TH INTERSECTS
1350 TRINITY HOSPITAL OF ARCATA
822-3621
1357 IRISH EDW B • 822-2220
1399 BERTRAND ILIE K MRS •
822-2907
---14TH INTERSECTS

---

74

CALIFORNIA AV (ARCATA)-FROM 2558
PACIFIC AV EAST

25 MC DCWELL ROBT • 822-1558
33 VACANT
45 BALABANIS HOMER P • 822-2730

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Polk's City Directory |

# B ST 1958



CARPETS
LINOLEUM and TILE
DRAPERIES
Tel. HIlside 3-3317
426 - 3rd
the Weavers House of Carpets

H. E. MELINE
THE OFFICE APPLIANCE CO.
Office Machines — Furniture — Safes
*See Advertisement On Yellow Page 42*
218 F St., P. O. Box 1020, Eureka, Tel. HIlside 3-0809

AUSTIN WAY—Contd

1110 Brown Darrell H ◎ ΔVA2-4565
1111 Layton Floyd H ◎ ΔVA2-3939
1120 Rodrigues Frank M ◎ ΔVA2-0759
1121 Rodden Alvin S ◎ ΔVA2-2893
1130 McCranie Wm T ◎ ΔVA2-0568
1131 Heistuman Ralph A ◎ ΔVA2-1166
1140 Billings J Henry ◎ ΔVA2-2371
1141 Martin Frank jr ΔVA2-0549
1150 Clemons Oscar R ◎ ΔVA2-0697
1151 Griswold Carl N ◎ ΔVA2-0481
1160 Ledbetter Dryden C ◎ ΔVA2-2140
1161 Vanducci Fred ◎ ΔVA2-2230
1170 Laursen Lee ◎ ΔVA2-2786
1171 Fraser Chas W ΔVA2-3329

**Haeger av intersects**

1180 Alden Oscar A ◎ ΔVA2-1023
1181 Dreiss Josephine H Mrs ◎ ΔVA2-1492
1190 Christie Donald L ◎ ΔVA2-3062
1191 Hostetler John E ◎ ΔVA2-1503

74

B—From 10th north, 2 west of Union

**11th intersects**
**12th intersects**

1226 Panelli Bessie M Mrs ◎ ΔVA2-1550
1240 Bostjancic Anton ◎
1269 Moynihan Paul D ◎ ΔVA2-1950
1270 Booth Herbert H ◎ ΔVA2-2133
1289 Ensign Clyde C ◎ ΔVA2-2651

**13th intersects**

1310 Rylander Sven H ◎ bldg contr ΔVA2-3590
1330 Iskra Roy J ◎ ΔVA2-0350
1360 Fulton Robt J ◎ ΔVA2-0844
1372 Rylander Roy H ◎ ΔVA2-4573
1398 Vacant

**14th intersects**

1430 Werner Henry nursery-mn ΔVA2-1587
1470 Vacant
1475 Enderson Wilbur J ◎ ΔVA2-0824
1498 Wilson Grady L ΔVA2-0234
1504 No return
1530 Giroux Esther I ΔVA2-2886
1590 Baiocchi Edw R ΔVA2-3522
1680 Johnson Wm T ◎ ΔVA2-1368

**17th intersects**
**18th intersects**
**Laurel dr intersects**

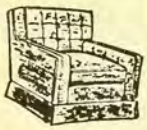
82

BALDWIN (Sunset Addition)—
From Sunset av north, 3 west of Redwood hwy

2205 Lewis Wm E ◎ ΔVA2-1436
2215 Hall Myron E ◎ ΔVA2-2239
2220 Ennes John ◎ ΔVA2-3344
2227 Matteoli Vasco ◎ ΔVA2-0588

**Grant av intersects**

2232 Hartman Granville D ◎ ΔVA2-1623
2240 Merz Geo J ◎ ΔVA2-3549
2245 Chezem Jim E ◎ ΔVA2-1094
2247 Rea Grace ◎ ΔVA2-0030
2252 MacMillan Ruth M Mrs ◎ ΔVA2-1042
2255 Olson Erik E ◎ ΔVA2-0486
2265 Wood Truman R ◎ ΔVA2-0717
2268 Pacini Marino G ◎ ΔVA2-2348
2276 Allen Robt G ◎ ΔVA2-3043


Pezzoli
Upholstery
Shop
•
Furniture
Repaired
Recovered
•
Used
Recovered
Furniture
For Sale
•
1340
Broadway
EUREKA
TEL.
HIlside
2-0042

Marvin L. Smith
Realtor
Mary E. Smith
Saleswoman
THE REALSMITH, Realtor
2212 ALBEE ST. EUREKA, CALIFORNIA
PHONE HIlside 3-1931
Exchanges
Homes
Ranches
Commercial

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Polk's City Directory |

# C ST 1958

2850 Knab Geo E ◎
△VA2-1324
3131 Bryan Robt V ◎
△VA2-0657
3150 Hill Amil R ◎
△VA2-0275

---

**76**

**C—From Front north**

**74**

**10th intersects**

1030 Whitchurch D Edgar
△VA2-0730
1049 Iskra Josephine Mrs ◎
△VA2-3313
1063 Monroe Perry ◎
△VA2-3356
1090 Peters Doris L Mrs ◎
△VA2-2817
1091 Abbott Loren C
△VA2-3661

**11th intersects**

1108 Rees Geo E ◎
△VA2-3518
1111 Larson Arth O ◎
△VA2-1337
1141 Vacant
1144 Mickey & Minnie Mouse
Nursery Sch
△VA2-1555
Stromberg Elta C Mrs
◎ △VA2-1555
1162 Inskip Herbert R ◎
△VA2-3294
1169 Coffman Max R ◎
△VA2-0519
1180 Stewart Georgia A Mrs
◎ △VA2-0266
1191 Sawyer Wm E ◎
△VA2-3057

**12th intersects**

1222 Miller Wm E
1249 Todd Max A ◎
△VA2-0815
1271 Fellman Clyde ◎
1288 Relac Jacob ◎
△VA2-2212

CAPITAL STOCK COMPANY INSURANCE
Standard protection
Guthrie
Insura
518 E St., Eurek

C—Contd

1291 Cates Paul W ◎
△VA2-0555
**13th intersects**
1350 Trinity Hosp of Arcata
△VA2-3621
1357 Irish Edw B ◎
△VA2-2220
1399 Sacchi Stacey D ◎
△VA2-2861

74

**CEDAR—From Laurel dr north, 1 east of Pine av**

1990 Humboldt State College
△VA2-1771
Siemens Cornelius H
△VA2-0654

# Appendix D

Additional Information

**MASEK CONSULTING SERVICES, INC.**
23478 Sandstone St. • Mission Viejo, CA 92692
Phone (949) 581-8503 • http://www.masekconsulting.net
Keeping You Out Of Trouble Is No Trouble For Us®

*Asbestos*

*Lead*

*Mold*

*PCBs*

*Indoor Air Quality*

*Abatement Project Management*

*LEED®*

*Phase I Environmental Site Assessments*

*Property Condition Assessments*

*Universal Wastes*

*Toxic and Hazardous Materials*

*Experience With Thousands of Buildings and Properties*

*Specialists In Saving Money, Keeping Projects On Schedule, and Reducing Liability*

# Asbestos and Lead-Based Paint and Lead-Glazed Ceramic Tile Survey Report

# Trinity Annex at Humboldt State University in Arcata, CA

## Prepared For Humboldt State University

## April 26, 2016

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Our inspection was performed on April 19, 2016.

Anyone reading this report should read the entire report, including attachments, which are part of this report. We use “we” throughout, rather than the awkward repeating of our name.

## Project-Specific Limitations

None. This was not a limited survey. The general limitations at the end of this report apply to all projects. We understand that the building may be demolished, or parts may be demolished and one part kept.

## Company Background

Since 1991 we have provided services at many thousands of properties of all types. Our goals have always been to produce superior reports, offer superior value, and provide superior service. Significantly, about 33% of our revenue has been from sub-consulting work for medium and large consulting companies who demand top quality and choose to trust us to do work for their clients. Our clients include investors, architects, lenders, attorneys, government organizations, property management firms and other consulting firms. We provide a wide range of services needed for pre-acquisition due diligence of commercial properties and for management and correction of identified hazards or deficiencies. Please visit our web site for more information: http://www.masekconsulting.net

## Asbestos Survey Findings

A Friable material can be broken, crumbled, pulverized or reduced to powder by hand pressure when dry (e.g. structural fireproofing, pipe insulation, ceiling tile, ceiling texture). Non-Friable materials include items such as vinyl floor tile, mastics, plastic roof cement, stucco, drywall joint compound & texture, roofing, and sheet vinyl flooring (when in place and in good condition, friable once disturbed). A non-friable material may become friable when disturbed or deteriorated.

### Drywall With Asbestos Joint Compound

Many years ago US EPA correctly stated that drywall and joint compound can never be separated, so ***for disposal only***, a composite of the two is used to determine if it is or is not ACM (a material containing over 1% asbestos by weight). However, you don't need laboratory analysis when mathematical analysis tells you it is impossible for the composite to be over 1%.

Our experience and research indicates that drywall joint compound containing asbestos was typically manufactured with several percent asbestos, and the asbestos type is usually reported to contain between less than one percent and five percent asbestos. Drywall joint compound which contains 5% asbestos would have to make up over 20% of the composite with the non-asbestos drywall for the composite material to be over 1% asbestos by weight. If it has a lower percentage asbestos content, it would have to make up a greater percentage of the composite. Anyone who has seen drywall after the drywall joint compound has been applied to the joints and fastener locations, and who considers the thickness and weight of the drywall in comparison to he thickness and weight of the drywall joint compound, knows that it is impossible for the

drywall joint compound to make up over 20% of the composite weight. This is also the case if the joint compound has also been used to apply a thin texture. The only exception is a situation in which joint compound has been applied in a thick layer over the entire surface of the drywall to produce some sort of skim coat, often with a decorative trowel pattern.

The US EPA regulates disposal, so drywall with asbestos joint compound may be disposed as construction debris, although some landfills have their own rules which impact the disposal of such materials. OSHA regulates employee exposures, so the materials must be handled properly to comply with their regulations.

Homogeneous Areas and Samples

To make the following table and this report readily readable, we utilize 12 point or larger type for all but the page footers and attachments. People also do not like having to turn pages to read them, especially if they are reading a screen. For the convenience of readers, we minimize the number of columns by using convenient codes for condition, disturbance potential, friability, removal, and waste handling.

Damage may be physical, due to deterioration, or due to water. Significant Damage means 10% or more evenly distributed, or 25% or greater localized damage. Damage means less than 10% damage (e.g. abraded, gouged, blistered, peeling, crumbling). Good means no or very little damage or deterioration.

Materials may be disturbed by contact, vibration, or air erosion, and all of those possible sources of disturbance are considered in determining if there is potential for significant damage, potential for damage, or low potential for damage.

Taking all of those factors into consideration, materials which contain asbestos (those containing over 1% asbestos are Asbestos Containing Materials) are categorized according to the following Hazard Rank scale:

| | | |
|---|---|---|
| worst | 7 - | Friable with significant damage |
| | 6a - | Friable with damage and potential for significant damage |
| | 6b - | Non-Friable with significant damage and potential for more significant damage |
| | 5a - | Friable with damage and potential for damage |
| | 5b - | Non-Friable with significant damage and potential for additional damage |
| | 5c - | Non-Friable with damage and potential for significant damage |
| | 5d - | Friable in good condition and potential for significant damage |
| | 4a - | Non-Friable with significant damage and low potential for disturbance |
| | 4b - | Friable with damage and low potential for disturbance |
| | 3a - | Friable in good condition and potential for damage |
| | 3b - | Non-Friable with damage and potential for damage |
| | 3c - | Non-Friable in good condition and potential for significant damage |
| | 2a - | Friable in good condition and low potential for disturbance |
| | 2b - | Non-Friable with damage and low potential for disturbance |
| | 2c - | Non-Friable in good condition and potential for damage |
| best | 1 - | Non-Friable in good condition and low potential for disturbance |

Category I non-friable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than one percent (1%) asbestos as determined using polarized light microscopy (PLM) according to the method specified in Appendix A, Subpart F, 40 CFR Part 763. (Sec. 61.141), or assumed to be such.

Category II non-friable ACM is any material, excluding Category I non-friable ACM, containing more than one percent (1%) asbestos as determined using polarized light microscopy according to the methods specified in Appendix A, Subpart F, 40 CFR Part 763 that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (Sec. 61.141), or assumed to be such.

If all or portions of materials which contain asbestos are removed (using typical methods and equipment), the following Waste codes indicate how the waste should be disposed:

F - Friable, hazardous asbestos waste;

NF - Non-Friable, non-hazardous asbestos waste; or

O - OSHA regulations regarding materials containing greater than zero, but less than 1% asbestos apply. Dispose as construction debris or non-friable asbestos waste, depending on the requirements of the landfill where the waste is disposed.

Suspect materials which are not sampled must be assumed to contain asbestos. Materials are typically assumed to contain asbestos due to the material being readily identifiable (e.g. asbestos-cement items), lack of access, or to avoid the cost of laboratory analysis for materials which commonly contain asbestos (e.g. plastic roof cement).

We generally omit the prefix of the sample numbers from the sketch(es) or drawings for clarity. Such prefixes are used solely to prevent the laboratory from accidentally mixing samples from different batches.

Please see the Scope of Services section below for information on our sampling protocols.

We use the words “roughly” or “approximately” with quantities to prevent contractor change orders for minor variations in quantity. *Contractors should verify the site conditions, material location(s), and quantities to their satisfaction prior to committing to a price and schedule for removal work.*

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| window putty | TA-1 | near the main door on the basement window | ND | | |
| | TA-125 | on the first floor window on the building side facing the parking lot | ND | | |
| | TA-128 | in the courtyard | ND | | |
| **Various patterns and colors of 9" x 9" and 12" x 12" vinyl floor tile, totaling roughly 16,000 square feet** | | | | **3c** | **NF** |
| **green with streaks 9x9 vinyl floor tile in the lobby, Rooms 112A, 129, 114A, 114, Photo 36** | **TA-2** | **in the main lobby** | **ND** | | |
| | **TA-14** | **in Room 112A, center** | **10** | | |
| | **TA-48** | **In Room 129, center** | **8** | | |
| **black 9x9 vinyl floor tile, as in Room 112A** | **TA-17** | **in Room 112A, in the corner** | **6** | | |
| **tan 9x9 vinyl floor tile in Room 116** | **TA-28** | **in Room 116 over linoleum** | **2** | | |
| **tan with streaks 9x9 vinyl floor tile in Rooms 123A, Room 127, Room 100, Photo 25** | **TA-31** | **in Room 123A, center** | **3** | | |
| | **TA-46** | **in Room 127, near the door** | **5** | | |
| **speckled tan 9x9 vinyl floor tile in Room 118** | **TA-34** | **in Room 118, center** | **3** | | |
| **greenish with streaks 9x9 vinyl floor tile in Room 107, Photo 20** | **TA-67** | **in Room 107, center** | **4** | | |
| **black 9x9 vinyl floor tile installed around the room edges, Photo 20** | **TA-69** | **in Room 107** | **4** | | |
| **whitish with sparkles 9x9 vinyl floor tile in Room 101, Photo 24,** | **TA-73** | **Room 101, corner** | **2** | | |
| **whitish with smears 9x9 vinyl floor tile in Room 102, Photo 49** | **TA-76** | **Room 102, center** | **2** | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **cream 9x9 vinyl floor tile in Room 100** | **TA-78** | **Room 100, center** | **3** | | |
| **marbled pattern brown/tan 9x9 vinyl floor tile in the basement corridor, Rooms 4, 7, 6, 9, 11 and 13 and on the stairway, Photos 27, 33** | **TA-86** | **basement stairway** | **3** | | |
| **tan 9x9 vinyl floor tile in the southeast addition wing** | **TA-106** | **Room 126, center** | **3** | | |
| **tan 9x9 vinyl floor tile in Rooms 160 & 162, Photo 12** | **TA-118** | **in Room 160, center** | **2** | | |
| **dark brown 12x12 vinyl floor tile in Room 110** | **TA-66** | **over linoleum in Room 110** | **2** | | |
| **patch of floor tile in Room 135** | **TA-83** | **patched section in Room 135** | **3** | | |
| **tan 12x12 vinyl floor tile in Room 121** | **TA-25** | **Room 121** | **2** | | |
| **peel & stick type strip of floor tile, Roughly 8 Sq. Ft., in Room 157** | **TA-123** | **in Room 157** | **2** | | |
| Areas of vinyl floor tile found not to contain asbestos | | | | | |
| gray streaked pattern 12x12 vinyl floor tile in Room 121 | TA-26 | | ND | | |
| gray speckled 9x9 vinyl floor tile, as in Room 131 | TA-49 | in Room 131 near the door | ND | | |
| tan 12x12 vinyl floor tile in the restroom, Room 112A | TA-12 | Room 112A | ND | | |
| bottom layer of vinyl floor tile over plywood in Room 112A | TA-13 | Room 112A | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| beige streaked pattern 12x12 vinyl floor tile, as in Room 115 | TA-18 | Room 115 | ND | | |
| whitish main pattern 12x12 vinyl floor tile in Room 135 | TA-85 | Room 135 center | ND | | |
| whitish with brown splotches 12x12 vinyl floor tile | TA-99 | Room 137 | ND | | |
| tan with brown wide splotches 12x12 vinyl floor tile | TA-109 | in Room 154A | ND | | |
| floor tile mastic adhering 12x12 vinyl floor tile | TA-19 | Room 115 | ND | | |
| | TA-84 | Room 135, under the patched tile | ND | | |
| mastic adhering 9x9 vinyl floor tile | TA-3 | Room 113 | ND | | |
| | TA-15 | Room 112A | ND | | |
| | TA-32 | in Room 123A | ND | | |
| | TA-35 | in Room 118 | ND | | |
| | TA-47 | in Room 127 | ND | | |
| | TA-63 | in Room 135 | ND | | |
| | TA-68 | in Room 107 | ND | | |
| | TA-70 | in Room 107 | ND | | |
| | TA-74 | in Room 101 | ND | | |
| | TA-77 | in Room 102 | ND | | |
| | TA-79 | in Room 100 | ND | | |
| | TA-87 | on the stairway to the basement | ND | | |
| | TA-106b | in Room 126 | ND | | |
| | TA-119 | in Room 160 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| stone chip pattern sheet vinyl flooring throughout the corridors on the first floor | TA-6 | at Room 114 | ND | | |
| marbled pattern linoleum in first floor rooms and some basement rooms | TA-10 | in Room 112 | ND | | |
| black linoleum around the room edges | TA-11 | Room 112 | ND | | |
| linoleum in Room 117 | TA-23 | on the counter top in Room 117 | ND | | |
| sheet vinyl flooring with gold specs in Rooms 123 and 125 | TA-43 | under the carpet in Room 123 | ND | | |
| brown linoleum in Room 150 | TA-64 | over green marbled linoleum in Room 150 | ND | | |
| multi-speckled pattern linoleum | TA-65 | in Room 111 | ND | | |
| green fissured pattern sheet vinyl flooring in the attic | TA-80 | laying in the attic main room | ND | | |
| brown linoleum sheet | TA-81 | laying loose in the attic | ND | | |
| orange linoleum sheet | TA-82 | | ND | | |
| cream/tan with brown specks linoleum in the chapel | TA-97 | under the carpet in Room 151 | ND | | |
| **tan sheet vinyl flooring in Room 124, roughly 100 square feet** | **TA-104** | **under the carpet in Room 124** | **8** | **3c** | **F** |
| **gray/tan sheet vinyl flooring in Room 159, roughly 200 square feet** | **TA-122** | **in Room 159 under the carpet** | **2** | **3c** | **NF** |
| hexagonal pattern sheet vinyl flooring | TA-113 | in Room 156A | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| tar paper under the 9x9 vinyl floor tile | TA-4 | in Room 113 | ND | | |
| | TA-16 | in the first floor restroom lobby | ND | | |
| | TA-33 | in Room 123A | ND | | |
| tar paper under the plywood | TA-7 | in the corridor at Room 114 | ND | | |
| tar paper under wood siding | TA-95 | in the courtyard | ND | | |
| **drywall joint compound & texture throughout, except for the northeast wing, roughly 35,000 square feet** | **TA-5** | **on wood panels in Room 113** | **ND** | **3c** | **NF** |
| | **TA-20** | **in Room 115 on the wall common with the lobby** | **ND** | | |
| | **TA-27** | **on the corner in Room 121** | **3** | | |
| | **TA-39** | **in Room 123** | **2** | | |
| | **TA-55** | **at Room 133 on the corridor corner** | **3** | | |
| | **TA-62** | **in the corridor at Room 135** | **3** | | |
| | **TA-75** | **in the janitors's closet (Room 104A)** | **3** | | |
| | **TA-88** | **in the corridor at the door to Room 5** | **2** | | |
| | **TA-89** | **on the basement corridor wall** | **2** | | |
| drywall joint compound & texture in the northeast wing (appears to have been remodeled) | TA-110 | on the corner in Room 154A | ND | | |
| | TA-111 | in the file room off Room 158 | ND | | |
| | TA-112 | in the storage room in Room 158 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **drywall texture on the plywood ceiling in Room 11, roughly 200 square feet** | **TA-91** | **center of Room 11** | **2** | **3c** | **NF** |
| drywall | TA-40 | in Room 123 | ND | | |
| top (color coat) of plaster in the additions | TA-44 | in Room 131 | ND | | |
| | TA-50 | in Room 129 | ND | | |
| | TA-102 | in Room 124 | ND | | |
| | TA-107 | in Room 126 | ND | | |
| bottom layer of plaster | TA-45 | in Room 131 | ND | | |
| | TA-51 | in Room 129 | ND | | |
| | TA-103 | in Room 124 | ND | | |
| | TA-108 | in Room 126 | ND | | |
| **textured plaster ceiling in the southwest addition, roughly 1,100 square feet** | **TA-52** | **in the addition corridor** | **4** | **3c** | **NF** |
| | **TA-53** | **in Room 129** | **4** | | |
| | **TA-54** | **in Room 127** | **4** | | |
| one layer of plaster on the incinerator | TA-93 | on the incinerator in the basement | ND | | |
| common pattern (fissured) 1x1 ceiling tile in the rooms on the first floor | TA-8 | Room 112 | ND | | |
| | TA-41 | Room 123 | ND | | |
| | TA-100 | in Room 137 | ND | | |
| small hole pattern 1x1 ceiling tile | TA-21 | Room 115 | ND | | |
| | TA-57 | on the section of the wall in Room 120A | ND | | |
| | TA-124 | in Room 157 | ND | | |
| | TA-58 | in Room 120 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **mastic adhering the fissured or hole patterns of 1' x 1' ceiling tile in the rooms of the main building, not in the additions and with the fiberglass ceiling tile in the corridors, roughly 10,000 square feet** | **TA-9** | **in Room 112** | **ND** | **1** | **NF** |
| | **TA-22** | **Room 115** | **<1** | | |
| | **TA-42** | **Room 123** | **ND** | | |
| | **TA-59** | **Room 120** | **2** | | |
| | **TA-101** | **in Room 137** | **ND** | | |
| coating on fiberglass based ceiling tile in the corridor on the first floor | TA-126 | corridor at Room 133 | ND | | |
| | TA-127 | corridor at room 141 | ND | | |
| mastic adhering the fiberglass based ceiling tile in the first floor corridors | TA-24 | corridor at room 121 | ND | | |
| | TA-56 | corridor at Room 133 | ND | | |
| bluish 1x1 ceiling tile above the boiler | TA-94 | basement boiler room | ND | | |
| 1x2 ceiling tile on drywall ceiling in the addition | TA-114 | in Room 156A | ND | | |
| | TA-116 | in Room 160 | ND | | |
| **mastic adhering the 1x2 ceiling tile in Rooms 156A and 160, Photo 12, roughly 250 square feet** | **TA-115** | **in Room 156A** | **2** | **1** | **NF** |
| | **TA-117** | **in Room 160** | **2** | | |
| large hole pattern 1x1 ceiling tile | TA-120 | in Room 161 | ND | | |
| | TA-121 | in Room 159 | ND | | |
| cove base | TA-29 | in Room 116 | ND | | |
| | TA-36 | in Room 118 | ND | | |
| | TA-60 | in Room 135 | ND | | |
| | TA-105 | in Room 139 | ND | | |
| cove base mastic | TA-30 | in Room 116 | ND | | |
| | TA-37 | in Room 118 | ND | | |
| | TA-61 | in Room 135 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| redwood insulation | TA-38 | in the wall in Room 118 | ND | | |
| **light fixture insulator in Room 105B, Photo 22, less than 1 square foot** | **TA-71** | **in Room 105 B, center** | **80** | **5d** | **F** |
| **insulation inside the metal cabinet of the sterilizer in Room 103A, roughly 40 square feet** | **TA-72** | **in Room 103A** | **80** | **3c** | **F** |
| **asbestos cement sheet on the door to Room 3, Photo 56, roughly 12 square feet** | **TA-90** | **on the door to Room 3** | **20** | **3c** | **NF** |
| **laboratory table top, roughly 50 square feet** | **TA-92** | **in Room 11** | **20** | | |
| wood fiber ceiling boards | TA-98 | Room 151 ceiling | ND | | |
| **two approximately 8" diameter asbestos cement flue pipes from the water heater room, roughly 50 linear feet, Photo 51** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **3c** | **NF** |
| **two approximately 6" diameter asbestos cement flue pipes above Room 150, roughly 15 linear feet** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **1** | **NF** |
| **The boiler flue pipe insulation, Photo 30, roughly 200 square feet** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **5d** | **F** |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| **assumed asbestos pipe insulation, mainly air cell, observed in the basement, crawl space and Room 100, roughly 2,000 linear feet, some laying on or mixed into soil in the crawl space, so the upper four inches of soil in the crawl space are contaminated, Photos 25, 26, 31, 32, roughly 8,000 square feet of contaminated soil to be removed** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **7** | **F** |
| **The approximately 2.5" diameter asbestos-cement conduit observed in Room 12 and in Room 156, roughly 120 linear feet, Photo 58** | **n/a** | **n/a -assumed, identified visually** | **n/a** | **3c** | **NF** |
| **Two pieces of asbestos-cement sheet material in Room, 156, roughly 3 square feet total, Photos 62, 63** | **n/a** | **n/a - assumed, identified visually** | **n/a** | **6b** | **NF** |
| the main pattern of fiberglass composition shingles | 149 | rear slope of main roof above Room 110 | ND | | |
| tar paper under the fiberglass composition shingles | 129 | above the south end of Room 154D | ND | | |
| | 132 | above Room 155 | ND | | |
| | 150 | rear slope of main roof above Room 110 | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| roll roofing on the small flat roof above the Room 156 addition | 130 | center of the on the small flat roof above the Room 156 addition | ND | | |
| tar paper on the small flat roof above the Room 156 addition | 131 | center of the on the small flat roof above the Room 156 addition | ND | | |
| gray plastic roof cement spots at the ventilator above Room 156, roughly 1 square foot | 133 | above Room 156 | ND | | |
| **plastic roof cement spots at skylight, Roughly 3 Sq. Ft.** | **134** | **above Room 162** | **6** | **1** | **NF** |
| gray plastic roof cement spots, strips, on roll roofing above Room 153, roughly 50 square feet | 135 | above the east end of Room 153 | ND | | |
| roll roofing above Room 153 | 136 | above the east end of Room 153 | ND | | |
| upper tar paper above Room 153 | 137 | above the east end of Room 153 | ND | | |
| 3 layers of older tar paper above Room 153 | 138 | above the east end of Room 153 | ND | | |
| tar paper under pea gravel, 3 layers, above Room 153 | 139 | above the east end of Room 153 | ND | | |
| old thin bottom tar paper above Room 153 | 140 | above the east end of Room 153 | ND | | |
| old shingles, partly under roll roofing, gray, above Rooms 151 and 151A | 141 | the southeast portion of the roof above Rooms 151 and 151a | ND | | |
| second from the top layer of shingles, green, above Rooms 151 and 151A | 142 | | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| third from the top layer of shingles, red, above Rooms 151 and 151A | 143 | | ND | | |
| tar paper, above Rooms 151 and 151A | 144 | | ND | | |
| top layer of tar paper layers under tar and rocks above Rooms 150 and 152 and the adjoining corridor | 145 | east end of the roof above Room 150, all of the layers are over 1" thick | ND | | |
| next tar paper layers under tar and rocks above Rooms 150 and 152 and the adjoining corridor | 146 | | ND | | |
| bottom tar paper layers above Rooms 150 and 152 and the adjoining corridor | 147 | | ND | | |
| **gray plastic roof cement spots on the tar and rocks roof above Rooms 150 and 152 and the adjoining corridor, roughly 50 square feet** | **148** | **at the vent above Room 150** | **4** | **1** | **NF** |
| roll roofing on the flat roof at the dormer of Room 200 | 151 | north end, center of the flat roof at the Dormer of Room 200 | ND | | |
| lower layer of roofing on the flat roof at the dormer of Room 200 | 152 | | ND | | |
| tar paper under the roofing on the flat roof at the dormer of Room 200 | 153 | | ND | | |

| Homogeneous Area (an area of material uniform in color, texture, construction or application date and general appearance) | Sample Number | Specific Sample Location Please see the drawings If one or more samples contain asbestos, the entire homogeneous area must be treated as asbestos containing | Lab. Result % or **N**one **D**etected | Asbestos Containing Materials | |
|---|---|---|---|---|---|
| | | | | Hazard Rank | Waste |
| gray plastic roof cement spots, joint between wood wall and roof of main building, roughly 50 square feet | 154 | above Room 114 | ND | | |
| shingles on the southeast addition | 155 | northeast corner of the addition, above Room 130A | ND | | |
| tar paper on the southeast addition | 156 | | ND | | |
| tar-like coating on two water pipes originating in the southwest crawl space and going into the basement corridor and Room 15 | 157 | In the basement corridor just outside of the crawl space entry door | ND | | |

**Lead-Based Paint and Lead-Glazed Ceramic Tile Survey Findings**

The lead-based paint (XRF readings greater than or equal to 1.0 mg/cm$^2$ in most places) identified is:

- All of the exterior painted wood surfaces (including the former exterior surfaces in Room 154A), except for different siding on the former chapel, paint is in poor condition in may locations;
- The metal down spouts;
- The interior wood window components;
- The wood cabinet in Room 109A;
- Most of the interior door frames;
- The cabinet in Rooms 103B and 109A;
- The laundry chute in Room 148;
- The plywood over the bathtubs in Rooms 164 ands 166;

- The dumbwaiter;
- The radiator alcove moldings;
- Wood cabinets in the restrooms, as in Room 118, 125; and,
- The paint on the concrete front entry area steps.

The lead-glazed ceramic tile (XRF readings greater than or equal to 1.0 mg/cm$^2$) is:

- The counter top in Room 109A ;
- The accent yellow wall tile in the restroom 105B;
- The shower ceramic tile in Room 101;
- Wall tile in Room 118; 125;
- The green wall tile in Room 133;

Solid sheet lead lining the X Ray room walls in Room 120, Photo 46 .

Lead Survey Samples

A room equivalent is an identifiable part of a building (e.g., room, exterior, corridor, stairway, foyer, Etc.). Closets or other similar areas adjoining rooms are not considered as separate room equivalents unless they are obviously dissimilar from the adjoining room equivalent.

Each testing combination may be composed of more than one building component (such as two similar windows within a room equivalent).

Surfaces covered with wallpaper are assumed to be painted.

For varnished, stained, or similar clear-coated floors, measurements in only one room equivalent are permissible if it appears that the floors in the other room equivalents have the same coating.

Some testing combinations have multiple parts. For example:

- All of the parts of an interior window sash;
- All of the parts of the window frame and trim (casings, stops, jambs, aprons, Etc.);
- All of the parts of baseboard assembly (main board, quarter round, and so forth);
- All of the parts of a door (stiles, rails, panels, mullions, panels, Etc.); and,
- All of the parts of a door frame assembly (jambs, stops, transoms, casings, Etc.).

Because it is highly unlikely that all the parts would have different painting histories, they are not considered separate testing combinations, unless we have substantial evidence that different parts have separate, distinct painting histories.

When the plus or minus indication on the XRF instrument is such that adding the amount indicated to the reading would cause it to be equal to or over the positive level, we add it and report that amount.

In the Title 17, California Code Of Regulations, Division 1, Chapter 8:

> "Industrial building" means a structure that is used primarily for industrial activity, which is generally not open to the public, including but not limited to, warehouses, factories, and storage facilities. "Industrial building" does not include any structure which fits the definition of a public building or a residential building.
>
> "Public building" means a structure, or part of a structure, and its land, which is generally accessible to the public, including but not limited to, schools, daycare centers, museums, airports, hospitals, stores, convention centers, government facilities, office buildings and any other building which is not an industrial building or a residential building.
>
> "Residential building" means a structure, or part of a structure, and its land, which is used or occupied, or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons.

A vacant building such as this slated for demolition is obviously an "industrial building" as it clearly is not a "residential building," since nobody is allowed to live in it, nor a "public building," since it is not open to the public, no matter its former use.

| Testing Combinations - condition is good unless noted | | | Lead $mg/cm^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| | calibration 1.04 | | 1.0 |
| | calibration 0.31 | | 0.3 |
| | calibration 0.71 | | 0.7 |
| Exterior | walkway ceiling | wood | 1.2 |
| Exterior | wall | wood | 6.4 |
| exterior | window frame | wood | 6.1 |
| Exterior | wall | wood | 3.3 |
| exterior | window sash | wood | 4.6 |
| Exterior | down spout | metal | 2.9 |
| Exterior | window frame | wood | 4.0 |
| Exterior | window sash | wood | 6.9 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| Exterior | walkway post | wood | 1.4 |
| Exterior | walkway railing | wood | 0.5 |
| Exterior | walkway ceiling | wood | 1.0 |
| Shed | wall | wood | 3.6 |
| shed | wall | wood | 3.6 |
| Exterior | wall | wood | 4.8 |
| exterior | window frame | wood | 4.0 |
| Exterior | window sash | wood | 5.3 |
| Exterior | wall | wood | 3.9 |
| exterior | down spout | metal | 4.0 |
| Exterior | gutter | wood | 1.7 |
| 154A | exterior door | wood | 0.23 |
| 154A | door frame | wood | 0.3 |
| 154A | window frame | wood | 0.01 |
| 154A | window sash | wood | 1.9 |
| 154A | wall | drywall | 0.00 |
| 154A | wall (used to be outdoors) | wood | 5.9 |
| 158 | door | wood | 0.2 |
| 158 | door frame | wood | 0.02 |
| 158 | ceiling | drywall | 0.02 |
| 158 | cabinet | wood | 0.01 |
| 158 | wall | wood | 0.03 |
| 158 | window frame | wood | 1.8 |
| 158 | window sash | wood | 1.7 |
| 158 | wall | drywall | 0.08 |
| 158 | door frame | wood | 0.25 |
| 158 | door | wood | 0.23 |
| 158 | door to corridor | wood | 0.16 |
| 158 | base molding | wood | 0.02 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 158 | radiator | metal | 0.06 |
| 160 | door fame | wood | 0.00 |
| 160 | wall | drywall | 0.00 |
| 155 | door frame | wood | 0.21 |
| 155 | door | wood | 0.06 |
| 155 | wall | drywall | 0.05 |
| 153 | wall | drywall | 0.11 |
| 162 | door frame | wood | 0.06 |
| 162 | door | wood | 0.03 |
| 162 | base molding | wood | 0.07 |
| 162 | window frame | wood | 0.8 |
| 162 | window sash | wood | 1.2 |
| 162 | radiator | metal | 0.01 |
| 159 | wall | drywall | 0.1 |
| 159 | window frame | wood | 1.0 |
| 164 | wall | drywall | 0.04 |
| 164 | door frame | wood | 0.08 |
| 164 | door | wood | 0.02 |
| 166 | door frame | wood | 0.07 |
| 166 | door | wood | 0.11 |
| 166 | wall | wood | 0.11 |
| 166 | tub cover | wood | 1.6 |
| 157 | wall | wood | 0.00 |
| 158 | door frame | wood | 0.09 |
| 158 | door | wood | 0.05 |
| 158 | wall | drywall | 0.02 |
| Exterior | door frame | wood | 1.0 |
| Exterior | window frame | wood | 3.8 |
| Exterior | window sash | wood | 4.4 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| Exterior | wall | wood | 5.6 |
| exterior | down spout | metal | 3.6 |
| Exterior | railing | metal | 0.16 |
| exterior | steps | ceramic | 0.05 |
| exterior | steps edge marking | concrete | 1.5 |
| Exterior | front porch post | wood | 4.7 |
| 113 | wall | wood | 0.00 |
| 113 | steam pipe | metal | 0.07 |
| 113 | radiator | metal | 0.04 |
| Corridor | wall | drywall | 0.2 |
| 111 | door frame | wood | 0.6 |
| 111 | wall | drywall | 0.3 |
| 111A | window frame | wood | 0.8 |
| Corridor | door frame | wood | 0.7 |
| 109A | counter top | ceramic | 6.8 |
| 109A | cabinet | wood | 1.7 |
| 109A | wall | drywall | 0.00 |
| Corridor | storage room door frame | wood | 0.05 |
| 110 | door frame | wood | 1.6 |
| 110 | door | wood | 0.01 |
| 110 | wall | drywall | 0.00 |
| 110 | window frame | wood | 1.8 |
| 110 | window sash | wood | 1.0 |
| 109 | door frame | wood | 0.02 |
| Corridor | ceiling | fiberglass tile | 0.00 |
| 109 | wall | drywall | 0.09 |
| 107 | door frame | wood | 1.5 |
| 107 | door frame | wood | 1.3 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 106 | closet door frame | wood | 0.00 |
| 106 | restroom door frame | wood | 0.3 |
| 106 | restroom wall | drywall | 0.06 |
| 105 | door frame | wood | 0.24 |
| 104 | door frame | wood | 1.0 |
| 105B | door frame | wood | 0.27 |
| 105B | wall | ceramic | 0.17 |
| 105B | accent wall tile | ceramic | 15.1 |
| 105B | wall | drywall | 0.16 |
| 105B | sterilizer | metal | 0.00 |
| 105 | door frame | wood | 0.11 |
| 105 | window frame | wood | 1.3 |
| 103A | door frame | wood | 1.5 |
| 103B | door frame | wood | 0.24 |
| 103B | cabinet | wood | 2.4 |
| 101 | shower wall | ceramic | 8.7 |
| 101 | wall | drywall | 0.17 |
| Corridor | janitor’s closet dumbwaiter | metal | 1.5 |
| Corridor | wall | drywall | 0.1 |
| corridor | janitor’s closet door frame | wood | 1.3 |
| 102 | door frame | wood | 1.3 |
| 9 | door | wood | 0.12 |
| 9 | door frame | wood | 3.0 |
| 9 | wall | wood | 0.17 |
| 9 | window frame | wood | 1.5 |
| 7 | cabinet | wood | 0.17 |
| 7 | wall | wood | 0.04 |
| 7 | pipe | metal | 0.02 |
| 7 | door frame | wood | 0.6 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 7 | door | wood | 0.3 |
| 7 | cabinet | wood | 0.06 |
| 5 | wall | wood | 0.15 |
| 5 | ceiling | wood | 0.6 |
| 1 | ceiling | wood | 0.6 |
| 1 | beam | wood | 0.4 |
| 1 | window sash | wood | 0.8 |
| Basement corridor | door to exterior | wood | 1.0 |
| Corridor | beam | wood | 0.5 |
| corridor | ceiling | wood | 0.7 |
| 10 | pipe | metal | 0.02 |
| 10 | door to exterior | wood | 7.7 |
| 10 | wall | concrete | 0.00 |
| 10 | ceiling | concrete | 0.01 |
| 10 | tank | metal | 0.4 |
| 10 | tank | metal | 0.01 |
| 10 | electrical panel | metal | 0.04 |
| Crawl space | doors | wood | 0.7 |
| 112 | door frame | wood | 0.6 |
| 112 | window frame | wood | 1.5 |
| 112 | window sash | wood | 1.5 |
| 112 | door frame to the restroom | wood | 0.7 |
| 112 | restroom wall | drywall | 0.05 |
| 115 | door frame | wood | 0.2 |
| 114A | door frame | wood | 1.5 |
| 114A | radiator molding | wood | 1.5 |
| 117 | door frame | wood | 1.9 |
| 119 | door frame | wood | 1.6 |
| 119 | metal radiator wall | metal | 0.3 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 119 | radiator | metal | 0.21 |
| 119 | restroom door frame | wood | 1.0 |
| 119 | restroom wall | drywall | 0.06 |
| 116 | door frame | wood | 2.2 |
| 118 | wall | ceramic | 5.4 |
| 118 | cabinet | wood | 1.9 |
| 125 | wall | ceramic | 2.6 |
| 125 | cabinet | wood | 1.6 |
| 127 | door frame | wood | 0.01 |
| 127 | wall | drywall | 0.13 |
| 129 | door frame | wood | 0.08 |
| 129 | wall | drywall | 0.09 |
| 129 | radiator cover | metal | 0.23 |
| 129 | windowash | wood | 0.8 |
| 129 | closet door | wood | 0.16 |
| 129 | restroom door frame | wood | 0.3 |
| 129 | restroom wall | drywall | 0.04 |
| Corridor | electrical panel | metal | 0.09 |
| Corridor | ceiling | plaster | 0.00 |
| 133 | door frame | wood | 0.4 |
| 133 | cabinet | wood | 0.4 |
| 133 | wall | ceramic | 4.6 |
| 133 | closet wall | wood | 0.5 |
| Corridor | door to exterior | wood | 0.6 |
| Corridor | door frame | wood | 0.04 |
| Corridor | restroom door frame | wood | 1.4 |
| Corridor | restroom wall | drywall | 0.00 |
| 130 | wall | plaster | 0.04 |
| 130A | wall | plaster | 0.06 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| 135 | door frame | wood | 1.4 |
| 120 | door frame | wood | 0.6 |
| 120 | window frame | wood | 1.7 |
| 120 | window sash | wood | 1.0 |
| 135 | door frame | wood | 1.4 |
| Corridor | fire door | metal | 0.18 |
| 124 | door frame | wood | 0.01 |
| 137 | door frame | wood | 1.1 |
| 137 | window sash | wood | 1.4 |
| 137 | window frame | wood | 1.0 |
| 137 | radiator enclosure | metal | 0.2 |
| 126 | door frame | wood | 1.0 |
| Corridor | wall | drywall | 0.08 |
| corridor | double door to exterior | wood | 0.09 |
| Corridor | fire hose cabinet | wood | 0.12 |
| Corridor | door frame to exterior | wood | 1.0 |
| 148 | laundry chute | wood | 2.3 |
| 148 | wall | dryrall | 0.6 |
| Corridor | door frame | wood | 1.0 |
| Corridor | door frame to exterior | wood | 1.3 |
| Corridor | door to exterior | wood | 0.3 |
| Exterior | door frame | wood | 2.5 |
| Exterior | door | wood | 3.7 |
| exterior | railing | metal | 0.16 |
| exterior | wall | wood | 3.2 |
| Exterior | chapel siding | wood | 0.16 |
| Exterior | chapel siding | wood | 0.15 |
| Exterior | window frame | wood | 4.8 |
| Exterior | window sash | wood | 5.1 |

| Testing Combinations - condition is good unless noted | | | Lead mg/cm$^2$ |
|---|---|---|---|
| Room Equivalent | Component | Substrate | |
| Corridor | window frame | wood | 1.4 |
| Corridor | water cooler | metal | 0.00 |
| Restroom | door frame | wood | 0.9 |
| Chapel | door frame | wood | 2.8 |
| Chapel | wall | drywall | 0.00 |
| chapel | ceiling | wood fiber board | 0.01 |
| Corridor | wall | drywall | 0.03 |
| 2nd floor | stairway wall | drywall | 0.02 |
| 2nd floor | window sash | wood | 2.0 |
| 2nd floor | wall | wood | 0.04 |
| 2nd floor | restroom door | wood | 0.00 |
| | calibration 1.04 | | 1.0 |

**Building Description and Photographs**

The photographs are important parts of the descriptive information.

The subject property contains a former hospital building. An article dated September 26, 2012 in The Lumberkjack newspaper title “Trinity Hospital: The forgotten Annex” states that a permit to build the structure is dated July 2, 1943. The article is here: http://thelumberjack.org/2012/09/26/trinity-hospital-the-forgotten-annex/

The building is an unusual structure. The exterior walls and load-bearing interior walls are solid wood, with studs placed touching each other, not spaced 16" on center. The floor is also solid lumber, with the floor joists touching.

There is a partial concrete basement and a crawl space.

There are two additions, one in the south west finished with plaster, and one in the southeast, also finished with plaster.

The walls of the main building are finished with drywall. A wing in the northeast appears to have been remodeled. The ceilings are finished with drywall, ceiling tile, wood and suspended ceiling panels. The floors are finished with vinyl floor tile, linoleum, carpet and sheet vinyl flooring. The exterior is covered with wood boards. The roofs are covered with composition shingles, roll roofing, and tar and rocks over layers of tar paper. The building insulation is a wood product,

apparently ground or crushed redwood bark. We observed newer HVAC ducts insulated with fiberglass and several newer gas furnaces, but the original heating system is a boiler with asbestos insulation on the pipes and flue. We observed one asbestos-cement electrical conduit, as well as a small quantity of asbestos-cement sheets. The boiler is insulated with fiberglass.

Photo 1: The back of the left front wing, and the center wing

Photo 2: The rear-most wing

Photo 3: The main entrance

Photo 4: The front portion of the right  side

Photo 5: The gas cylinder storage shed

Photo 6: Room 154A

Photo 7: Room 154C

Photo 8:Room 154D

Photo 9: Room 156

Photo 10: Room 156A

Photo 11: Room 158

Photo 12: Room 160 with asbestos floor tile and 1' x 2' ceiling tile adhered with asbestos mastic

Photo 13: Room 155

Photo 14: The corridor outside Room 157

Photo 15: Room 153

Photo 16: A typical original radiator, this one in Room 158, a corridor

Photo 17:The backs of Room 151m the former chapel, and Room 153

Photo 18: Room 113, the main entry lobby

Photo 19: Room 106

Photo 20: Various flooring in Room107, black and greenish floor tile are asbestos

Photo 21: The corridor outside of Room 105

Photo 22: The light fixture asbestos insulator in Room 105B

Photo 23: Room 105B

Photo 24: Room 101 with asbestos 9x9 vinyl floor tile

Photo 25: Room 100, with air-cell pipe insulation and asbestos floor tile

Photo 26: The incinerator and new coverings over pipes with old asbestos insulation

Photo 27: The portion of the basement corridor with asbestos 9" x 9" vinyl floor tile

Photo 28: Room 15

Photo 29: The boiler

Photo 30:Old asbestos insulation under a newer covering on the boiler flue

Photo 31: The old asbestos insulation on the pipes in the crawl space have not been covered with newer materials and there are pieces of pipe insulation on the soil, with some mixed into the soil

Photo 32: Pipe insulation in poor condition in the crawl space

Photo 33: Room 7 with asbestos floor tile

Photo 34: Room 2

Photo 35: The corridor outside of Room 148 and 149, with a partial ceiling collapse due to water intrusion

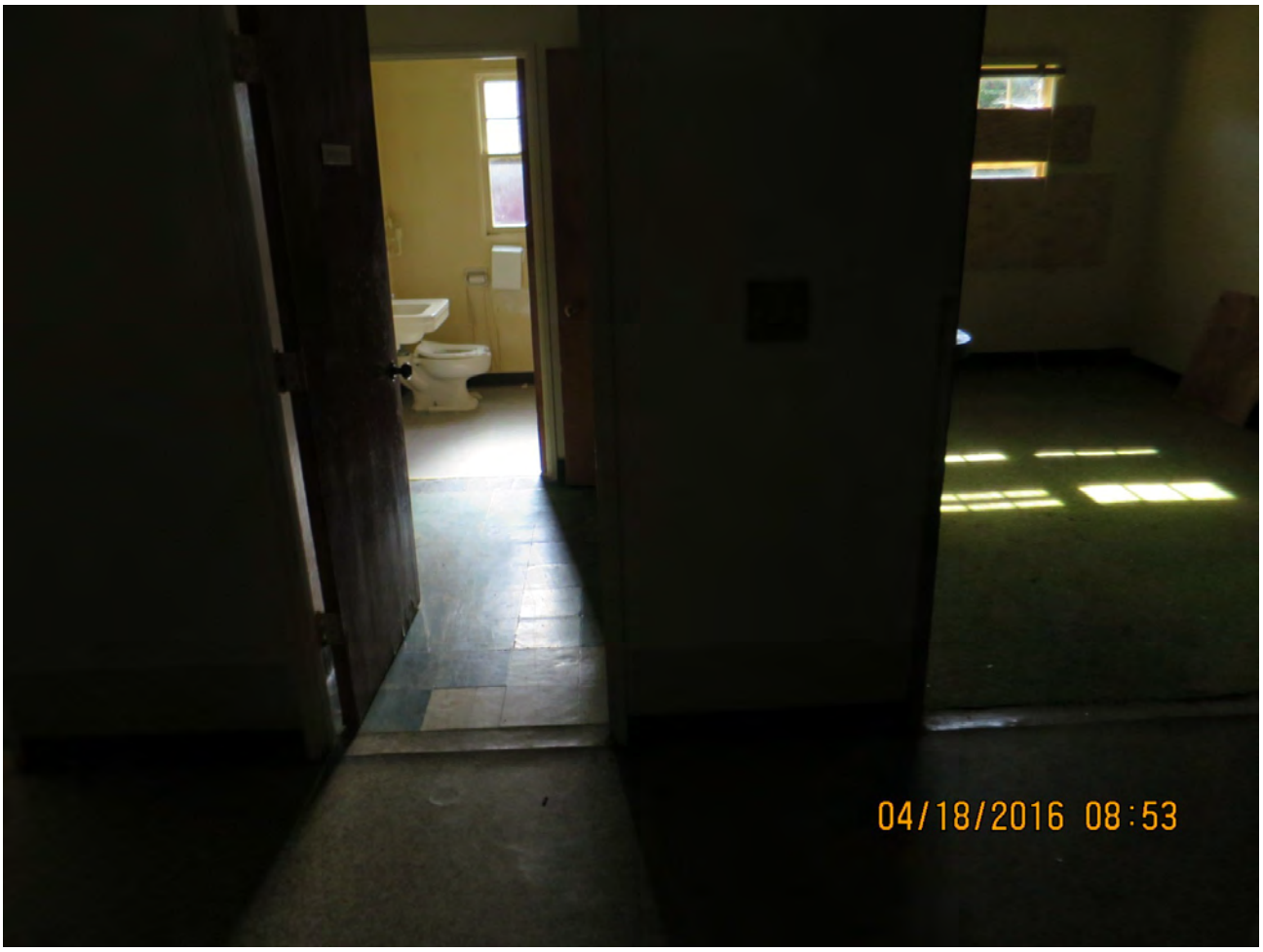



Photo 36: Looking into Rooms 114 with asbestos floor tile

Photo 37: Room 125

Photo 38: The corridor outside of Room 125, showing the different finishes in this addition

Photo 39: The addition starting at Rooms 124 and 137, with metal ceiling tile in the corridor

Photo 40: Room 137A and Room 137

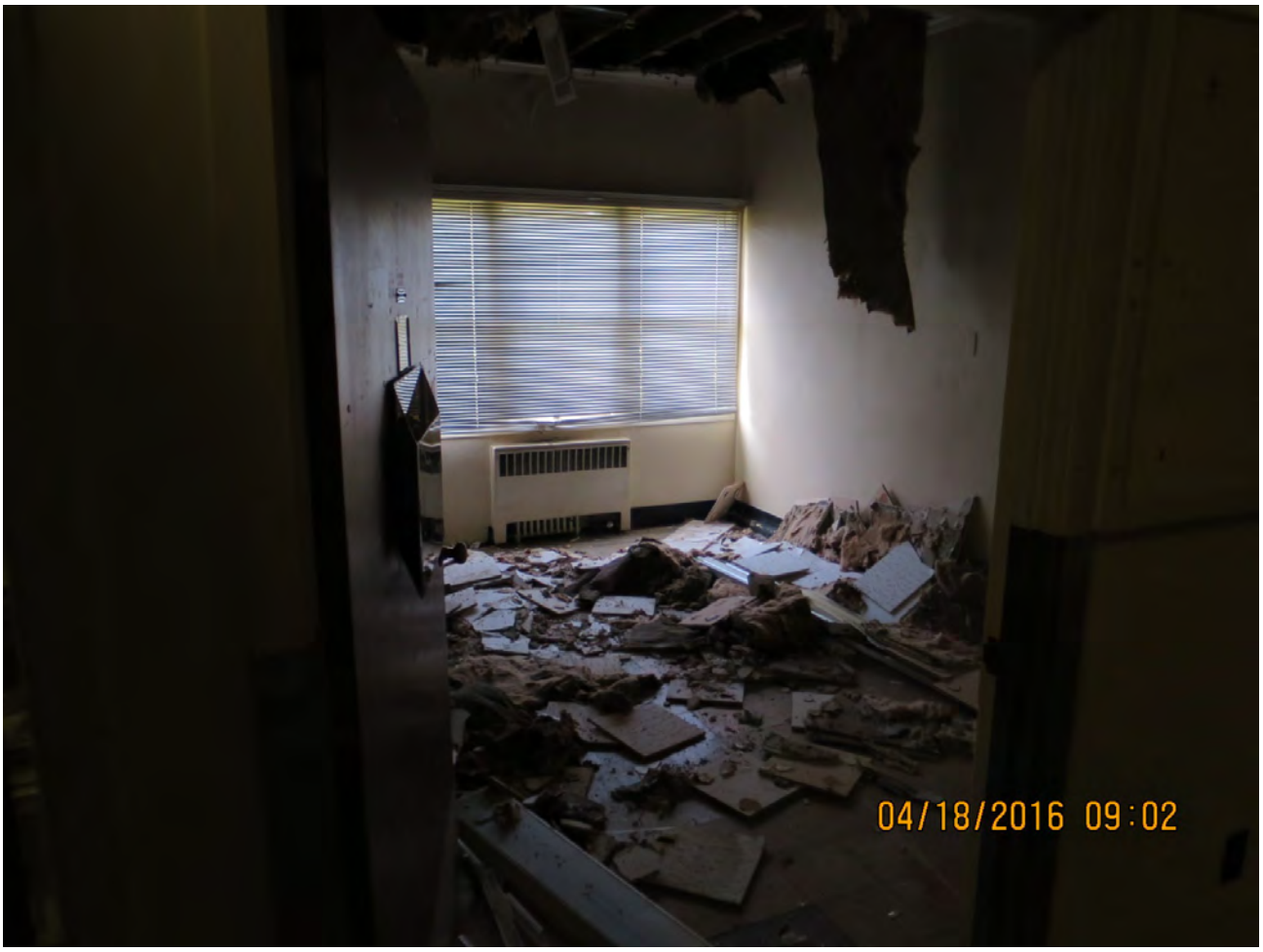



Photo 41: The collapsed ceiling in Room 141

Photo 42: The attic, Room 200

Photo 43: The attic insulation is a fibrous wood product, probably shredded redwood bark

Photo 44: The attic of the right front addition connected to the original building attic

Photo 45: The exterior walls are solid wood, with 2x2 studs touching

Photo 46: Sheet lead lining walls at the former X-Ray area in Room 120

Photo 47: Vinyl floor tile in Room 135

Photo 48: Brown burlap-backed linoleum and vinyl floor tiles in Room 150

Photo 49: Asbestos Vinyl floor tile in Room 102

Photo 50: The exposed front wall studs in the attic

Photo 51: Two approximately 8" diameter asbestos-cement flue pipes

Photo 52: A wall in the attic is made of studs which touch, and an ornate old radiator

Photo 53: One of many typical new furnaces, here in the attic, all with fiberglass-insulated ducts

Photo 54: A typical door, made of solid wood

Photo 55: The basement ceiling is sold wood, as the floor joists touch

Photo 56: An asbestos-cement panel on the door to Room 3

Photo 57: An un-insulated tank in the hot water heater room, and another of the newer furnaces

Photo 58: The approximately 2.5" diameter asbestos-cement conduit observed in Room 12 and in Room 156

Photo 59: The former chapel, Rooms151 and 151A has different siding than the rest of the building and it is not coated with lead-based paint

Photo 60: Linoleum in Room 152

Photo 61: The former chapel, Room 151

Photo 62: A piece of asbestos-cement sheet material laying on the floor in Room 156

Photo 63: Another piece of asbestos-cement sheet material laying on the floor in Room 156

Photo 64: The 1' x 1' ceiling tile in Room 157

Photo 65: Looking towards the roofs of Rooms 156 and 154

Photo 66: Looking towards the roofs of Rooms 153 and 151

Photo 67: Looking at the roofs of Rooms 152 and 150 and the roof over the corridor outside of those rooms

Photo 68: The small area of flat roofing outside of the Room 200 dormer, and the roof of the front portion of he building

Photo 69: The roof of the larger addition on the right side

Photo 70: Lead-based paint in poor condition on the main entry steps

Photo 71: water pipes in the crawl space and basement coated with a tar-like material

## Recommendations

All persons who read and use this report should read the entire report and all of the attachments.

Information on laws and regulations is provided as a convenience, not as a substitute for proper legal advice and review of the entire text of the applicable laws and regulations.

It is routine for us to be hired to oversee, monitor, and document abatement work on large projects and school projects. All clients should consider reducing their liability from claims which could arise during or after abatement work by retaining us to oversee, monitor, and document that work.

### Limitations of Polarized Light Microscopy (PLM) Analytical Methods

It is possible that materials reported to contain less than 1% asbestos by Polarized Light Microscopy (PLM) analysis may or may not actually contain asbestos. Non-friable Organically Bound (NOB) such as floor tiles (vinyl and asphalt), roofing materials, mastics, and caulking may contain asbestos which is tightly bound to the matrix material and therefore not easily isolated and detected by microscopy. PLM many not detect asbestos fibers less than 0.2 microns in diameter. Because asbestos fibers found in NOB materials may be less than 0.1 microns in diameter, this method can sometimes yield low estimates or even false negative results. In New York, both PLM and TEM analysis is required in order to declare that samples of NOB materials do not contain asbestos. Clients in other areas may wish to have samples of non-friable organically bound materials reported as “none detected” under PLM analysis re-analyzed by TEM.

### Advance Notification Is Required Prior To Asbestos Abatement Work:

California has many Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs): Amador, Antelope Valley, Bay Area, Butte, Calaveras, Colusa, Eastern Kern, El Dorado, Feather River, Glenn, Great Basin, Imperial, Lake Lassen, Mariposa, Mendocino, Modoc, Mojave Desert, Monterey Bay, North Coast, Northern Sierra, Northern Sonoma, Placer, Sacramento, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Siskiyou, South Coast, Tehama, Tuolumne, Ventura, and Yolo-Solano. In most of them, the federal asbestos NESHAP (National Emission Standard for Hazardous Air Pollutant) provisions requiring a two week advance notification for removal of more than 160 square feet or 260 linear feet of asbestos containing materials apply. In the South Coast Air Quality Management District (SCAQMD) which encompasses Los Angeles, Orange, Riverside, and parts of San Bernardino Counties, a ten ***working day*** advance notification must be given for work on more than 100 square feet of asbestos containing material. SCAQMD has an agreement with US EPA to administer the asbestos NESHAP. Rule 1403 is their asbestos regulation regarding notification and asbestos removal and demolition work. Their Rule 222 governs use of negative air machines and HEPA vacuums for asbestos work. Before starting work, the current notification requirements should be verified. Notification is also required prior to demolition. The company or organization actually doing the work is responsible for notification.

Asbestos abatement contractors must display a posting board at each work location, and it should contain copies of their notification, license, OSHA temporary job site notification, and other information such as the location of emergency medical facilities. Copies of the AHERA training, annual asbestos worker medical exam, and latest respirator fit test report for each worker and supervisor must be on site.

Notifications to Employees, Contractors, Tenants, and the Public:

1) Building owners must notify their employees and other owners (e.g of tenant companies) within 15 days of their knowledge of the presence of asbestos containing materials (Connelly Act, AB 3713, California Health and Safety Code, Section 25915), and annually thereafter.

2) Federal OSHA construction asbestos regulations, 29CFR1926.1101 (k), and the corresponding California regulations, apply to communication of hazards during construction activities.

3) Federal OSHA general industry asbestos regulations, 29CFR1910.1001(j)(2)(i), and the corresponding California regulations, require that building owners determine the presence, location, and quantity of materials which contain asbestos at the work site, and inform employees about the presence and location of those materials. Again, tenants are not employees. While this aspect of the regulation is widely ignored, as most commercial building have either not been inspected for asbestos, or only partially inspected, we suggest that all building owners implement an asbestos management (O&M) program based on at least a walkthrough asbestos survey. Asbestos was used in many common building materials up to the late 1980s, so having an asbestos management program in place minimizes liability and costs.

4) Federal OSHA general industry asbestos regulations, 29CFR1910.1001(j)(2)(iii) requires that building owners inform employers of employees, and employers inform employees who will perform housekeeping activities in areas which contain asbestos (actual or presumed) of the presence and location of those materials which may be contacted during such activities.

5) Federal OSHA general industry asbestos regulations, 29CFR1910.1001(j)(4)(i), and the corresponding California regulations, require that building owners or employers affix or post labels or signs so that employees will be notified of what materials contain, or are presumed to contain, asbestos. The labels are to be attached in such areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. The labels must comply with the requirements of 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard, and must include the following information:

DANGER

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST

CANCER AND LUNG DISEASE HAZARD

6) There is a slight variation in wording of the warnings in California's Connelly Act, AB 3713, California Health and Safety Code, Section 25915:

CAUTION.

ASBESTOS.

CANCER AND LUNG DISEASE HAZARD.

DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT

so we usually develop signs and labels which are a combination of the California and OSHA wording.

7) In a January 24, 1996 letter to Ms. Lisa K. Rushton interpreting their 29CFR1910.1101 and 29CFR1926.1101 regulations, OSHA stated: "Signs and labels are required to be posted on or near the product. However, it is generally not feasible to put labels on walls and floors. If it is not feasible, alternatives may be used. For example, if asbestos containing floors are being serviced by employees using a common equipment room day after day, then a sign or label for the asbestos flooring can be posted in that room."

8) California's Connelly Act, AB 3713, California Health and Safety Code, Section 25915, Sub-Section 25915.5 states: "An owner required to give notice to employees pursuant to this chapter, in addition to notifying his or her employees, shall mail, in accordance with this subdivision, a copy of that notice to all other persons who are owners of the building or part of the building, with whom the owner has privity of contract. Receipt of a notice pursuant to this section by an owner, lessee or operator shall constitute knowledge that the building contains asbestos-containing construction materials for purposes of this chapter. Notice to an owner shall be delivered by first-class mail addressed to the person and at the address designated for the receipt of notices under the lease, rental agreement, or contract with the owner. "

9) The California Proposition 65 notification signs which building owners (excepting many or most government buildings) should have posted on your buildings cover many materials and substances, but they are not sufficient for notifying employees or contractors working on the building.

Contractor / Employer Registration / Licensing

An employer who will be engaging in asbestos-related work involving 100 square feet or more of surface area of asbestos-containing construction material must be registered with DOSH. Asbestos abatement contractors must have this registration in addition to a contractor's license, so they are typically used to perform such work. The square footage of ACCM to be disturbed is computed by adding up the surface area of all ACCMs which will be handled during the course of the work being performed by the employer, even if it is in noncontiguous locations in

all of the buildings, structures, premises, fixtures, machinery or other areas which will be handled during the course of the work for which the employer has contracted, whether pursuant to single or multiple contracts with the same hirer. This generally means that a licensed asbestos abatement contractor must be utilized, unless a particular employer feels that they will have enough asbestos work that training and equipping some of their staff and becoming registered is cost effective.

If the work involves less than 100 sq. ft. of ACCM, the employer must send a simple "report of use" to Cal/OSHA. All other occupational health and safety work rule requirements apply-especially those from Title 8 of the California Code of Regulations, 1529. For more information about "reports of use" and the database of carcinogen use reports, call 415-703-5190. Also, see 8 CCR 5203, the Carcinogen Report of Use Requirements.

More information may be found on the DOSH web site.

OSHA Asbestos Regulations:

The federal OSHA asbestos regulations for the construction industry are contained in 29CFR1926.1101. The corresponding California regulations are at California Code of Regulations, Title 8 - Industrial Relations, Division 1- Industrial Relations, Chapter 4 - Division of Industrial Safety, Sub-chapter 4 - Construction Safety Orders, Article 4 - Dusts, Mists, Fumes, Vapors, and Gases, §§1529. Asbestos.

All of these OSHA regulations use the following definitions:

> ACM is Asbestos Containing Material (also ACBM, which is Asbestos Containing Building material)
>
> PACM is Presumed Asbestos Containing Material;
>
> Surfacing Material is material that is sprayed, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members; and,
>
> TSI is Thermal System Insulation (e.g. pipe and boiler insulation).

The California regulations mirror the federal OSHA regulations, and defines four classes of work on asbestos containing materials:

> "Class I asbestos work" means activities involving the removal of TSI and surfacing ACM and PACM.
>
> "Class II asbestos work" means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
>
> "Class III asbestos work" means repair and maintenance operations, where

"ACM", including TSI and surfacing ACM and PACM, is likely to be disturbed. "Disturbance" means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

"Class IV asbestos work" means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II, and III activities.

The regulations require that all Class I, II and III asbestos work shall be conducted within regulated areas, with all of the related requirements for demarcation, signs, respirators, and so forth.

All asbestos work performed within regulated areas must be supervised by a competent person. A competent person for Class I and Class II work must be trained as an asbestos supervisor, as originally defined in the US EPA Asbestos Hazard Emergency Response Act (AHERA), 40 CFR 763 - available on the US EPA web site.

For Class III work, the competent person need only have the 16 hour training required for maintenance and custodial staff who disturb ACMs (also known as Operations & Maintenance or O&M training).

The OSHA regulations at 29CFR1926.1101(k)(9)(iii) require that training of workers for Class I operations and for Class II operations that require the use of critical barriers (or equivalent isolation methods) and/or negative pressure enclosures be the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement workers training (40 CFR Part 763, subpart E, appendix C). However, 1926.1101(k)(9)(iv)(A) covering work with asbestos containing roofing materials, flooring materials, siding materials, ceiling tiles, or asbestos cement panels, allows a much shorter 8 hour training class for workers. That shorter class must include "hands-on" training and all the elements included in paragraph (k)(9)(viii) of that section, plus the specific work practices and engineering controls set forth in paragraph (g) of that section which specifically relate to the category of work to be performed.

Many private training facilities provide the asbestos supervisor and worker initial and annual refresher training classes, as well as the O&M training classes. Unless it is reasonably certain that the supervisor and workers will never need to disturb more than the small amount of ACM allowed under Class III, they need the normal AHERA supervisor and worker classes.

Despite the small size of Class III projects, they must be conducted using engineering and work practice controls which minimize the exposure to employees performing the asbestos work and to bystander employees:

(A) The work shall be performed using wet methods.

(B) To the extent feasible, the work shall be performed using local exhaust ventilation.

(C) Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of thermal system insulation or surfacing material, the employer shall use impermeable drop cloths, and shall isolate the operation using mini-enclosures or glove bag systems or another isolation method.

(D) Where the employer does not produce a "negative exposure assessment" for a job, or where monitoring results show the PEL (Permissible Exposure Limit) has been exceeded, the employer shall contain the area using impermeable drop cloths and plastic barriers or their equivalent, or shall isolate the operation using another listed and compliant control system.

(E) Employees performing Class III jobs, which involve the disturbance of thermal system insulation or surfacing material, or where the employer does not produce a "negative exposure assessment" or where monitoring results show a PEL has been exceeded, shall wear respirators which are selected, used and fitted according to the applicable regulations.

Federal OSHA published a nice informal summary of their asbestos regulations for the construction industry, publication OSHA3096, Revised in 2002. It is available online.

Lead Regulations

Three federal agencies regulate lead paint under Title X of the Housing and Community Development Act of 1992: The Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD), and the Occupational Safety and Health Administration (OSHA). The federal lead regulations for *construction work* are contained in 29CFR1926.62 and the corresponding California regulations in CCR 8 Section 1532.1 have some additions or revisions which are not in the federal regulations.

In California, accreditation, certification, and work practices for lead-based paint and lead hazards are regulated by Title 17, California Code Of Regulations, Division 1, Chapter 8. California Senate Bill 460 amended H&SC 17920.10 by adding "lead hazards" as a violation, amended H&SC 17961 to allow local agencies to enforce 17920.10 when lead hazards are present, and amended H&SC 105251-56 making it illegal for contractors to create lead hazards and to allow local enforcement agencies to perform enforcement. In California, lead abatement work must be performed by California CDPH (formerly DHS) accredited supervisors and workers.

The action level for employee exposure to airborne lead is 30 ì g/$m^3$ averaged over an 8-hour day. The Permissible Exposure Limit (PEL) is 50 ì g/$m^3$ averaged over an 8-hour day.

If lead is present in a *construction workplace* in *any* quantity, the *construction employer* is required to make an initial determination of whether any employee's exposure to airborne lead exceeds the action level. This initial determination requires that the employer perform an exposure assessment to monitor the construction workers' exposures unless they have objective data from similar operations performed within the previous 12 months, or data from outside

sources such as trade associations and suppliers. In a letter to Mr. William F. Alcarese dated September 10, 2008, federal OSHA stated that an employer working with paint which contains any amount of lead in such as way that would generate airborne levels to which employees may be exposed, must conduct exposure monitoring (or use objective or historical data to demonstrate that the action level is not exceeded.

Monitoring for an initial exposure assessment may be limited to a representative number of employees who are reasonably expected to have the highest exposure levels. Such monitoring is typically done by clipping small battery-powered air pumps to the employees' belts, with hoses running to filter cassettes clipped to the lapel of their shirts.

Some people mistakenly assume that work on materials found to contain any lead, even a low reading such as 0.18 $mg/cm^2$, requires use of a lead abatement contractor. That is incorrect, as abatement personnel are mainly trained to remove lead paint and ceramic tile, not to perform normal construction tasks.

There are four categories of tasks with different requirements for performing exposure assessments when lead is present and when the amount of lead is unknown:

1) For common miscellaneous construction tasks such as demolition using machinery, drilling holes through walls to run pipes or conduits, driving fasteners into surfaces, the regulations do not list any special requirements for performing exposure assessments. However, if an employer of an employee performing such a task has any reason to believe that an employee may be exposed to lead in excess of the PEL, they are required to implement the same personal protective measures as for category 2 below. It is obvious that many employers assume that employees performing such work, especially with paint containing less than 1.0 $mg/cm^2$ of lead, will not be exposed above the PEL.

   In California, Title 8, Section 1532.1 states that exposure assessment for such tasks is not required if data showing that the paint contains less than 600ppm of lead is available. However, that is a lesser standard than in the federal regulations, and federal OSHA, in a letter to Mr. William F. Alcarese dated September 10, 2008, states "Accordingly, for all tasks governed by OSHA's Lead in Construction standard (29 CFR 1926.62) involving paints having any level of lead, employers must comply with the assessment measures and any applicable protections of that standard." Also, data showing if the paint is above or below 600ppm of lead is usually not available, as the X-Ray Fluorescence (XRF) machines which are the normal and preferred method of testing produce results in units of milligrams per square centimeter, not ppm, and no conversion between the two units is possible.

2) For the tasks listed below, performing an exposure assessment requires that the workers involved be provided with personal protective clothing and equipment, change areas, hand washing facilities, biological monitoring (blood tests), training, and tight fitting air purifying half-face or better respirators as specified in the regulations :

Manual demolition of structures (e.g., dry wall)

Manual scraping;

Manual sanding;

Heat gun applications;

Power tool cleaning with dust collection systems; and,

Spray painting with lead paint;

3) For the tasks listed below, performing an exposure assessment requires that the workers involved be provided with personal protective clothing and equipment, change areas, hand washing facilities, biological monitoring (blood tests), training, and tight fitting air purifying full-face or better respiratory protection as specified in the regulations :

Using lead containing mortar;

Lead burning;

Rivet busting;

Power tool cleaning without dust collection systems;

Cleanup activities where dry expendable abrasives are used;

Abrasive blasting enclosure movement and removal;

4) For the tasks listed below, performing an exposure assessment requires that the workers involved be provided with personal protective clothing and equipment, change areas, hand washing facilities, biological monitoring (blood tests), training, and tight fitting full-face PAPR or better respiratory protection as specified in the regulations:

Abrasive blasting; and,

Welding, cutting, and torch burning.

Lead Waste Disposal

To determine if lead waste, including soil, demolition debris, and waste from lead abatement projects, is hazardous waste:

1) Sample the waste and have a laboratory perform a Total Threshold Limit Concentration (TTLC) test (preparation EPA 3050B, test method EPA 6010B). If that test indicates 1,000 parts per million (ppm) or more lead, the waste is

hazardous waste.

2) If the test results indicate that the waste contains 50ppm or less of lead, it is not a hazardous waste.

3) If the waste contains 50 or more ppm of lead, but less than 1,000ppm of lead, then a California California Waste Extraction Test (WET - preparation method CAC 66261.126, test method EPA 6010B) should be performed on the waste sample.

4) If the waste exceeds the Soluble Threshold Limit Concentration (STLC) for lead of 5 ppm, it is a California hazardous waste.

Hazardous wastes must be disposed of at a hazardous waste landfill and must be hauled under a proper manifest by a licensed hazardous waste transporter.

In an E-mail message sent 5/27/2004, Mr. Charles Corcoran (Ccorcora@dtsc.ca.gov or 916-327-4499), Chief of the Waste Identification and Recycling Section of the California Department of Toxic Substances Control stated that "The waste must be classified as it will be generated. If the entire building is to be demolished, then that is the waste to be classified. In the event the whole building is demolished, if the entire waste does not exceed the 350 ppm limit [note - his E-mail was written before the 350ppm requirement expired, therefore reverting back to the 1,000 ppm TTLC and 5 ppm STLC limits] or exhibit any hazardous waste characteristic, it may be disposed to a C&D landfill. If any individual components are first removed from the building, then DTSC would consider those wastes to be separately generated and would expect the generator to characterize them as a distinct waste."

To perform the profile testing, a representative sample of the waste needs to be collected. If a whole building is to be disposed, then the sample would be of the entire debris (we would take care to avoid over or under sampling any particular building components). If the waste is a window, then some of the wood, some of the glass, and some of the putty should be included. If the waste is ceramic tile (as during a school bathroom remodeling project), then some tile, some grout, and some of the mortar needs to be included. If the waste is wood trim, then a chunk of the wood needs to be cut out. If the waste is painted concrete, then a core or chunk of the concrete needs to be collected. In all cases, the sample should approximate the proportion of lead paint / lead ceramic tile and other materials actually present in the waste. The laboratory will require that the sample they receive be pulverized.

<u>All Field Personnel Should Have Basic Asbestos and Lead Training</u>

All contractors working on existing buildings should see that all of their field personnel have at least the two hour asbestos awareness training, and that any of their employees who will be performing work involving spot disturbances / removal of materials which contain asbestos have the 16 hour training needed for performing OSHA Class III asbestos work. They should also see that all field personnel also have the basic training on respiratory protection needed for work with lead (they would receive this during the 16 hour asbestos training).

<u>Exposure Assessment Programs Are Mandatory</u>

All contractors should have well organized asbestos and lead exposure assessment programs and exposure assessment databases. Exposure assessment is mandatory, and until exposure assessment data is obtained, contractors must provide respiratory protection and other measures which could be very inconvenient, cumbersome, and expensive. Exposure assessment data is generally only good for one year, so ongoing collection of data avoids having out of date exposure assessment data. It also builds up a nice database of information to show that the contractor is in compliance with the applicable laws and regulations and that workers are not being improperly exposed.

Exposure assessment data is collected for workers with similar experience and training performing similar tasks. It is important to organize the exposure assessment data in the contractor's database by tasks and experience.

The actual data collection involves placing personal air pumps on the belts of the workers being monitored, with a filter cassette hanging over their shoulder and clipped to their collar so that it is in their "breathing zone." Asbestos exposure assessments require both 30-minute "excursion" (highest exposure) sample and 8 hour samples. Lead exposure assessments require 8 hour samples (a typical work shift. It is important to record the sample information - flow rate, work task being monitored, and worker experience. The filter cassettes should be properly labeled and are submitted to a laboratory for analysis of the lead or asbestos content.

Once initial exposure assessment data is obtained, the Contractor need only provide the respiratory protection and other measures indicated by the exposure assessment data for each task-experience combination.

The federal Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard is 29 CFR 1910.134. Employees who are required to wear respirators must be provided with training on the use of the respirator, and a physical examination by a doctor to show that they are fit to wear a respirator. They must be offered a selection of respirators or different brands and sizes to find one that fits well, and must be fit tested (once per year) to see that the respirator seals well when they are wearing it.

<u>Asbestos - The Significance, Or Not, Of The Year 1980:</u>

There is occasionally some confusion regarding the significance of the year 1980. It is common knowledge in the asbestos consulting and abatement (removal) industries that many common asbestos containing materials (e.g. drywall joint compound, stucco, flooring materials, ducts) were used well into or throughout the1980s. Federal OSHA regulations, 29CFR1926.1101(k)(1), state:

> Employers and building owners shall identify TSI and sprayed or troweled on surfacing materials in buildings as asbestos-containing, unless they determine in compliance with paragraph (k)(5) of this section that the material is not asbestos-containing. Asphalt and vinyl flooring material installed no later than 1980 must also be considered as asbestos containing unless the employer, pursuant to paragraph (g)(8)(i)(I) of this section determines that it is not asbestos-containing.

However, the regulation then immediately goes on to state (emphasis added):

***If the employer/building owner has actual knowledge, or should have known through the exercise of due diligence, that other materials are asbestos-containing, they too must be treated as such. When communicating information to employees pursuant to this standard, owners and employers shall identify "PACM" as ACM.***

The exercise of due diligence would include obtaining information from knowledgeable persons, such as asbestos consultants, and/or obtaining an asbestos survey/inspection by a California Certified Asbestos Consultant.

## Scope of Services

We performed a visual examination of those areas to determine the overall construction and usage of the building(s) and to plan and coordinate the survey work, taking into account any information provided on the age and construction of the building(s). We examined any plans and documents supplied to us determine if any ACMs were specified and to provide information on remodeling or renovation work. Areas of potential ACM were identified using the available information on the age of the building, construction materials present and the consultant's expertise.

### Asbestos Containing Materials (ACMs) Which Are Banned

It is important not to view the dates of the laws / regulations which banned the materials listed below as absolute cut-off dates. In many cases, the laws / regulations allowed suppliers to sell their existing supplies, and the manufacturers may not have immediately been aware of the new laws / regulations. For example, we have spoken with a large manufacturer of drywall joint compound in southern California and learned that they were still manufacturing drywall joint compound with asbestos in the middle 1980s. Our experience inspecting thousands of buildings of all types also confirms that asbestos containing drywall joint compound was used in many buildings constructed in the middle 1980s.

- Spray applied fireproofing was banned by the 1973 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Wet-applied and pre-formed (molded) asbestos pipe insulation and pre-formed (molded) asbestos block insulation on boilers and hot water tanks were banned by the 1975 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Spray applied decorative ACM (e.g. acoustic ceiling texture) was banned by the 1978 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Patching compounds which are used to cover, seal or mask cracks, joints, holes and similar openings in the trim, walls, ceiling, etc. of building interiors (also used to create textured effects) which a consumer can purchase (those where the sale or use of the product by consumers is facilitated, and those containing respirable free form asbestos which are used in residences, schools, hospitals, public buildings or other areas where consumers have customary access) were banned

by the US Consumer Product Safety Commission (CPSC) in 1978 - see 16 CFR 1304;

- Artificial emberizing materials (ash and embers) containing respirable freeform asbestos (generally packaged in an emberizing kit for use in fireplaces, and designed for use in such a manner that the asbestos fibers can become airborne under reasonably foreseeable conditions of use were banned by the US Consumer Product Safety Commission (CPSC) in 1978 - see 16 CFR 1305;

- Spray-on application of materials containing more than 1% asbestos to buildings, structures, pipes, and conduits unless the material is encapsulated with a bituminous or resinous binder during spraying and the materials are not friable after drying was banned by the 1990 Clean Air Act (CAA) Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP);

- Asbestos paper products (flooring felt, roll board, and corrugated, commercial, or specialty paper) were banned by the Toxic Substances Control Act (TSCA) - On July 12, 1989, the US EPA issued a final rule banning most asbestos-containing products. While most of that regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans in 1991, the bans on these materials were affirmed; and,

- Products that have not historically contained asbestos, otherwise referred to as "new uses" of asbestos were banned by the Toxic Substances Control Act (TSCA) - On July 12, 1989, the US EPA issued a final rule banning most asbestos-containing products. While most of that regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans in 1991, the bans on these materials were affirmed.

Various asbestos containing materials were specifically listed as NOT banned by the US EPA's guidance document of May 18, 1999, but this list is far from comprehensive, as many other common materials which are not banned are not listed:

Troweled-on Surfacing Materials (e.g. cement stucco and gypsum plaster);

Asbestos-cement corrugated sheet, shingles, flat sheet, millboard, and pipe;

Asbestos clothing for adults;

Pipeline wrap;

Roofing felt;

Vinyl-asbestos floor tile;

Automatic transmission components;

Clutch facings;

Friction materials;

Brake pads, linings, and blocks;

Gaskets;

Non-roofing coatings; and,

Roof coatings.

Which Materials Commonly Contain Asbestos?

The list in the table below was developed based on US EPA publications and our experience performing asbestos surveys / inspections of thousands of buildings of all types.

While the production and usage of some have been banned, and most others are simply no longer produced or installed, many are still legal and new products containing asbestos could appear on the market, so this list may become out of date.

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Acoustic Ceiling Texture | Yes | Through the mid to late 1970s |
| Acoustic Plaster | No | Through the mid 1970s |
| Adhesives / Mastics (flooring, mirror, pipe insulation, etc.) | No | Through the 1980s |
| Asphalt Floor Tile | No | Through the 1960s |
| Asphalt pavement (the gravel used to make it) | No | There are substantial areas of naturally-occurring asbestos in the USA, and in recent years more has been discovered |
| Blown-in Insulation | Yes | Prior to the mid 1970s |
| Boiler and Vessel Insulation | Yes | Through the mid-1970s |
| Breeching / Flue Insulation | Yes | Through the mid 1970s |
| Caulking and Sealants | No | Through the mid-1980s |
| Ceiling Tiles and Lay-in or Suspended Ceiling Panels | Yes | Prior to the early 1970s, often are heavy and have a “layered” internal appearance. Newer non-suspect types are readily identified. |

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Concrete (especially the gravel used to make it) | No | There are substantial areas of naturally-occurring asbestos in the USA, and in recent years more has been discovered |
| Concrete block filler (used to smooth the rough surface) | No | Through the 1970s and into the 1980s |
| Drywall (also known as Gypsum Wallboard or the brand name Sheetrock). Due to imprecise use of English, and confusion between composite and discrete layer sampling, some people may mistakenly believe that drywall itself is a suspect material. Some have loosely used the term "wallboard" to refer to asbestos-cement panels used as wall covering. Indeed, for quite a few years we sampled drywall. Finally tiring of wasting time and money sampling a material which was never, ever positive, we investigated. We discovered these problems, and a situation in which mistakes in one document (e.g. the sloppy use of the imprecise term "wallboard") repeated in other documents. All the times we have asked, people stating that drywall might contain asbestos have not been able to produce an example of it. The drywall system is suspect, but not the gypsum board itself. | | |
| Drywall Joint Compound, Also Known As Mud, May Also Be Used as a Skim or Texture Coat | No | Manufactured and applied through the mid-1980s. Naturally occurring asbestos in raw materials is allowed, but manufacturers avoid liability by screening raw materials. |
| Ducts (Made of Corrugated *Asbestos* Covered with Aluminum on the Inside and Outside, one common brand is Alumabestos) | Yes | Through the mid 1980s |
| Duct Insulation (corrugated or paper) | Yes | Sometimes found on register boots and ducts through the mid-1980s |
| Electric Wiring Insulation | Yes | Prior to the 1970s in some cables and wires, through the 1980s in some heating appliances and machinery |
| Electrical Panel Partitions and/or Arc Chutes | No | Used through the 1970's |
| Elevator Equipment Panels | No | Through the 1970's |
| Elevator Brake Shoes | No | Many still in use |
| Fiber-Cement Conduits | No | Through the 1980's |
| Fiber-Cement Ducts (one common brand is Transite) | No | Common for underground HVAC ducts through the 1980s |

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Fiber-Cement Flues (one common brand is Transite) | No | Used through the 1980s, although usage tapered off sharply after the 1970's |
| Fiber-Cement Sheets - Interior, Exterior, or in Freezers/Chillers, (some made with wood paterns, one common brand is Transite) | No | Used through the 1970s, with some usage in the 1980s |
| Fiber-Cement Pipes (one common brand is Transite) | No | Through the 1980's and some may still be in use |
| Fiber-Cement Cooling Tower Slats and Other Components (one common brand is Transite) | No | Through the 1980s |
| Fire Blankets | Yes | Prior to the 1980s |
| Fire Curtains | Yes | Prior to the 1980s |
| Fire Door Interior Insulation | No (covered) | Through the 1970s |
| Fireproofing Materials (as on structural steel) | Yes | Through the mid to late 1970s |
| Flexible Duct Connectors (also known as vibration cloths) | Yes | Soft woven cloth, easy to differentiate from fiberglass or rubber |
| Gaskets | No | Still in use |
| Gravel | No | There are substantial areas of naturally-occurring asbestos in the USA, and in recent years more has been discovered |
| Electrical Ducts | No | Through the 1970s |
| Laboratory Hoods/Table Tops | No | Trough the 1980s |
| Mastics (floor tile, mirror, ceiling tile, etc.) | No | Through te 1980s |
| Paint - textured or elastomeric / coatings | No | Through the mid to late 1970's |
| Packing Materials (for valves or for wall/floor penetrations) | No | Through the 1980s |

| Most Common Suspect Material | Typically Friable In Place? | Notes and Approximate Usage Dates |
|---|---|---|
| Pipe Insulation (corrugated air-cell, block, etc.) | Yes | Through the 1970s |
| Plaster (interior gypsum plaster, which typically consists of two or more layers | No | Rare, used prior to the mid 1970's |
| Plastic Roof Cement (typically applied at flashings, joints, and penetrations, may brands are still manufactured with asbestos) | No | Very common, still legally manufactured, sold and applied |
| Roofing Felt / Tar paper | No | Through the 1970's and into the 1980s |
| Roofing Shingles or Roll Roofing | No | Through the 1970s and into the 1980s |
| Sheet Vinyl Flooring | No | Through the 1980s |
| Silver Roof Paint | No | Through the 1970s and into the 1980s |
| Spackling Compounds | No | Through the 1970s |
| Spray-Applied Insulation | Yes | Through the mid to late 1970s |
| Stucco, or Cement Plaster, which typically consists of two or more layers | No | Generally, used through the 1980s, but in early 2006 an Arizona regulator told us that a wholesaler in the Phoenix area imports asbestos and sells it to contractors who mix it into stucco |
| Tank and Vessel Insulation | Yes | Through the mid to late 1970s |
| Taping Compounds (drywall joint compound) | No | Through the mid 1980s |
| Textured Paints / Coatings (paints made with texture, not texture applied before painting) | No | Through the 1970s |
| Thermal Paper Products | Yes | Through the 1970s |
| Vinyl Floor Tile | No | Through the mid 1980s |
| Window Putty | No | Though the 1970s |

Asbestos Sampling

Representative samples of potential / suspect ACM were collected after identification of homogeneous sampling areas (these are areas in which the materials are uniform in color, texture, construction or application date and general appearance) of potential ACM. Each homogeneous area of potential ACM was observed for material type, location, condition, and friability. Representative samples were collected from each area of potential ACM, excepting areas which were inaccessible, or areas of assumed ACM. The building(s) was examined for the presence of previous or multiple layers of materials, if applicable. If no suspect materials were identified, or if only materials assumed to contain asbestos were identified, no samples were collected.

Most of the laws and regulations regarding asbestos sampling reference the AHERA section on sampling (40CFR763.86). We used that protocol, with additions to be more conservative, but not to overly increase the cost of asbestos surveys. Given the lack of detailed guidance in AHERA regarding miscellaneous materials, our judgement and extensive experience were important factors in determining the appropriate number of samples. For example, we know that drywall joint compound is difficult for the laboratories to analyze due to the presence of binders and such and the relatively low asbestos content, so we collect more samples from an area of it than we would from a similar area of a material such as sheet vinyl flooring which is very easy to analyze and which typically was made with a relatively high asbestos content. Of course, we do not sample non-suspect materials (see the table of suspect materials above).

Suspect materials were assumed to contain asbestos or were sampled as follows:

*Friable Surfacing Material*, which is a friable suspect material sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes:

- At least three bulk samples from each homogeneous area that is 1,000 ft $^2$ or less;
- At least five bulk samples from each homogeneous area that is greater than 1,000 ft $^2$ but less than or equal to 5,000 ft $^2$; and,
- At least seven bulk samples from each homogeneous area that is greater than 5,000 ft $^{2.}$

*Friable Thermal System Insulation*, which is a friable suspect material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes:

- At least three bulk samples from each homogeneous area;
- At least one bulk sample from each homogeneous area of patched thermal system insulation if the patched section is less than 6 linear or square feet; and,
- In a manner sufficient to determine whether the material is ACM or not

ACM, bulk samples from each insulated mechanical system where cement or plaster is used on fittings such as tees, elbows, or valves.

*Friable Miscellaneous Materials*, which are interior building materials on structural components, structural members or fixtures, such as ceiling tiles:

- Bulk samples from each homogeneous area in a manner sufficient to determine whether the material is ACM or not ACM.

*Nonfriable Materials* which are interior building materials on structural components, structural members or fixtures, such as floor tiles:

- In a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from each homogeneous area.

Sampling was done based on the friability of the material at the time of the asbestos survey.

Reasonable care was taken to reduce accidental fiber release into the building environments. In order to reduce the potential for fiber release while collecting samples of suspect materials, the test areas were sprayed with a water-containing surfactant. The tools used for collection of samples were cleaned with soapy water-soaked cloths between samples in order to avoid cross-contamination of samples. The samples were placed into heavy plastic sample bags which were then sealed and labeled. The location, type, and other information on each sample were recorded.

Asbestos Laboratory Analysis

A chain-of-custody form accompanied the samples to the laboratory. The samples were analyzed by an NVLAP accredited laboratory using the Polarized Light Method (PLM, EPA 600/R-93/116 and/or EPA 600/M4-82-020600M4). The PLM method is, by far, the most commonly used method to analyze bulk materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and approximate percentage of asbestos in a given sample. The detection limit of the PLM method for asbestos identification is about one percent by volume.

Lead Survey

Suspect areas of lead (paint and ceramic tile glaze) were analyzed using non-destructive In place testing using a portable Thermo Niton 700-703ALXp portable XRF (X-Ray Fluorescence) instrument.

## General Limitations

The conclusions presented in this report are professional opinions based on the indicated data described in this report. Opinions and recommendations presented herein apply to site conditions existing at the time of the site visit(s). Changes in the conditions of the property may occur with time due to natural processes or various activities on the subject property. Changes

in applicable codes and standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, this report may become invalid. This report is intended only for the client, purpose, location, and project indicated. The only persons or companies which may rely on it are our client, an abatement contractor hired by our client, and the client of our client when we are sub-consultants. All others may not rely upon this report without having a contract in place with us. We do not warrant that the information supplied to us by others is accurate.

Reports such as this prepared by any consultant are never intended to be definitive studies of the presence of asbestos and/or lead at the subject properties. Other locations of asbestos and/or lead may exist at the subject property, and the levels may vary from those stated in this report. There may be variations in the composition of materials which appear similar. Materials may be hidden from view and not accessible. This is especially so for occupied structures or structures where damage and invasive sampling need to be minimized (such as structures not owned by our client).

For pre-demolition surveys of vacant buildings, we do not hesitate to examine the structure in several areas, looking for multiple layers of materials and materials which are under other materials. We very, very rarely miss anything. However, we are performing surveys, not demolition work, so may not see things such as a patch of floor tile hidden under carpeting, and not detected by our typical examination of the area under the carpet at a corner(s) or existing hole(s). We examine the structure(s) in several locations, but do not pull up all of the carpet, or cut numerous holes in floors and walls. That would constitute demolition work, not survey work, and could also create contamination due to excessive disturbances of suspect materials.

Location and sampling of underground items, such as asbestos-cement pipes, would have been outside of the scope of services for this project.

## Regulatory Compliance

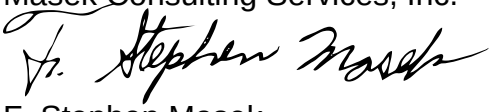
The report meets and exceeds the requirements of all applicable laws and regulations. If someone unfamiliar with our reports, after reading this entire report and all of the attachments, has any questions regarding where specific information is found, they should contact us by phone or E-mail, and we will direct them to the appropriate places in this report.

## Consultant Background

The inspection and sampling portions of the survey and professional aspects of the report preparation were performed by Mr. F. Stephen Masek. Mr. Masek has performed thousands of environmental inspections in a wide variety of commercial and government buildings, including airports, military bases, high-rise buildings, apartment buildings, shopping centers, schools, office buildings, hospitals, retail buildings, factories, recreation facilities, warehouses, residences and R&D buildings. Mr. Masek has been a California Certified Asbestos Consultant since the certification program started in 1992, and has been an asbestos consultant since 1990. Mr. Masek has been a California certified lead Inspector / Risk Assessor since 1993. He has extensive experience in related environmental services. He obtained a B.S.B.A. degree from Washington University in St. Louis (1980). He is a member of Mensa, the high IQ society. As an active member of ASTM, he has contributed to the revisions to the ASTM Phase I Environmental Site Assessment Standard, was chairman of an asbestos survey task group,

and helped write portions of the ASTM Property Condition Assessment standard. He has written numerous magazine articles and has spoken at local, state, and national conventions. He also provides expert witness services.

Sincerely,
Masek Consulting Services, Inc.



F. Stephen Masek
President
California Certified Asbestos Consultant #92-0822
California Certified Lead Inspector / Risk Assessor / Project Monitor #751
Indoor Air Quality Association member
Association of Environmental Professionals member
ASTM International member, Committees D-22 & E-50
E-Mail: stephenmasek@masekconsulting.net

**Sketch and Laboratory Report Attachments**

The attachments are important parts of this report.

The chain of custody form(s) is/are part of the laboratory report(s), and is/are one of the pages counted in the report(s).

Avoiding laboratory bias is done by minimizing the information provided to the laboratory. Therefore, we do not give information to the laboratory about which samples are or are not homogeneous, where they were collected, the full address of the building, and the name of the owner, as such information could be the cause of laboratory bias.

Three pages of sketches follow. We generally omit the prefix of the sample numbers from the sketch(es) or drawings for clarity. Such prefixes are used solely to prevent the laboratory from accidentally mixing samples from different batches.

The 10 page asbestos laboratory report, number 121601911, prepared by EMSL Analytical, Inc. follows.

OrderID: 121601911

121601911

**Chain Of Custody To:**

- ☐ EMSL Analytical, Inc. at 200 Route 130 North, Cinnaminson, NJ 08077 Ph. 856-858-4800
- ☐ LA Testing 520 Mission St. ; S. Pasadena, CA 91030; Phone 323-254-9960
- ☐ LA Testing 11652 Knott Avenue, Unit F5 Garden Grove, CA 92841 *Phone 714-828-4999*
- ☒ EMSL Analytical, Inc. 3356 W. Catalina, Phoenix, AZ 85017 Phone 602-276-4344
- ☒ EMSL Analytical, Inc. 7916 Convoy Ct, San Diego, CA 92111 Phone (858) 499-1303

**From: Masek Consulting Services, Inc. (customer number 32MASE50)**
**23478 Sandstone St. Mission Viejo, CA 92692**
**Phone: (949) 581-8503 ● http://www.masekconsulting.net**

EMSL's Federal Express Account 2148-0319-4

Project Name: TA

Enclosed are 157 samples numbered TA-1 to TA-157

First positive Stop on the following samples:

no #63

☒ PLM ☐ TEM(AHERA / LEVEL II / bulk) ☐ Lead (1 ⌀ wipe) ☐ Other: _____

Turnaround (from the day & hour the samples are received at the lab to the day and hour we receive the complete ***final*** report with ***all*** signatures): ☒ 3 Day ☐ 48 Hour ☐ 24 Hour ☐ 6 hour ☐ 3 hour

*Only analyze the numbered materials listed on the sample bags.*

**E-mail the results *with the countersigned chain of custody* to**
**stephenmasek@masekconsulting.net**

Samples collected and relinquished by F. Stephen Masek:

Date: 4/19/16 Signature: F. Stephen Masek

Lab - Received:

Date: 4/21/16 Name: Veronica Loza Signature: Veronica Loza

930 Emsl fed ex (8094 1730 9218)

# EMSL Analytical, Inc.

**3356 West Catalina Drive Phoenix, AZ 85017**
Tel/Fax: (602) 276-4344 / (602) 276-4053
http://www.EMSL.com / phoenixlab@emsl.com


**EMSL Order:** 121601911
**Customer ID:** 32MASE50
**Customer PO:**
**Project ID:**

**Attention:** Stephen Masek
Masek Consulting Services, Inc.
23478 Sandstone
Mission Viejo, CA 92692

**Project:** TA

**Phone:** (714) 878-5284
**Fax:**
**Received Date:** 04/21/2016 9:30 AM
**Analysis Date:** 04/22/2016
**Collected Date:** 04/19/2016

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-1 | | Beige<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0001* | | | | | |
| TA-2 | | Green<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0002* | | | | | |
| TA-3 | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| *121601911-0003* | | | | | |
| TA-4 | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0004* | | | | | |
| TA-5 | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0005* | | | | | |
| TA-6 | | Various<br>Fibrous<br>Heterogeneous | 15% Cellulose<br>3% Synthetic<br>2% Glass | 80% Non-fibrous (Other) | None Detected |
| *121601911-0006* | | | | | |
| TA-7 | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| *121601911-0007* | | | | | |
| TA-8 | | Tan/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| *121601911-0008* | | | | | |
| TA-9 | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0009* | | | | | |
| TA-10 | | Various<br>Fibrous<br>Heterogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| *121601911-0010* | | | | | |
| TA-11 | | Brown/Black<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| *121601911-0011* | | | | | |
| TA-12 | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0012* | | | | | |
| TA-13 | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0013* | | | | | |
| TA-14 | | Green<br>Non-Fibrous<br>Homogeneous | | 90% Non-fibrous (Other) | 10% Chrysotile |
| *121601911-0014* | | | | | |
| TA-15 | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| *121601911-0015* | | | | | |
| TA-16 | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| *121601911-0016* | | | | | |

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**EMSL Order:** 121601911
**Customer ID:** 32MASE50
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-17<br>*121601911-0017* | | White/Black<br>Non-Fibrous<br>Heterogeneous | | 94% Non-fibrous (Other) | 6% Chrysotile |
| TA-18<br>*121601911-0018* | | Beige<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-19<br>*121601911-0019* | | Tan<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-20<br>*121601911-0020* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-21<br>*121601911-0021* | | Gray/White<br>Fibrous<br>Heterogeneous | 40% Cellulose<br>40% Glass | 20% Non-fibrous (Other) | None Detected |
| TA-22<br>*121601911-0022* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | <1% Chrysotile |
| TA-23<br>*121601911-0023* | | Black/Beige<br>Fibrous<br>Heterogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| TA-24<br>*121601911-0024* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-25<br>*121601911-0025* | | Beige<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-26<br>*121601911-0026* | | Gray<br>Non-Fibrous<br>Homogeneous | 2% Cellulose | 98% Non-fibrous (Other) | None Detected |
| TA-27<br>*121601911-0027* | | White<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-28<br>*121601911-0028* | | Tan<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-29<br>*121601911-0029* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-30<br>*121601911-0030* | | Tan<br>Non-Fibrous<br>Homogeneous | 2% Wollastonite | 98% Non-fibrous (Other) | None Detected |
| TA-31<br>*121601911-0031* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-32<br>*121601911-0032* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-33<br>*121601911-0033* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-34<br>*121601911-0034* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-35<br>*121601911-0035* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-36<br>*121601911-0036* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-37<br>*121601911-0037* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-38<br>*121601911-0038* | | Brown<br>Fibrous<br>Homogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-39<br>*121601911-0039* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-40<br>*121601911-0040* | | Brown/White<br>Fibrous<br>Heterogeneous | 10% Cellulose | 85% Gypsum<br>5% Non-fibrous (Other) | None Detected |
| TA-41<br>*121601911-0041* | | Brown/White<br>Fibrous<br>Heterogeneous | 99% Cellulose | 1% Non-fibrous (Other) | None Detected |
| TA-42<br>*121601911-0042* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-43<br>*121601911-0043* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>3% Synthetic | 77% Non-fibrous (Other) | None Detected |
| TA-44<br>*121601911-0044* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-45<br>*121601911-0045* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-46<br>*121601911-0046* | | Tan<br>Non-Fibrous<br>Heterogeneous | | 95% Non-fibrous (Other) | 5% Chrysotile |
| TA-47<br>*121601911-0047* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-48<br>*121601911-0048* | | Green<br>Non-Fibrous<br>Homogeneous | | 92% Non-fibrous (Other) | 8% Chrysotile |
| TA-49<br>*121601911-0049* | | Gray/Black<br>Non-Fibrous<br>Heterogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-50<br>*121601911-0050* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-51<br>*121601911-0051* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-52<br>*121601911-0052* | | White<br>Non-Fibrous<br>Heterogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-53<br>*121601911-0053* | | White<br>Non-Fibrous<br>Heterogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-54<br>*121601911-0054* | | White<br>Non-Fibrous<br>Heterogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-55<br>*121601911-0055* | | Beige<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-56<br>*121601911-0056* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-57<br>*121601911-0057* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-58<br>*121601911-0058* | | Gray/White<br>Fibrous<br>Heterogeneous | 40% Cellulose<br>40% Min. Wool | 10% Perlite<br>10% Non-fibrous (Other) | None Detected |
| TA-59<br>*121601911-0059* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-60<br>*121601911-0060* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-61<br>*121601911-0061* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-62<br>*121601911-0062* | | Tan/White<br>Non-Fibrous<br>Heterogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-64<br>*121601911-0063* | | Brown/Tan<br>Non-Fibrous<br>Heterogeneous | 5% Cellulose | 95% Non-fibrous (Other) | None Detected |
| TA-65<br>*121601911-0064* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-66<br>*121601911-0065* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-67<br>*121601911-0066* | | Tan<br>Non-Fibrous<br>Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-68<br>*121601911-0067* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-69<br>*121601911-0068* | | Tan/Black<br>Non-Fibrous<br>Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| TA-70<br>*121601911-0069* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-71<br>*121601911-0070* | | Gray<br>Fibrous<br>Homogeneous | | 20% Non-fibrous (Other) | 80% Chrysotile |
| TA-72<br>*121601911-0071* | | Gray<br>Fibrous<br>Homogeneous | | 20% Non-fibrous (Other) | 80% Chrysotile |
| TA-73<br>*121601911-0072* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-74<br>*121601911-0073* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-75<br>*121601911-0074* | | Tan/White<br>Non-Fibrous<br>Heterogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-76<br>*121601911-0075* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-77<br>*121601911-0076* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-78<br>*121601911-0077* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-79<br>*121601911-0078* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-80<br>*121601911-0079* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-81<br>*121601911-0080* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-82<br>*121601911-0081* | | Various<br>Fibrous<br>Homogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-83<br>*121601911-0082* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-84<br>*121601911-0083* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-85<br>*121601911-0084* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-86<br>*121601911-0085* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-87<br>*121601911-0086* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-88<br>*121601911-0087* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-89<br>*121601911-0088* | | White<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-90<br>*121601911-0089* | | Gray<br>Fibrous<br>Homogeneous | | 80% Non-fibrous (Other) | 20% Chrysotile |
| TA-91<br>*121601911-0090* | | Beige<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-92<br>*121601911-0091* | | Black<br>Fibrous<br>Homogeneous | | 80% Non-fibrous (Other) | 20% Chrysotile |
| TA-93<br>*121601911-0092* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-94<br>*121601911-0093* | | Tan/Blue<br>Fibrous<br>Heterogeneous | 95% Min. Wool | 5% Non-fibrous (Other) | None Detected |
| TA-95<br>*121601911-0094* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-96<br>*121601911-0095* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-97<br>*121601911-0096* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-98<br>*121601911-0097* | | Brown<br>Fibrous<br>Homogeneous | 99% Cellulose | 1% Non-fibrous (Other) | None Detected |
| TA-99<br>*121601911-0098* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-100<br>*121601911-0099* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-101<br>*121601911-0100* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-102<br>*121601911-0101* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-103<br>*121601911-0102* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-104<br>*121601911-0103* | | Tan<br>Non-Fibrous<br>Homogeneous | | 92% Non-fibrous (Other) | 8% Chrysotile |
| TA-105<br>*121601911-0104* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-106A<br>*121601911-0105* | | Tan<br>Non-Fibrous<br>Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| TA-106B<br>*121601911-0106* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-107<br>*121601911-0107* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-108<br>*121601911-0108* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-109<br>*121601911-0109* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-110<br>*121601911-0110* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-111<br>*121601911-0111* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

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| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-112<br>*121601911-0112* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-113<br>*121601911-0113* | | Various<br>Fibrous<br>Heterogeneous | 20% Cellulose<br>5% Synthetic | 75% Non-fibrous (Other) | None Detected |
| TA-114<br>*121601911-0114* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-115<br>*121601911-0115* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-116<br>*121601911-0116* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-117<br>*121601911-0117* | | Brown<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-118<br>*121601911-0118* | | Gray<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-119<br>*121601911-0119* | | Black<br>Non-Fibrous<br>Homogeneous | 3% Cellulose | 97% Non-fibrous (Other) | None Detected |
| TA-120<br>*121601911-0120* | | Brown/White<br>Fibrous<br>Heterogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| TA-121<br>*121601911-0121* | | Brown<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-122-Flooring 1<br>*121601911-0122* | | Gray<br>Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-122-Flooring 2<br>*121601911-0122A* | | Various<br>Fibrous<br>Heterogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| TA-123<br>*121601911-0123* | | Tan<br>Non-Fibrous<br>Homogeneous | | 98% Non-fibrous (Other) | 2% Chrysotile |
| TA-124<br>*121601911-0124* | | Brown<br>Fibrous<br>Homogeneous | 99% Cellulose | 1% Non-fibrous (Other) | None Detected |
| TA-125<br>*121601911-0125* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-126<br>*121601911-0126* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-127<br>*121601911-0127* | | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-128<br>*121601911-0128* | | Gray<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-129<br>*121601911-0129* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |

Initial Report From: 04/26/2016 12:21:53

**EMSL Analytical, Inc.**
**3356 West Catalina Drive Phoenix, AZ 85017**
Tel/Fax: (602) 276-4344 / (602) 276-4053
http://www.EMSL.com / phoenixlab@emsl.com

**EMSL Order:** 121601911
**Customer ID:** 32MASE50
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-130<br>*121601911-0130* | | Gray/Black<br>Fibrous<br>Heterogeneous | 10% Synthetic | 90% Non-fibrous (Other) | None Detected |
| TA-131<br>*121601911-0131* | | Black<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-132<br>*121601911-0132* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-133<br>*121601911-0133* | | Gray/Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-134<br>*121601911-0134* | | Gray/Black<br>Fibrous<br>Homogeneous | | 94% Non-fibrous (Other) | 6% Chrysotile |
| TA-135<br>*121601911-0135* | | Gray/Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-136<br>*121601911-0136* | | Black<br>Fibrous<br>Heterogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-137<br>*121601911-0137* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| TA-138<br>*121601911-0138* | | Black<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-139<br>*121601911-0139* | | Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-140<br>*121601911-0140* | | Black<br>Fibrous<br>Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| TA-141<br>*121601911-0141* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-142<br>*121601911-0142* | | Black/Green<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-143<br>*121601911-0143* | | Red/Black<br>Fibrous<br>Heterogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-144<br>*121601911-0144* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-145<br>*121601911-0145* | | Black<br>Fibrous<br>Homogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-146<br>*121601911-0146* | | Black<br>Fibrous<br>Homogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| TA-147<br>*121601911-0147* | | Black<br>Fibrous<br>Heterogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-148<br>*121601911-0148* | | Black<br>Fibrous<br>Homogeneous | 10% Cellulose | 86% Non-fibrous (Other) | 4% Chrysotile |

Initial Report From: 04/26/2016 12:21:53

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**EMSL Order:** 121601911
**Customer ID:** 32MASE50
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| TA-149<br>*121601911-0149* | | Black<br>Fibrous<br>Heterogeneous | 20% Glass | 80% Non-fibrous (Other) | None Detected |
| TA-150<br>*121601911-0150* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-151<br>*121601911-0151* | | Gray/Black<br>Fibrous<br>Heterogeneous | 10% Glass | 90% Non-fibrous (Other) | None Detected |
| TA-152<br>*121601911-0152* | | Black<br>Fibrous<br>Heterogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| TA-153<br>*121601911-0153* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-154<br>*121601911-0154* | | Gray/Black<br>Fibrous<br>Homogeneous | | 90% Non-fibrous (Other) | 10% Chrysotile |
| TA-155<br>*121601911-0155* | | Black/Green<br>Fibrous<br>Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| TA-156<br>*121601911-0156* | | Black<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| TA-157<br>*121601911-0157* | | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Analyst(s)
*Jillian Chesson (63)*
*Peter Donato (95)*

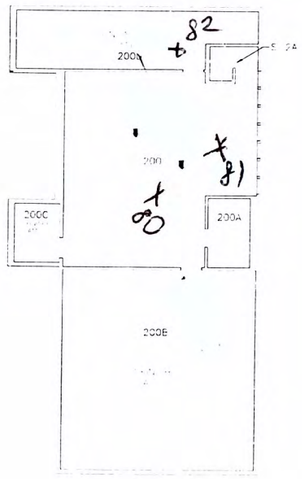
Michelle Wilson
Michelle Wilson, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Phoenix, AZ NVLAP Lab Code 200811-0, AZ0937

Initial Report From: 04/26/2016 12:21:53

Attachment 6



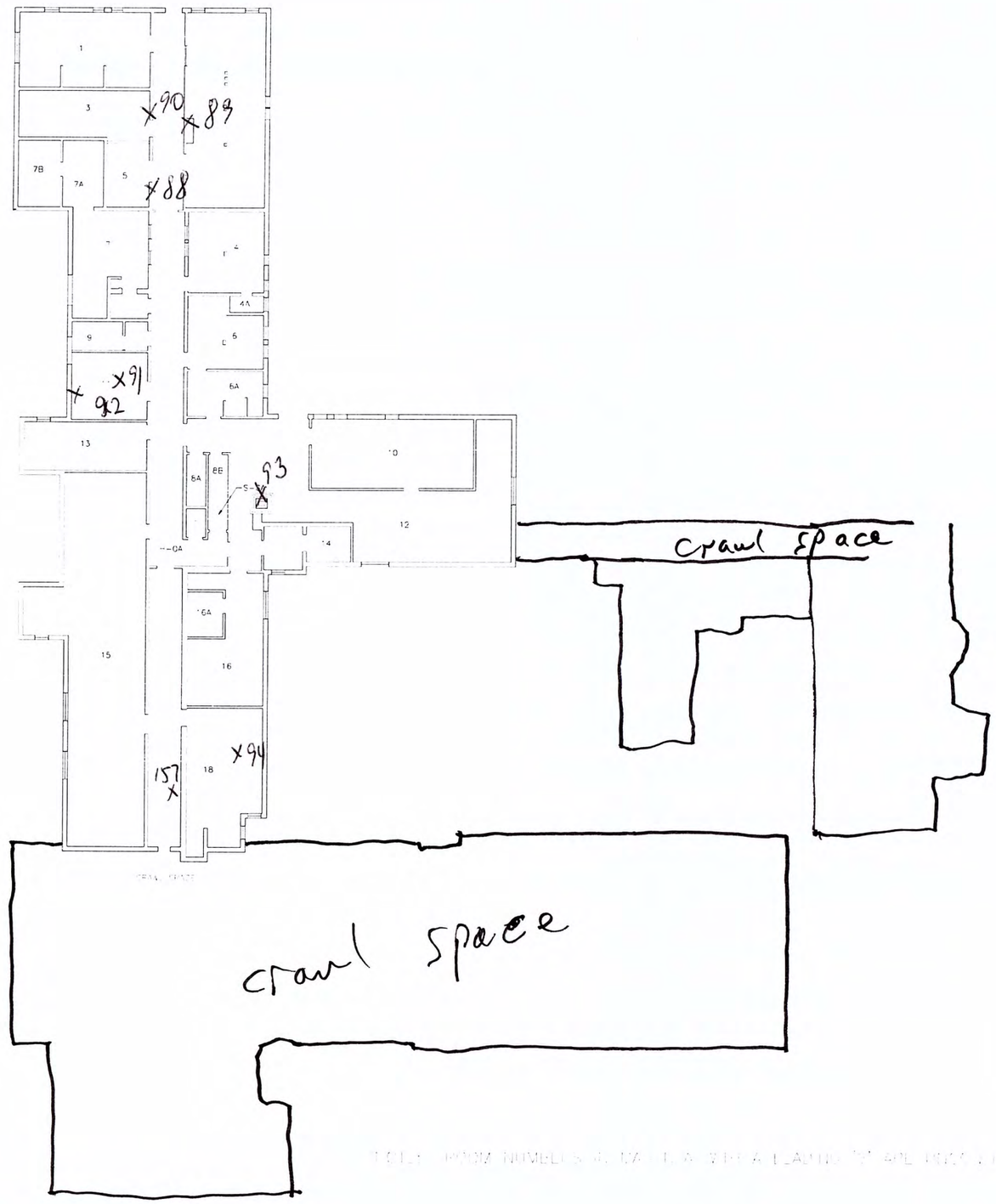
Trinity Annex

SECOND FLOOR

NOT TO SCALE

A2

Attachment 6




roughly
1" = 2'

TITLE FROM NUMBERS 3, 7A, 7B, 9, 13, & 15 ARE NOT ENABLED AND SUBJECT TO CHANGE

humboldt architecture
https://humboldtarchitecture.com/

PUBLISHED BY
Administration

01/22/2013

CAMPUS: HC
CODE:
ASSET #: 170

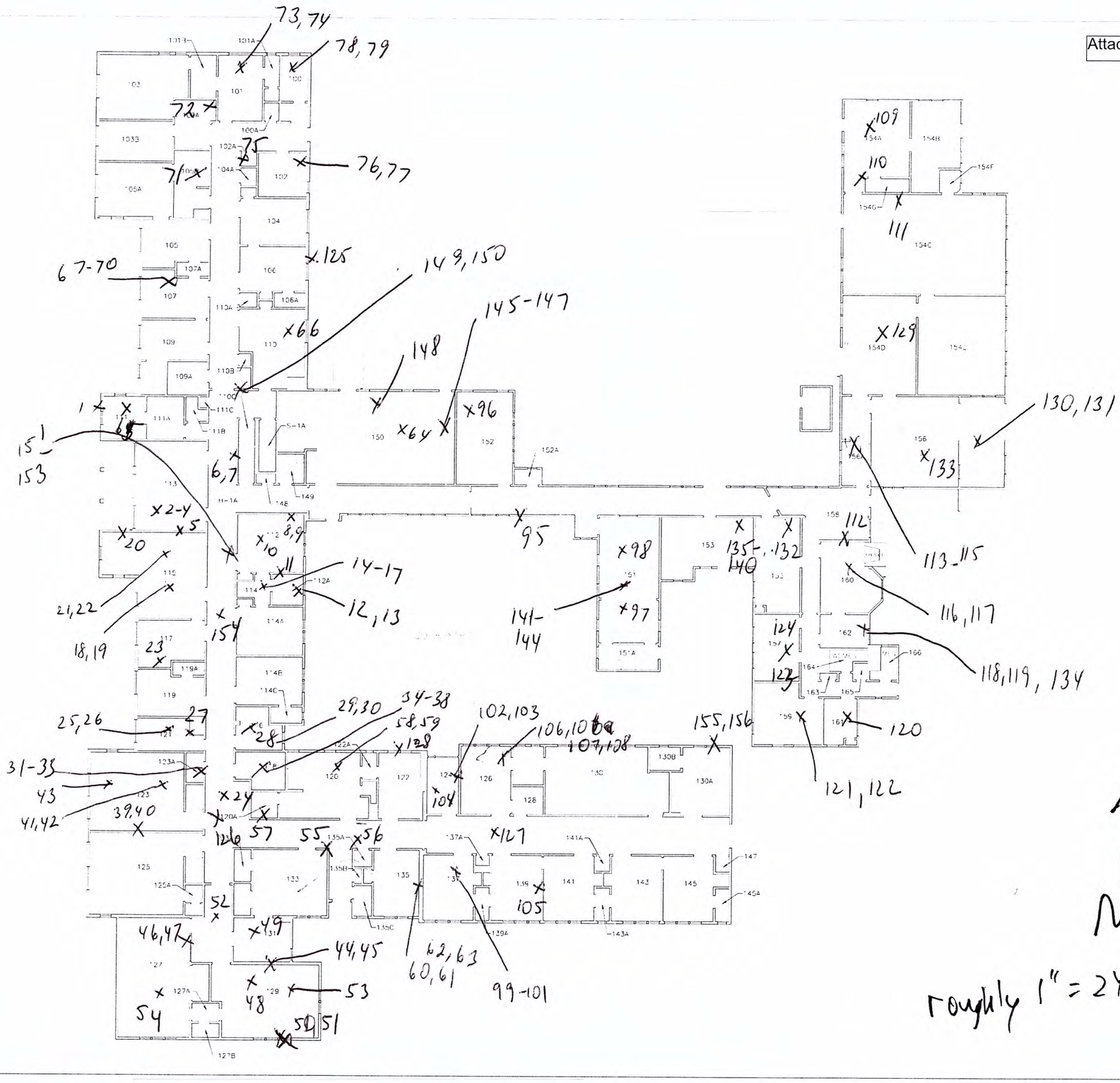
NOT TO SCALE
DIGITAL PLOT

Trinity Annex

BASEMENT

A0

Attachment 6




Trinity Annex

FIRST FLOOR

NOT TO SCALE
DIGITAL PLOT

CAMPUS: [illegible]
ASSET #: [illegible]

Plan Set By: AY
Approved by: [illegible]

01/27/2014

Homeplot Facilities Inc

https://homeplot.digcampus.com/

# Appendix NOI

Noise Measurement and Analysis Files

**From:** Bob Brown
**To:** Smadar Levy
**Subject:** Noise info
**Date:** Friday, May 04, 2018 9:14:02 AM

---

Hi Smadar

Below are my notes for the noise readings.

Rincon –HSU

Noise reading (dBA, slow) were taken on May 3, 2018 during peak hour traffic at two locations (indicated on Google Earth photo provided). HSU was in session this week. Weather was calm/ overcast

The first location was at the SW corner of C and 14th Streets, from 7:35 a.m. to 7:50 a.m. Most of the contribution was from passing vehicles (commute traffic), though Highway 101 could be heard in the background. Highway 101 did not seem to influence the readings much. Minimum/maximum readings during this time was 28.6/ 72.7 dBA . The Leq(15) was 58.3. A second reading was taken from 8:15 – 8:30 with a Leq(15) of 59 dBA. While commute traffic was less, several construction trucks passed this location during this period.

The second location was on the NE corner of B and 13th Streets, from 7:55 a.m. to 8:10 a.m. This included commute traffic with HSU in session. Leq(15) was 57.4 dBA. Minimum/maximum readings were 39/75.4 dBA. The less traffic but higher reading were due to two southbound buses accelerating up the slight incline south on B Street.

**Bob Brown, AICP**
Principal Planner

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1062 G. St. Suite I, Arcata, CA 95521-4800
707-822-5785 w

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/14/2021
Case Description: HSU Trinity Annex Updated - Demolition

| | | ---- Receptor #1 ---- | | |
|---|---|---|---|---|
| | | Baselines (dBA) | | |
| Description | Land Use | Daytime | Evening | Night |
| Residences | Residential | 58 | 58 | 58 |

| Description | Impact Device | Usage(%) | Equipment Spec Lmax (dBA) | Actual Lmax (dBA) | Receptor Distance (feet) | Estimated Shielding (dBA) |
|---|---|---|---|---|---|---|
| Concrete Saw | No | 20 | | 89.6 | 160 | 0 |
| Dozer | No | 40 | | 81.7 | 160 | 0 |
| Backhoe | No | 40 | | 77.6 | 160 | 0 |
| Backhoe | No | 40 | | 77.6 | 160 | 0 |
| Backhoe | No | 40 | | 77.6 | 160 | 0 |

| | | Results | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calculated (dBA) | | Noise Limits (dBA) | | | | | | Noise Limit Exceedance (dBA) | | | | | |
| | | | | Day | | Evening | | Night | | Day | | Evening | | Night | |
| Equipment | | *Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq |
| Concrete Saw | | 79.5 | 72.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Dozer | | 71.6 | 67.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Total | 79.5 | 74.8 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/14/2021
Case Description: HSU Trinity Annex Updated - Site Prep

| | | ---- Receptor #1 ---- | | |
|---|---|---|---|---|
| | | Baselines (dBA) | | |
| Description | Land Use | Daytime | Evening | Night |
| Residences | Residential | 58 | 58 | 58 |

| | | | Equipment | | | |
|---|---|---|---|---|---|---|
| | | | Spec | Actual | Receptor | Estimated |
| | | Impact | Lmax | Lmax | Distance | Shielding |
| Description | | Device | Usage(%) | (dBA) | (dBA) | (feet) | (dBA) |
| Dozer | | No | 40 | | 81.7 | 160 | 0 |
| Grader | | No | 40 | 85 | | 160 | 0 |
| Backhoe | | No | 40 | | 77.6 | 160 | 0 |

| | | | | Results | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calculated (dBA) | | Noise Limits (dBA) | | | | | | Noise Limit Exceedance (dBA) | | | | | |
| | | | | Day | | Evening | | Night | | Day | | Evening | | Night | |
| Equipment | | *Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq |
| Dozer | | 71.6 | 67.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Grader | | 74.9 | 70.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Total | 74.9 | 73.1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/14/2021
Case Description: HSU Trinity Annex Updated - Grading

| | | ---- Receptor #1 ---- | | |
|---|---|---|---|---|
| | | Baselines (dBA) | | |
| Description | Land Use | Daytime | Evening | Night |
| Residences | Residential | 58 | 58 | 58 |

| | | | Equipment | | | |
|---|---|---|---|---|---|---|
| | | | Spec | Actual | Receptor | Estimated |
| | Impact | | Lmax | Lmax | Distance | Shielding |
| Description | Device | Usage(%) | (dBA) | (dBA) | (feet) | (dBA) |
| Dozer | No | 40 | | 81.7 | 160 | 0 |
| Grader | No | 40 | 85 | | 160 | 0 |
| Backhoe | No | 40 | | 77.6 | 160 | 0 |

| | | | | Results | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calculated (dBA) | | Noise Limits (dBA) | | | | | | Noise Limit Exceedance (dBA) | | | | | |
| | | | | Day | | Evening | | Night | | Day | | Evening | | Night | |
| Equipment | | *Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq |
| Dozer | | 71.6 | 67.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Grader | | 74.9 | 70.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Total | 74.9 | 73.1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/14/2021
Case Description: HSU Trinity Annex Updated - Building Construction

| | | | | ---- Receptor #1 ---- |
|---|---|---|---|---|
| | | Baselines (dBA) | | |
| Description | Land Use | Daytime | Evening | Night |
| Residences | Residential | 58 | 58 | 58 |

| Description | Impact Device | Usage(%) | Equipment Spec Lmax (dBA) | Actual Lmax (dBA) | Receptor Distance (feet) | Estimated Shielding (dBA) |
|---|---|---|---|---|---|---|
| Generator | No | 50 | | 80.6 | 160 | 0 |
| Crane | No | 16 | | 80.6 | 160 | 0 |
| Man Lift | No | 20 | | 74.7 | 160 | 0 |
| Backhoe | No | 40 | | 77.6 | 160 | 0 |
| Welder / Torch | No | 40 | | 74 | 160 | 0 |
| Welder / Torch | No | 40 | | 74 | 160 | 0 |
| Welder / Torch | No | 40 | | 74 | 160 | 0 |

| | | | Results | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calculated (dBA) | | Noise Limits (dBA) | | | | | | Noise Limit Exceedance (dBA) | | | | | |
| | | | | Day | | Evening | | Night | | Day | | Evening | | Night | |
| Equipment | | *Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq |
| Generator | | 70.5 | 67.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Crane | | 70.4 | 62.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Man Lift | | 64.6 | 57.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Welder / Torch | | 63.9 | 59.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Welder / Torch | | 63.9 | 59.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Welder / Torch | | 63.9 | 59.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Total | 70.5 | 71.2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/14/2021
Case Description: HSU Trinity Annex Updated - Architectural Coating

| | | ---- Receptor #1 ---- | | |
|---|---|---|---|---|
| | | Baselines (dBA) | | |
| Description | Land Use | Daytime | Evening | Night |
| Residences | Residential | 58 | 58 | 58 |

| | | | Equipment | | | |
|---|---|---|---|---|---|---|
| | | | Spec | Actual | Receptor | Estimated |
| | Impact | | Lmax | Lmax | Distance | Shielding |
| Description | Device | Usage(%) | (dBA) | (dBA) | (feet) | (dBA) |
| Compressor (air) | No | 40 | | 77.7 | 160 | 0 |

| | | Results | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calculated (dBA) | | Noise Limits (dBA) | | | | | | Noise Limit Exceedance (dBA) | | | | | |
| | | | | Day | | Evening | | Night | | Day | | Evening | | Night | |
| Equipment | | *Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq |
| Compressor (air) | | 67.6 | 63.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Total | 67.6 | 63.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/14/2021
Case Description: HSU Trinity Annex Updated - Building Construction

| | | Baselines (dBA) | | | ---- Receptor #1 ---- |
|---|---|---|---|---|---|
| Description | Land Use | Daytime | Evening | Night | |
| Residences | Residential | 58 | 58 | 58 | |

| Description | Impact Device | Usage(%) | Equipment Spec Lmax (dBA) | Actual Lmax (dBA) | Receptor Distance (feet) | Estimated Shielding (dBA) |
|---|---|---|---|---|---|---|
| Concrete Mixer Truck | No | 40 | | 78.8 | 160 | 0 |
| Paver | No | 50 | | 77.2 | 160 | 0 |
| Roller | No | 20 | | 80 | 160 | 0 |
| Backhoe | No | 40 | | 77.6 | 160 | 0 |

Results

| | Calculated (dBA) | | Noise Limits (dBA) | | | | | | Noise Limit Exceedance (dBA) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Day | | Evening | | Night | | Day | | Evening | | Night | |
| Equipment | *Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq | Lmax | Leq |
| Concrete Mixer Truck | 68.7 | 64.7 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Paver | 67.1 | 64.1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Roller | 69.9 | 62.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Backhoe | 67.5 | 63.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total | 69.9 | 69.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Calculated Lmax is the Loudest value.

## Vibration Analysis

PPV (in/sec) = PPV {ref} * (25/D)^1.5

Where PPV = Peak Particle Velocity
{ref} = PPV at the reference distance of 25 feet
D = distance to the receptor

Equipment = Large bulldozer

| | | |
|---|---|---|
| PPV{ref} = | 0.076 | in/sec |
| D = | 50 | feet |
| ***PPV at receptor =*** | ***0.027*** | ***in/sec*** |

PPV is 1.7x to 6x larger than RMS velocity
Assume typical conversion factor of 4 PPV:RMS

| | | |
|---|---|---|
| ***Therefore estimated RMS velocity =*** | ***0.007*** | ***in/sec*** |
| ***Lv =*** | ***77*** | ***VdB*** |

Source: Chapter 12 Noise and Vibration During Construction in
*Transit Noise and Vibration Assessment, April 1995*
Harris Miller Miller & Hanson, Inc.
Prepared For: USDOT Federal Transit Administration

**Vibration Source Levels For Construction Equipment**

| Equipment | | PPV at 25 ft (in/sec) | Approximate Lv at 25 feet * |
|---|---|---|---|
| Impact Pile Driver | upper range | 1.518 | 112 |
| | typical | 0.644 | 104 |
| Sonic Pile Driver | upper range | 0.734 | 105 |
| | typical | 0.17 | 93 |
| Clam shovel drop (slurry wall construction) | | 0.202 | 94 |
| Hydromill (slurry wall construction) | in soil | 0.008 | 66 |
| | in rock | 0.017 | 75 |
| Vibratory Roller | | 0.21 | 94 |
| Hoe Ram | | 0.089 | 87 |
| | large | 0.089 | 87 |
| Bulldozer | small | 0.003 | 58 |
| Caisson drilling | | 0.089 | 87 |
| Loaded trucks | | 0.076 | 86 |
| Jackhammer | | 0.035 | 79 |

* RMS Velocity in decibels VdB with Vref of 1E-6 in/sec and PPV:RMS of ~

***Criterion***

| US Bureau of Mines, 1971 | |
|---|---|
| PPV, in/sec | Degree of Damage |
| <2 | Safe |
| 2 - 4 | Plaster Cracking |
| 4 - 7 | Minor Damage |
| >7 | Major Damage |

| Canmet, Bauer, and Calder, 1977 | | |
|---|---|---|
| Equipment | PPV Threshold, in/sec | Type of Damage |
| Rigid Mercury Switches | 0.5 | Trip Out |
| House | 2 | Cracked Plaster |
| Concrete Block | 8 | Crack in Block |
| Cased Drill Holes | 15 | Horizontol Offset |
| Pumps, Compressors | 40 | Shaft Misalignment |

**Human Response Criteria**

| Level, Lv in VdB | Equivalent Noise Level, dBA | | Human Response |
|---|---|---|---|
| | Low freq (30Hz) | Hi Freq (60 Hz) | |
| 65 | 25 | 40 | Approximate threshold of perception, low-freq inaudible, but mid-freq excessive for sleeping |
| 75 | 35 | 50 | Approx. dividing line between barely perceptible and clearly perceptible. Annoying vibration for most people. Low-freq acceptable for sleeping areas. |
| 85 | 45 | 60 | Vibration acceptable only if no more than 2 events/day for residential uses. Low-freq annoying in sleeping areas; mid-freq unacceptable for sensitive uses, including schools and churches. |
| 90 | 50 | 65 | Difficulty with tasks such as reading computer screens. Generally annoying for commercial uses. |

**Impact Criteria**

| Land Use | Lv in VdB | | |
|---|---|---|---|
| | Frequent Events (70+/day) | Occasional Events (30-70) | Infrequent (<30 events/day) |
| Category 1: Vibration | 65 | 65 | 65 |
| Concert Halls | 65 | 65 | 65 |
| TV Studios | 65 | 65 | 65 |
| Recording Studios | 65 | 65 | 65 |
| Category 2: Residences, hotels, sleeping areas | 72 | 75 | 80 |
| Auditoriums | 72 | 80 | 80 |
| Theaters | 72 | 80 | 80 |
| Category 3: Institutional with primarily daytime use only | 75 | 78 | 83 |

# Appendix TRA

Focused Traffic Study

May 27, 2021

Mr. Stephen Svete, AICP, LEED AP ND
Rincon Consultants
200 Washington Street, Suite 207
Santa Cruz, CA 95060

# Focused Traffic Study and CEQA Initial Study Checklist for the Humboldt State Trinity Annex Project

Dear Mr. Svete;

As requested, W-Trans has prepared a focused traffic study relative to the proposed Humboldt State University (HSU) relocation of the Children's Center and the Swetman Child Development Lab to the site of the Trinity Annex structure, which is on the block bounded by 13th, 14th, B, and C streets in the City of Arcata. This focused traffic study includes a description of the proposed project, an operational analysis of the intersection of 14th Street/B Street, which provides key access to HSU, as well as an Initial Study checklist based on criteria set forth in the California Environmental Quality Act (CEQA).

## Existing Conditions

The site is currently occupied by the vacant Trinity Annex structure and 42 HSU permit-parking spaces. The study area consists of the sections of 13th Street, 14th Street, B Street, and C Street fronting the project site, the project access points, and the intersection of 14th Street/B Street in the City of Arcata. 13th Street and 14th Street run east-west and B and C streets run north-south; all four streets have two 12-foot travel lanes with parking along both sides. The intersection of B Street/14th Street is all-way stop-controlled, with one lane on each approach and crosswalks across all four legs. An aerial showing the existing facilities on the site is enclosed.

## Project Description

The proposed project would result in the demolition of additions to the original hospital building on the site, modernization of the hospital building, and construction of new additions to bring the total size to approximately 13,200 square feet. The Children's Center that is currently located in three on-campus houses and the Swetman Child Development Lab (which is also located on campus) would be relocated to this new facility. The 42 HSU permit-parking spaces would be replaced with 48 HSU permit-parking spaces, 42 of which would be in a single-aisle parking lot that includes a drop-off/pick-up area, located parallel and adjacent to B Street, with the other six parking spaces located on 13th Street. Vehicle access to the on-site parking and drop-off/pick up area would be provided via an entrance-only driveway on 14th Street and a bi-directional driveway on 13th Street. The project would involve moving the existing bus stop on 14th Street adjacent to the project site to B Street. Ten bicycle parking spaces are proposed to be installed. A copy of the project site plan is enclosed.

The enrollment capacity of HSU is not anticipated to change as a result of this project since the existing buildings housing the Children's Center and the Swetman Child Development Lab are expected to be demolished and replaced with parking or landscaping after completion of this project.

## Trip Generation

The project would not result in additional enrollment capacity; rather, it represents the movement of several campus services to a new consolidated building. As such, there would not be an increase in trips generated as a result of the project. However, the routing of these trips would change as a result of the new locations of the Child

Development Lab and Children's Center. To calculate the magnitude of the change in traffic patterns, the trips that would be relocated from the existing on-campus facilities to the new facility at the Trinity Annex site were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for "Day Care Center" (ITE LU 565). The Children's Center would have a capacity of 76 children, and the Child Development Lab would have two sessions of 26 children per session, although the total daily capacity of 52 children was used to provide a more conservative estimate. These calculations are presented in Table 1.

**Table 1 – Trip Generation Summary**

| Land Use | Units | Daily | | AM Peak Hour | | | | PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rate | Trips | Rate | Trips | In | Out | Rate | Trips | In | Out |
| Children's Center | 76 st | 4.09 | 311 | 0.78 | 59 | 31 | 28 | 0.79 | 60 | 28 | 32 |
| Child Development Lab | 52 st | 4.09 | 213 | 0.78 | 41 | 21 | 20 | 0.79 | 41 | 19 | 22 |
| **Total** | | | **524** | | **100** | **52** | **48** | | **101** | **47** | **54** |

Note: st = students

The trip generation estimate represents a conservative estimate. The Children's Center and Child Development Lab are for HSU staff and students only, therefore there may be some drivers who combine dropping off a child with parking to attend HSU, reducing the outbound trips in the morning and inbound trips in the evening compared to trips that are typically generated by standalone day care centers open to the general public.

## Trip Distribution

To determine the potential effect of the relocated trips from the on-campus facilities to the Trinity Annex site, the distribution of the existing trips was estimated by assessing the existing street network and parking supply. As these childcare services are only for HSU staff and students, it is assumed that inbound trips in the morning would generally arrive from off-campus and drivers would park near the existing facilities, such that the driver could drop off a child at the Child Development Lab or Children's Center, then pick up the child at the end of the school day and depart the campus. The routing of these trips is shown in Plate 1. Emphasis is given to the intersection of 14th Street/B Street as this location was analyzed for potential impacts to operations as a result of this project.

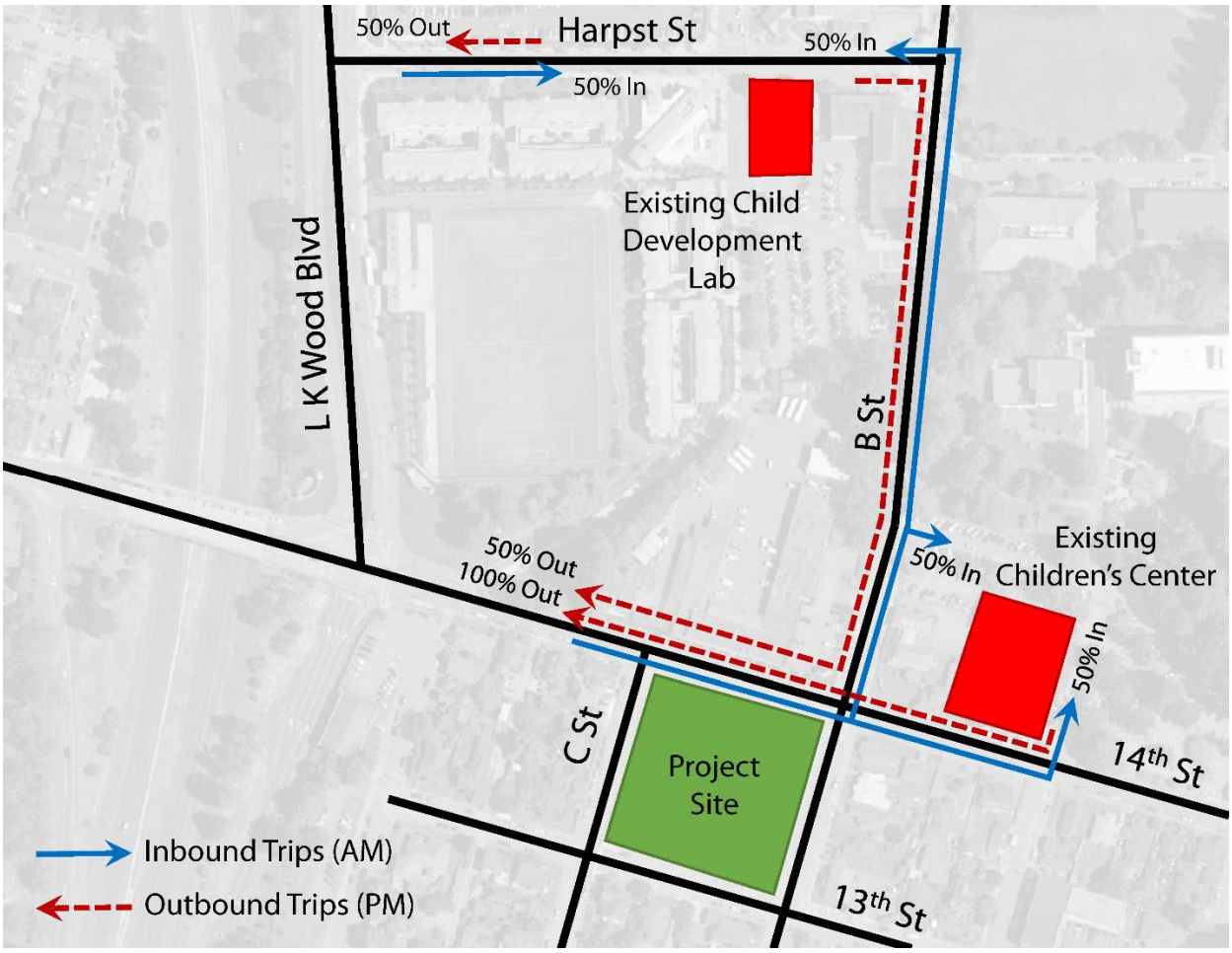



**Plate 1** Existing Trip Distributions

For the proposed project it was assumed that trips would continue to generally arrive in the morning from off-campus and depart in the evening to off-campus destinations. However, it was further assumed that, instead of parking at the Trinity Annex site, drivers dropping off children would then depart the site and head into campus in the morning to park at a more central location. In the evening, these drivers would then leave the campus proper to pick up children at the Trinity Annex site. It is possible that some drivers would park at the Trinity Annex site to drop off their children then walk to campus, but to provide a more conservative analysis it was assumed that the total number of outbound trips shown in Table 1 would be by vehicle rather than as a pedestrian. The project-related distribution assumptions are shown in Plate 2.

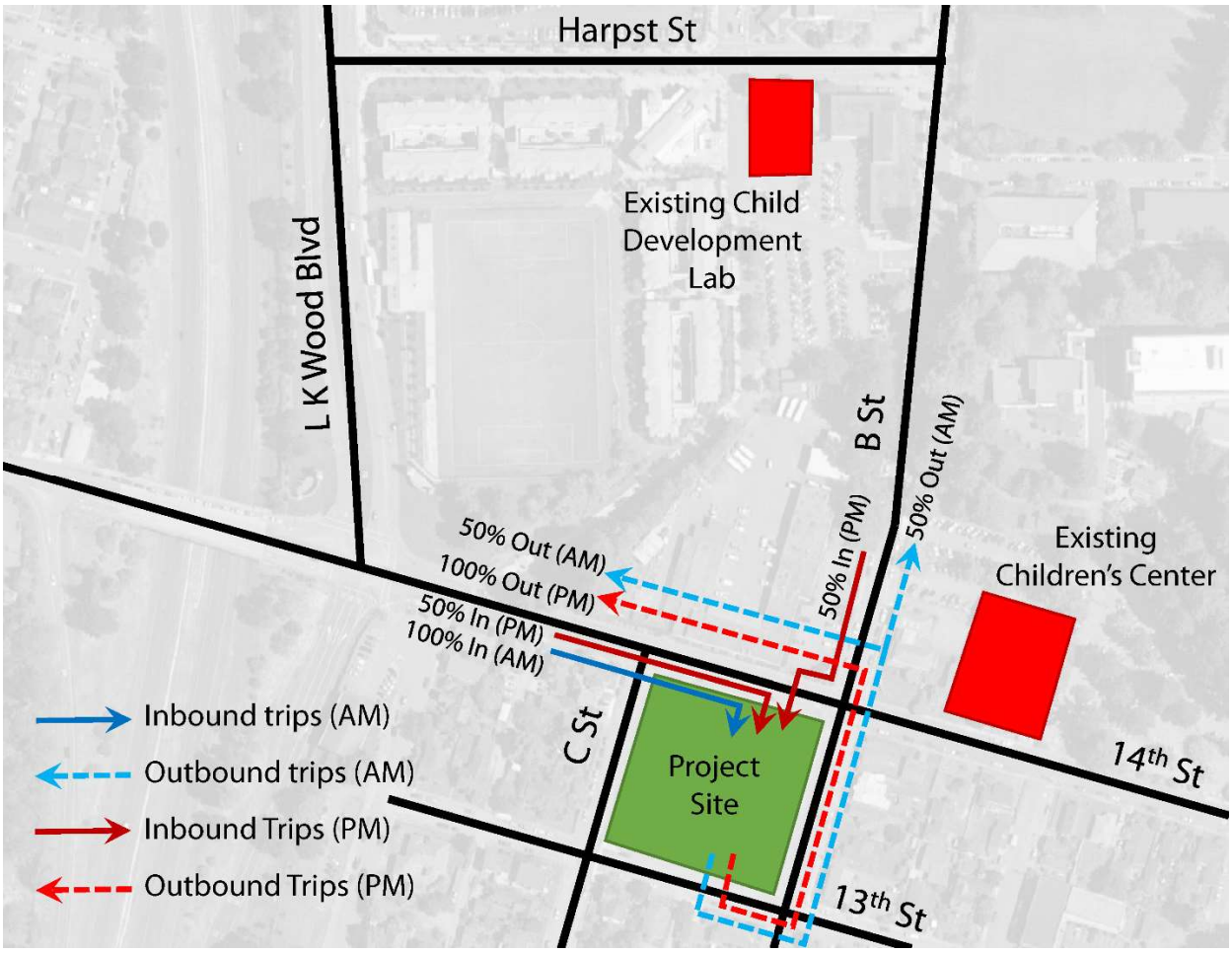



**Plate 2** Project Trip Distributions

## Capacity Analysis

### Intersection Level of Service Methodologies

The study intersection of 14th Street/B Street was analyzed using the all-way stop-controlled methodology published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2010. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle, which is then converted into a Level of Service (LOS). LOS is a system used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions.

### Volume Development and Operational Analysis

Traffic volume data was collected during the a.m. and p.m. peak periods in October 2018 when HSU and local schools were in session. Caltrans District 1 estimates the traffic on US 101 near the campus increases by 1.25 percent each year per the *2014 Growth Factors Memorandum*, Caltrans, February 2014; three years of this growth were therefore applied to the 2018 volumes to estimate 2021 conditions. This Adjusted 2021 scenario represents anticipated typical traffic volumes in 2021 (without the COVID-19 pandemic and the associated shelter-in-place and work-from-home trends), and without shifts in traffic patterns that would result from the proposed project.

With construction of the proposed project, some trips inbound to HSU were assumed to instead route to and from campus via the project site. Also, some trips that previously started or ended on campus would instead now start or end at the project site. At the 14th Street/B Street intersection this reallocation of trips would result in a reduction of eastbound trips and an increase in northbound trips during the morning peak hour, and a reduction in westbound trips and an increase in northbound and southbound trips during the evening peak hour. Some trips taken via Harpst Street to and from the existing Swetman Child Development Lab would instead use 14th Street and B Street to access the proposed project site. These trips were added to or subtracted from the Adjusted 2021 volumes to generate the Adjusted 2021 Plus Project volumes. Overall, there would be an increase in traffic volumes entering the intersection of 0.9 percent during the a.m. peak hour and 4.5 percent during the p.m. peak hour.

Operation under the Adjusted 2021 and Adjusted 2021 Plus Project volumes were assessed for the a.m. and p.m. peak hours. These results are summarized in Table 2 and copies of the calculation outputs are enclosed.

**Table 2 – Adjusted 2021 and Adjusted 2021 plus Project Peak Hour Intersection Levels of Service**

| Study Intersection | Adjusted 2021 Conditions | | | | Adjusted 2021 plus Project | | | |
|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | |
| | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| 14th St/B St | 12.6 | B | 11.2 | B | 12.2 | B | 11.5 | B |

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

As shown in Table 2, 14th Street/B Street would operate at LOS B without or with the project during both peak hours. It is noted that despite a nominal increase in total volume during the a.m. peak hour, the delay would be expected to decrease by 0.4 seconds. This is because the project would result in a reduction in traffic on the eastbound approach which has an approach delay greater than the overall intersection average delay, and likewise add traffic to the northbound approach which has an approach delay lower than the overall intersection average delay. This decreases the overall average delay of the intersection. The conclusion could incorrectly be drawn that the project would improve operation based on this data alone; however, it is more appropriate to conclude that the project trips are expected to make use of excess capacity, so drivers will experience little, if any, change in conditions as a result of the project.

**Finding** – The intersection of 14th Street/B Street would operate at LOS B under Adjusted 2021 conditions during both peak hours. With the changes in vehicle patterns associated with the proposed project under the Adjusted 2021 Plus Project scenario, the intersection would continue to operate at LOS B during each peak hour.

## CEQA Initial Study Checklist

This section provides a discussion of the CEQA checklist for potential transportation/traffic impacts. The potential impacts are summarized in Table 3.

| Table 3 – XVII. TRANSPORTATION/TRAFFIC | | | | |
|---|---|---|---|---|
| **Would the Project:** | **Potentially Significant Impact** | **Less than Significant Impact with Mitigation** | **Less than Significant Impact** | **No Impact** |
| a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? | | | X | |
| b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? | | | X | |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | |
| d) Result in inadequate emergency access? | | | X | |

***a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?***

The *Humboldt State University 2004 Master Plan*, Humboldt State University, September 2004, includes the following planning objectives related to parking and vehicle circulation facilities:

- Routine vehicle traffic shall be kept out of the campus core, to minimize pedestrian and vehicle conflicts;
- Service/emergency access shall be maintained throughout the campus; care shall be taken when these routes must coexist with pedestrian paths;
- Parking capacity shall expand in proportion to campus population growth and this increased capacity shall be accommodated in parking structures;
- New campus housing development shall include adjacent parking facilities;
- To moderate the expansion of parking demand, programs to encourage the campus community to use public transportation rather than personal vehicles shall be maintained and expanded; and
- Bicycle storage facilities shall be improved.

The *Arcata General Plan: 2020, Transportation Element*, City of Arcata, October 2008, includes numerous objectives, policies and programs supporting the need for all modes of travel to be accommodated by the transportation system. This is demonstrated through General Plan Policy T-1, which states:

- Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes.

Additionally, the *Arcata Pedestrian and Bicycle Master Plan 2010*, City of Arcata, April 2010, includes the following objectives related to pedestrian and bicycle connectivity:

- Objective B: Complete a network of bikeways that are feasible, fundable, and that serve bicyclists' needs, especially for travel to employment centers, schools, commercial districts, transit stops, and institutions.
- Objective C: Complete a network of walkways that serves pedestrian needs, especially for short trips to employment centers, schools, commercial districts, transit stops, and institutions.

In addition to these objectives, the Plan identifies both 14th Street and B Street as proposed bikeways.

### Roadway Facilities

The proposed project is not anticipated to generate any new trips, and therefore not result in an adverse impact to roadway facilities. Additionally, the project would move childcare pick-up/drop-off activity away from the campus core to the off-campus Trinity Annex Site, aligning with the first planning objective listed above from the *Humboldt State University 2004 Master Plan*. Therefore, potential impacts to roadway facilities would be less than significant, and no mitigation measures are required.

### Pedestrian Facilities

The proposed project includes interior walkways to provide pedestrian circulation between the parking area, Children's Center and Child Development Lab building, and the surrounding street network. Therefore, no mitigation measures are required as pedestrian impacts would be less than significant.

### Bicycle Facilities

While the *Humboldt State University 2004 Master Plan* does not specify a rate for the provision of bicycle parking, it includes a planning objective that "bicycle storage facilities shall be improved." The project as proposed includes installing ten bicycle parking spaces. A survey conducted by HSU in 2021 determined that there are six existing bicycle parking spaces on the Trinity Annex site. Therefore, the project would provide an increase in bicycle parking capacity compared to the existing condition.

As HSU's *Master Plan* does not specify a quantity for bicycle parking, it is recommended that LEED Gold certification standards instead be used to determine bicycle parking supply. This standard prescribes providing short-term bicycle parking at a rate of 2.5 percent of peak visitors, and long-term bicycle parking at a rate of five percent of regular building occupants. Each rate includes a minimum of four spaces. HSU estimates that there would be 164 peak visitors and 36 regular building occupants, leading to a short-term requirement for 4.1 bicycle parking spaces, a long-term requirement for the minimum of four bicycle parking spaces, and a combined total of 8.1 bicycle parking spaces. The proposed supply of ten bicycle parking spaces exceeds this requirement.

The project impacts to bicycle facilities would be less than significant, as the project would increase the bicycle parking supply and exceed the requirements for LEED Gold certification.

### Transit

Humboldt Transit Authority operates the Redwood Transit System (RTS) and Arcata and Mad River Transit System (A&MRTS). There is an existing bus stop on 14th Street adjacent to the project site on the eastbound approach to the 14th Street/B Street intersection. Service to this stop is provided by RTS and the A&MRTS Gold and Orange routes. The project would modify this bus stop by moving it around the corner to B Street. The project plans include a bus shelter at this new location, replicating the amenities provided at the existing bus stop. The existing street parking spots adjacent to the site on B Street close to the intersection with 14th Street would be eliminated to provide additional space for an eastbound bus on 14th Street to turn right onto B Street. As the bus stop would be replaced nearby with an equivalent facility and the street parking would be reduced to allow for a right-turn at 14th Street/B Street, there would be a less than significant impact to transit, and mitigation is not required.

***b) Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?***

CEQA Guidelines § 15064.3, subdivision (b) indicates that land use projects would have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. The *California State University Transportation Impact Study Manual*, Fehr & Peers, March 2019, includes two screening criteria for VMT analysis that apply to this project:

- "Projects generating less than 110 vehicle trips per day." As this project would not generate any new trips, this criterion applies; and
- "Childcare centers that serve students, faculty, and staff families."

As these screening criteria exempt the project from further VMT analysis, the impacts to VMT are considered less than significant, and mitigation is not required.

***c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

There are no geometric design features included as part of this project related to traffic, other than constructing a driveway on 14th Street and one on 13th Street, and a parking lot with a straight aisle between the two. As these driveways and parking aisle follow standard design practice, they would not be anticipated to present a hazardous condition.

The proposed land use would consist of a support building for HSU and a parking area. As the existing site includes a parking area and as HSU is across the street, these land uses would not be considered incompatible. Therefore, there would be a less than significant impact caused by the project related to an increase in hazards due to design features or incompatible uses.

***d) Would the project result in inadequate emergency access?***

The project site is proposed to include a 20-foot wide (minimum) drive aisle through the parking lot between 14th Street and 13th Street. The project plans include a fire access lane diagram that demonstrates that all building exteriors are within a 150-foot reach of a vehicle area accessible to fire engines. The project would not impact emergency access on nearby streets. The project site would therefore have adequate emergency access and would result in a less than significant impact related to emergency access.

We hope this information is adequate to address the issue of potential traffic impacts associated with the proposed land use. Please contact us if you have any further questions.

Sincerely,

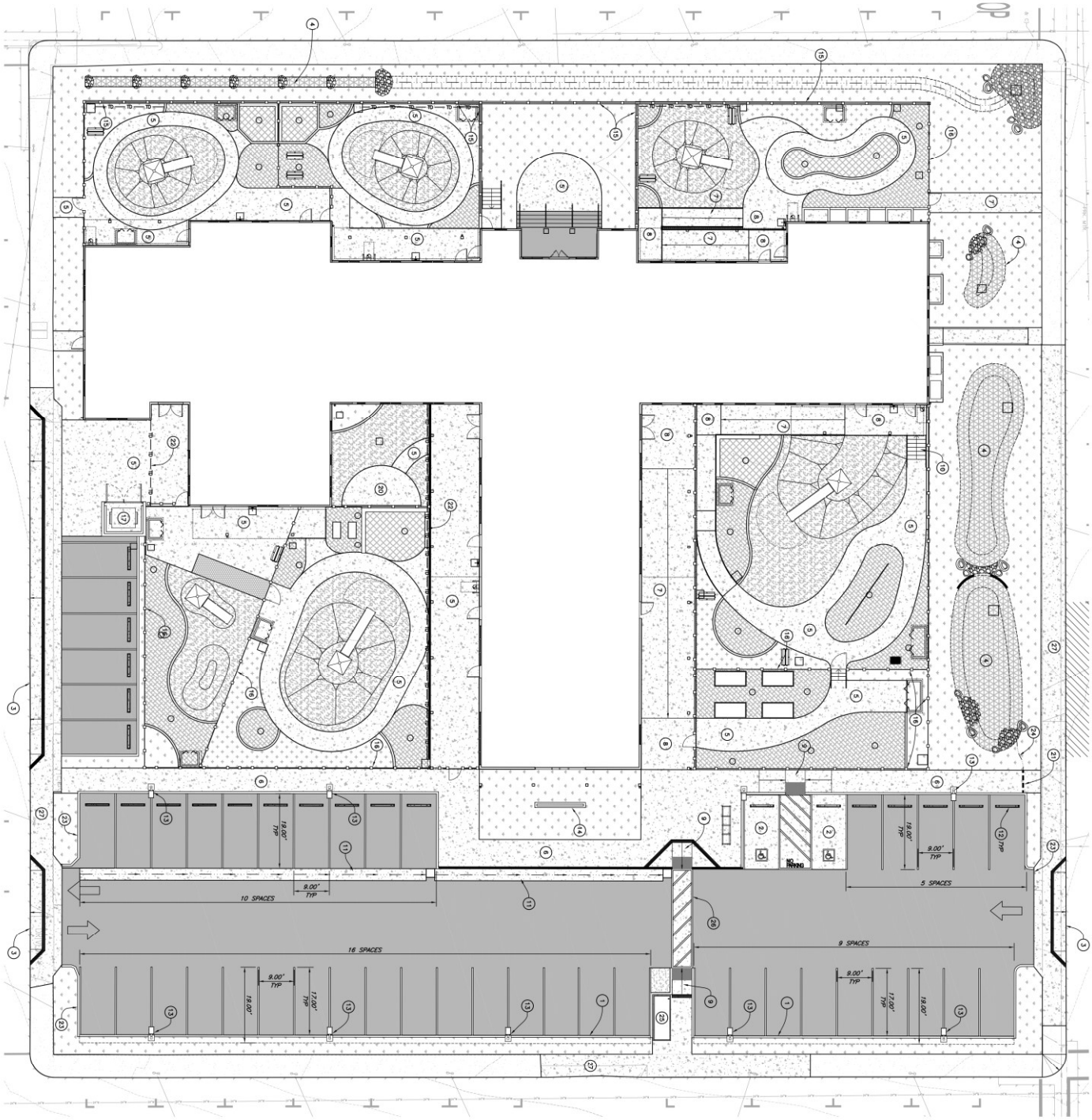
Kevin Carstens, PE, TE
Associate Engineer

Mark E. Spencer, PE
Senior Principal

MES/krc/ARC017-1.L1

Enclosure: Existing Site Aerial, Proposed Site Plan, Operational Calculation Outputs

**Figure 2-3 Existing Site Conditions – Aerial Photograph**




## KEY NOTES:

1. 4" HIGH CURB WITH 2' VEHICLE OVERHANG OVER PLANTER
2. ACCESSIBLE PARKING STALL, SEE DET 2 SHT C8.0
3. DRIVEWAY, SEE DET 1 SHT C8.0
4. BIORETENTION BASIN, SEE DET 5 ON SHT C9.0
5. CONC WALKWAY, SEE DET 2 ON SHT C7.0
6. SIDEWALK, SEE DET 6 ON SHT C7.0
7. RAMP, SEE ARCH PLANS
8. LANDING
9. CURB RAMP, SEE DET 1 SHT C8.0
10. CONC STAIRS
11. CONC VALLEY GUTTER, SEE DET 9 SHT C8.0
12. WHEEL STOP, SEE DET 4 SHT C8.0
13. LIGHT FIXTURE, SEE ARCH PLANS
14. SIGN, SEE ARCH PLANS
15. RETAINING WALL W/FENCE
16. FENCING, SEE ARCH PLANS
17. TRASH ENCLOSURE, SEE ARCH PLANS
18. FLOW THRYOUGH PLANTER
19. DRAIN INLET, SEE SHT C9.0
20. RAISED PLATFORM, SEE LANDSCAPE PLANS
21. UNDER SIDEWALK DRAIN, SEE DET 1 SHT C9.0
22. TRENCH DRAIN, SEE DET 7 SHT C8.0
23. CONC CURB, SEE DET 8 SHT C7.0
24. VEGETATED SWALE
25. BUS SHELTER
26. CROSSWALK
27. CITY SIDEWALK, SEE DET 3 SHT C9.0

## LEGEND:

(N) CONCRETE
(N) 4" PAVING
(N) LANDSCAPING
BIORETENTION AREA
VEGETATED SWALE

1"=10'

50% PRELIMINARY DESIGN

This document is for plan review only
Not for permitting or construction

C3.0

SITE PLAN

| # | DESCRIPTION | DATE |
|---|---|---|
| | 50% PRELIMINARY DESIGN | |

CLIENT: HUMBOLDT STATE UNIVERSITY
PROJECT NUMBER: 20269
DATE: 4/15/2021
DRAWN BY: CDN
CHKED BY: JSO

KEY PLAN

TRINITY CHILDREN'S CENTER & CHILD DEVELOPMENT LAB

HUMBOLDT STATE UNIVERSITY

1350 "C" STREET
ARCATA, CA 95521

50% PRELIMINARY DESIGN

ARCHITECT: PBK Architects, Inc.
2325 Iverson Lane Bldg. Suite 40
Santa Rosa, CA 95403
T 415.462.3000 F
T 707.544.2910

PBK WLC

SHN
812 W. WABASH AVE.
EUREKA, CA 95501
707-441-8855
WWW.SHN-CONSULTING.COM

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.6 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 104 | 201 | 44 | 19 | 112 | 59 | 13 | 18 | 4 | 13 | 17 | 33 |
| Future Vol, veh/h | 104 | 201 | 44 | 19 | 112 | 59 | 13 | 18 | 4 | 13 | 17 | 33 |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 144 | 279 | 61 | 26 | 156 | 82 | 18 | 25 | 6 | 18 | 24 | 46 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 14.8 | 10.2 | 9.4 | 9.3 |
| HCM LOS | B | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 37% | 30% | 10% | 21% |
| Vol Thru, % | 51% | 58% | 59% | 27% |
| Vol Right, % | 11% | 13% | 31% | 52% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 35 | 349 | 190 | 63 |
| LT Vol | 13 | 104 | 19 | 13 |
| Through Vol | 18 | 201 | 112 | 17 |
| RT Vol | 4 | 44 | 59 | 33 |
| Lane Flow Rate | 49 | 485 | 264 | 88 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.079 | 0.617 | 0.343 | 0.131 |
| Departure Headway (Hd) | 5.866 | 4.583 | 4.677 | 5.407 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 614 | 780 | 763 | 655 |
| Service Time | 3.866 | 2.643 | 2.747 | 3.507 |
| HCM Lane V/C Ratio | 0.08 | 0.622 | 0.346 | 0.134 |
| HCM Control Delay | 9.4 | 14.8 | 10.2 | 9.3 |
| HCM Lane LOS | A | B | B | A |
| HCM 95th-tile Q | 0.3 | 4.3 | 1.5 | 0.4 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.2 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 54 | 166 | 26 | 16 | 223 | 50 | 33 | 23 | 9 | 31 | 46 | 106 |
| Future Vol, veh/h | 54 | 166 | 26 | 16 | 223 | 50 | 33 | 23 | 9 | 31 | 46 | 106 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 59 | 182 | 29 | 18 | 245 | 55 | 36 | 25 | 10 | 34 | 51 | 116 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 11.3 | 11.9 | 9.6 | 10.4 |
| HCM LOS | B | B | A | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 51% | 22% | 6% | 17% |
| Vol Thru, % | 35% | 67% | 77% | 25% |
| Vol Right, % | 14% | 11% | 17% | 58% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 65 | 246 | 289 | 183 |
| LT Vol | 33 | 54 | 16 | 31 |
| Through Vol | 23 | 166 | 223 | 46 |
| RT Vol | 9 | 26 | 50 | 106 |
| Lane Flow Rate | 71 | 270 | 318 | 201 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.115 | 0.384 | 0.44 | 0.293 |
| Departure Headway (Hd) | 5.808 | 5.12 | 4.99 | 5.238 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 616 | 703 | 721 | 686 |
| Service Time | 3.849 | 3.15 | 3.018 | 3.27 |
| HCM Lane V/C Ratio | 0.115 | 0.384 | 0.441 | 0.293 |
| HCM Control Delay | 9.6 | 11.3 | 11.9 | 10.4 |
| HCM Lane LOS | A | B | B | B |
| HCM 95th-tile Q | 0.4 | 1.8 | 2.3 | 1.2 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.2 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 77 | 186 | 44 | 19 | 112 | 59 | 37 | 42 | 4 | 13 | 17 | 33 |
| Future Vol, veh/h | 77 | 186 | 44 | 19 | 112 | 59 | 37 | 42 | 4 | 13 | 17 | 33 |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 107 | 258 | 61 | 26 | 156 | 82 | 51 | 58 | 6 | 18 | 24 | 46 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 14.3 | 10.7 | 10.2 | 9.5 |
| HCM LOS | B | B | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 45% | 25% | 10% | 21% |
| Vol Thru, % | 51% | 61% | 59% | 27% |
| Vol Right, % | 5% | 14% | 31% | 52% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 83 | 307 | 190 | 63 |
| LT Vol | 37 | 77 | 19 | 13 |
| Through Vol | 42 | 186 | 112 | 17 |
| RT Vol | 4 | 44 | 59 | 33 |
| Lane Flow Rate | 115 | 426 | 264 | 88 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.187 | 0.576 | 0.362 | 0.136 |
| Departure Headway (Hd) | 5.845 | 4.867 | 4.945 | 5.579 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 613 | 746 | 731 | 641 |
| Service Time | 3.887 | 2.875 | 2.956 | 3.621 |
| HCM Lane V/C Ratio | 0.188 | 0.571 | 0.361 | 0.137 |
| HCM Control Delay | 10.2 | 14.3 | 10.7 | 9.5 |
| HCM Lane LOS | B | B | B | A |
| HCM 95th-tile Q | 0.7 | 3.7 | 1.7 | 0.5 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.5 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 54 | 166 | 26 | 16 | 191 | 50 | 87 | 23 | 9 | 44 | 46 | 106 |
| Future Vol, veh/h | 54 | 166 | 26 | 16 | 191 | 50 | 87 | 23 | 9 | 44 | 46 | 106 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 59 | 182 | 29 | 18 | 210 | 55 | 96 | 25 | 10 | 48 | 51 | 116 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 11.9 | 11.9 | 10.6 | 11 |
| HCM LOS | B | B | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 73% | 22% | 6% | 22% |
| Vol Thru, % | 19% | 67% | 74% | 23% |
| Vol Right, % | 8% | 11% | 19% | 54% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 119 | 246 | 257 | 196 |
| LT Vol | 87 | 54 | 16 | 44 |
| Through Vol | 23 | 166 | 191 | 46 |
| RT Vol | 9 | 26 | 50 | 106 |
| Lane Flow Rate | 131 | 270 | 282 | 215 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.214 | 0.401 | 0.411 | 0.321 |
| Departure Headway (Hd) | 5.892 | 5.338 | 5.241 | 5.367 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 607 | 673 | 686 | 668 |
| Service Time | 3.947 | 3.381 | 3.284 | 3.416 |
| HCM Lane V/C Ratio | 0.216 | 0.401 | 0.411 | 0.322 |
| HCM Control Delay | 10.6 | 11.9 | 11.9 | 11 |
| HCM Lane LOS | B | B | B | B |
| HCM 95th-tile Q | 0.8 | 1.9 | 2 | 1.4 |