

NEGATIVE DECLARATION and INITIAL STUDY

Reyes Holdings, Victorville Warehouse
APN 3090-431-07

Prepared for:

City of Victorville
14343 Civic Drive, P.O. Box 5001
Victorville, California 92395

Prepared by:

Mark Hagan
Wildlife Biologist
B.S. Degree, Wildlife Management
Humboldt State University

INITIAL STUDY

1. PROJECT TITLE: Site Plan Case No. PLAN22-00004 (Reyes Holdings, Victorville Warehouse)
2. LEAD AGENCY NAME AND ADDRESS: City of Victorville, Planning Department, 14343 Civic Drive, Victorville, California 92392
3. CONTACT PERSON AND PHONE NUMBER:

Alex Jauregui, Senior Planner; 760.955.5135
4. PROJECT LOCATION: APN 3090-431-07, Victorville, California. The approximately 7 acres (2.8 ha) project area was located south of Ottawa Street, and east of Enterprise Way, T5N, R4W, a portion of the NE1/4 of the SW1/4 of the of Section 27, S.B.B.M (Figures 1 to 3).
5. PROJECT SPONSOR'S NAME AND ADDRESS:

Mr. Phil Erdman
707-684-9941
PErdman@reyesholdings.com
6250 North River Road, Rosemont, IL 60018
6. GENERAL PLAN DESIGNATION: Heavy Industrial
7. ZONING: APN 3090-431-07 is zoned M-2T, Heavy Industrial
8. DESCRIPTION OF PROJECT: Development of an approximately 18,600 square foot building warehouse facility is planned for APN 3090-431-07. Supporting infrastructure, drainage control, etc. will be constructed and installed to support this operation. Building and supporting infrastructure specifics are in the site plan (Figure 4). Packaging and distribution of food and beverages will be accomplished within this facility. Employees assigned to the site will consist of 18 drivers and 7 administrative staff. Thirty-five sales and merchandisers will be at the site once to twice a week. Four shuttles will be used for deliveries three times per night.
9. SURROUNDING LAND USES AND SETTING (Figures 5 to 7):

Enterprise Way was west of the study site. Ottawa Street was north of the study site. Vacant desert was present across from Enterprise Way and Ottawa Street. A wrought iron fence, parking, and industrial buildings existed adjacent to the eastern boundary. Sidewalks, cul de sac, and industrial buildings were present to the south of the study site. A sidewalk and a channelized wash/storm drain existed west and north of the project site. Heavy Industrial zoning is present to the north, south, and east of the project site. General Commercial zoning was present to the west of the project site. An Environmental Impact Report is currently under review for the Ottawa Business Center Project immediately adjacent to the north of Ottawa Street.

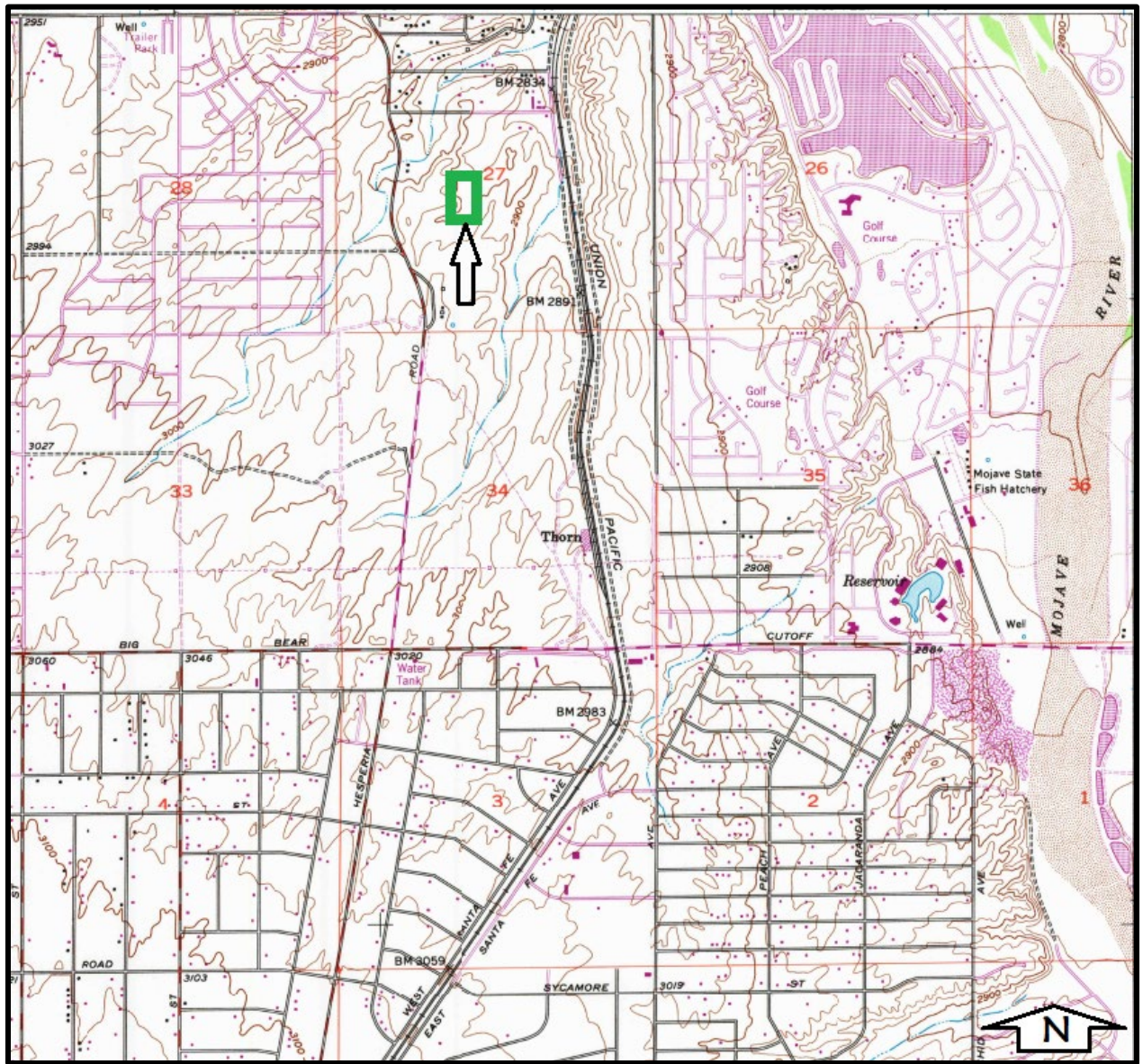


Figure 1. Approximate location of study area as depicted on excerpt from USGS Quadrangle, Hesperia, California, 7.5' 1980.

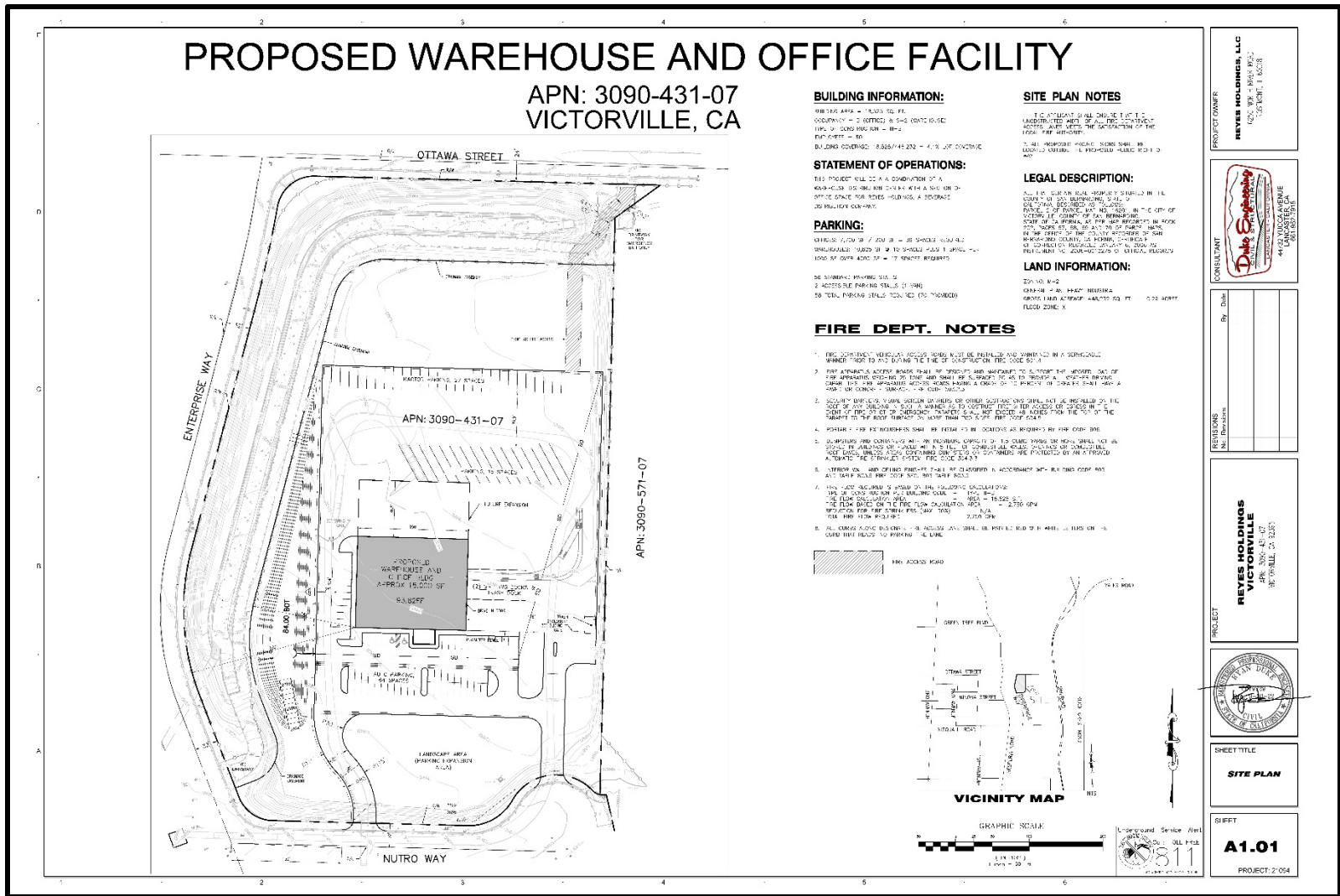


Figure 2. Approximate location of project area, Google Earth, April 2018, showing surrounding land use.



Figure 3. Representative photos of the project site. Top photo is west half, bottom photo is east half of site.

Figure 4. Site Plan - January 2022



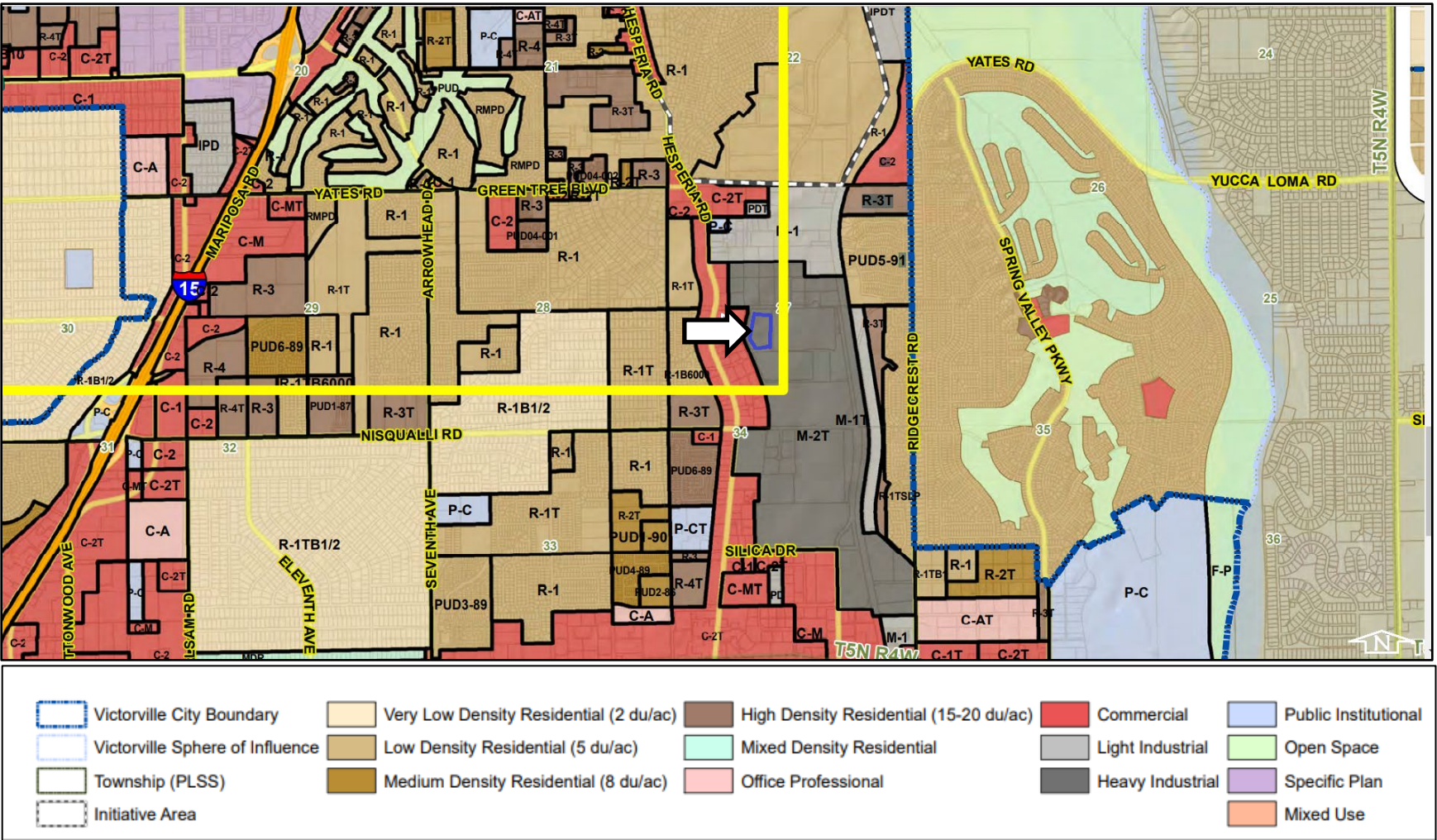


Figure 5. Surrounding zone designations from Victorville General Plan.
Note arrow indicating project site.



Figure 6. Photos of surrounding land uses. Top photo is south of the project site, bottom photo is looking to the east of the site.



Figure 7. Photos of surrounding land uses. Top photo storm channel immediately adjacent to the west of the project site. Bottom photo looking west of the site.

10. OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement). Distribution of this document is appropriate, but not limited, to the following agencies:

Lahontan Regional Water Quality Control Board
Mojave Desert Air Quality Management District

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1?

The City of Victorville mailed the required tribal notice on 9 March 2022. No responses were received. The 30-day period closed with no concerns noted by tribal entities. However, after the close of the required tribal noticing period, the City received comments from the San Manuel Band of Mission Indians that have been included as Cultural and Tribal Mitigation Measures CUL-1 through CUL-3 and TCR-1 and TCR-2 accordingly.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | | | | |
|--|------------------------|--|-------------------------------|--|------------------------------------|
| | Aesthetics | | Hazards & Hazardous Materials | | Public Services |
| | Agriculture Resources | | Hydrology/Water Quality | | Recreation |
| | Air Quality/GHG/Energy | | Land Use/Planning | | Transportation/Traffic |
| | Biological Resources | | Mineral Resources | | Utilities/Service Systems |
| | Cultural Resources | | Noise | | Mandatory Findings of Significance |
| | Geology/Soils | | Population/Housing | | |

DETERMINATION: (To be completed by the Lead Agency). On the basis of 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 in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. | x |
| I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. | |
| I find that the proposed project MAY have a "potentially significant impact" or potentially significant unless mitigated" 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 potentially 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. | |



 Signature

6/2/2022

 Date

Alex Jauregui

 Printed Name

Senior Planner

 Title

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in its explanation following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e. g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation incorporated, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analysis," may be cross-referenced).
- 5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.
Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:
 - (a) Earlier Analysis Used. Identify and state where they are available for review.
 - (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address the site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify: (a) the significance criteria or threshold, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significant.

| 1. Aesthetics: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|---|--|----------------------------------|----------------------|
| a) Have a substantial adverse effect on a scenic vista? | | | | X |
| The project site is not located next to a state scenic highway and the area is not considered a scenic resource. The project site is situated next to existing industrial development. | | | | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | X |
| There are no trees, rock outcroppings, or historic buildings on the project site. Caltrans information indicates there are no designated scenic highways in the City of Victorville (Caltrans 2022). | | | | |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | | | X |
| The proposed project would not substantially degrade the existing visual character or quality of the site or its surroundings. This project site has been fully graded, developed, and used as a parking lot in the past. The area to the south and east are developed with industrial facilities. The project site is bounded on the north and south by paved roads. | | | | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | X |
| The project will be developed in compliance with Victorville municipal codes intended to prevent substantial light or glare. This project is situated within an industrial use area. | | | | |

| | | | | |
|---|---------------------------------------|--|------------------------------|------------------|
| 2. Agriculture Resources: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | X |
| No. This is non-agricultural land (Department of Conservation 2022) | | | | |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |
| No. This project site is zoned heavy industrial and has been previously graded and used for tractor-trailer parking. | | | | |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | | | | X |
| This project would have no impacts on farmland. The area, both project site and adjacent sites, are zoned heavy industrial and commercial. | | | | |

| 3. Air Quality: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|---------------------------------------|--|------------------------------|------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | X |
| Development and operation of this project will comply with all applicable district rules and regulations, and proposed control measures as required by the Mojave Desert Air Quality Management District (MDAQMD). By complying with these rules, regulations, and measures the project would not conflict with or obstruct implementation of the air quality plan. This project is located within an appropriately zoned area (M2 – Heavy Industrial). The mitigation measures required by the MDAQMD are listed within the Mitigation, Monitoring and Reporting Plan (MMRP) (Appendix E). | | | | |
| 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | | X |
| An Air Quality Study was accomplished and findings indicated “The estimated emissions of criteria pollutants and greenhouse gases for each year of construction and the total operational emissions are well below the applicable MDAQMD Significant Emissions Thresholds; therefore, this project does not have a significant air quality impact on the environment (Appendix A). In addition, this project is not expected to expose sensitive receptors to substantial pollutant concentrations. Since the construction and operational emissions are below the significance thresholds, emissions mitigation measures are not required” (MS Hatch Consulting 2021). Emission thresholds applicable to this project have been set by the MDAQMD and are contained within the Air Quality Study (MS Hatch Consulting 2021). The Air Quality Study was based on an approximately 50,000 square foot facility whereas the project has been scaled down to an 18,600 square foot facility making the emissions even less than projections. | | | | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | | X |
| The proposed project is not considered one of the project types that the MDAQMD CEQA Guidelines require to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations (MS Hatch Consulting). As such, hazardous air pollutants (HAP) emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors (MS Hatch Consulting 2021). | | | | |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | | X |
| Typical construction odors would be expected and temporary not affecting a substantial number of people in this industrial/commercial area. Objectionable odors of the nature expected to affect substantial number of people would be those such as landfills, and sewage treatment facilities. This facility will be operating a beverage distribution center which would not be expected to produce highly odiferous emissions. | | | | |

| 4. Biological Resources Would the project? | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|--------------------------------------|---|--------------------------|--------------|
| 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? | | X | | |
| Results noted here are from Hagan 2022, Appendix B. This project is being developed on a previously developed site and is not expected to result in a significant adverse impact to biological resources. No sensitive wildlife sign was observed within the project site. There is no suitable habitat for sensitive plants within the site. Vegetation within the site is unsuitable for nesting birds. No migratory bird mitigations are necessary. No burrowing owl cover sites were observed within the study site. A few California ground squirrel burrows were observed on the constructed banks which make the south and east boundaries. It is possible for burrowing owls to take up residence within these burrows at some time in the future. A burrowing owl survey should be accomplished within 30 days prior to construction activities to ensure burrowing owls have not moved into the study area. If burrowing owls are discovered the guidance outlined in the California Department of Fish and Wildlife titled "Staff Report on Burrowing Owl Mitigation" will be used for addressing burrowing owl issues on the study site (California Department of Fish and Game 2012). | | | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | | | | X |
| There is no riparian habitat or sensitive natural community present on the project site. | | | | |
| 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? | | | | X |
| There are none of these features within the project site. | | | | |
| 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? | | | | X |
| There is no evidence of any movement corridors or nursery sites within this project area. This project will not interfere with the movement of fish or wildlife species, migratory corridors, or wildlife nursery sites. The area is fenced on two sides with constructed banks on the other two sides. | | | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |
| There are no sensitive resources within the project site which could be impacted (Hagan 2022). | | | | |
| 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? | | | | X |
| This project site is not within any approved Habitat Conservation Plan, Natural Community Conservation Plan, or any other local, regional, or state habitat conservation plan. | | | | |

| 5. Cultural Resources | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|--------------------------------|---------------------------------------|-----------------------|-----------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5? | | X | | |
| No adverse change would be expected. A Cultural Resources Report was completed for the project site (Love 2022, Appendix C). There was no observation of any historical resources on the project site. The Records Search returned with a negative finding for cultural resources. However, mitigation measures will be employed in the event resources or remains are discovered during construction. These measures are listed in the MMRP (Appendix E). | | | | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | | | X |
| No archaeological resources are present within this project site (Love 2022). No indication of human remains was observed on the project site. The site was completely graded and recontoured prior to 2005 according to Google Earth historical aerials. | | | | |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | | X | | |
| No indication of human remains was observed on the project site. The site was completely graded and recontoured prior to 2005 according to Google Earth historical aerials. However, mitigation measures will be employed in the event resources or remains are discovered during construction. These measures are listed in the MMRP (Appendix E). | | | | |

| 6. Energy | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|--------------------------------|---------------------------------------|-----------------------|-----------|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | | X |
| Energy use calculated during the Air Quality Study, Tables 3 and 4, were well below any significance level (MS Hatch Consulting 2021). During construction and operation, this project will be required to comply with the latest Environmental Protection Agency (EPA) and California Air Resources Board (CARB) emissions standards as well as Title 24 Building Efficiency Standards. Following these standards will ensure no significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources occur. | | | | |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficient? | | | | X |
| Calculated energy use is well below significance and will not conflict or obstruct with state or local plans for renewable energy or energy efficient. In addition to Title 24 and the EPA and CARB emissions standards compliance the City of Victorville has energy policies within the General Plan to promote energy sustainability (City of Victorville 2008). Policy 7.2.1 requires sustainable building design and development. Policy 7.2.1.3 requires drought tolerant landscaping. Both of these further ensures compliance with state and local plans. | | | | |

| 7. Geology and Soils: Would the project | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|---------------------------------------|--|------------------------------|------------------|
| a) Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i)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? Refer to Division of Mines and Geology Special Publication 42. ii)Strong seismic ground shaking? iii)Seismic-related ground failure, including liquefaction? iv)Landslides? | | | | X |
| i)Based on the American Geosciences Institute California Earthquake Hazard Zones map this area and site are not within an Earthquake Fault Zone. ii)Strong seismic shaking could occur anywhere in Southern California. The building would have to comply with the California Building Codes and the City of Victorville engineering requirements. iii)There are clay soils within the project site however they are primarily in the northern portion where the parking area is planned. Liquefaction can be associated with clay soils. The engineering plans and geo-technical studies will ensure the building is constructed with this issue in mind. iv)The project site is level and other than constructed banks in the general vicinity there are no areas of elevation around the project site. Landslides would not be expected. | | | | |
| b) Result in substantial soil erosion or the loss of topsoil? | | | | X |
| Grading and soil disturbance will create some soil erosion and loss of topsoil but due to requirements in the Stormwater Pollution Prevention Plan (SWPP) which will be part of the construction these actions will not result in substantial soil erosion or 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? | | | | X |
| The project would comply with the California Building Code and incorporate recommendations from the geo-technical and soils report into the development of the project. | | | | |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | | X |
| According to the General Plan the expansion potential for most soils within the City of Victorville have a low expansion potential (City of Victorville 2008). The soils within this project site have been graded and recontoured in the past for development. No substantial risk to life or property is expected. | | | | |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | X |
| Septic tanks will not be used for this project. | | | | |

| | | | | |
|--|--|---|--|--|
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | X | | |
| The project site is on a previously developed site which has been graded and recontoured, no paleontological resources or unique geologic features are present or expected. However, mitigation measures will be employed in the event resources are discovered during construction. These measures are listed in the MMRP (Appendix E). | | | | |

| 8. Greenhouse Gas Emissions: Would the project: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|---------------------------------------|--|------------------------------|------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | | X |
| <p>An Air Quality Study was accomplished and findings indicated “The estimated emissions of criteria pollutants and greenhouse gases for each year of construction and the total operational emissions are well below the applicable MDAQMD Significant Emissions Thresholds; therefore, this project does not have a significant air quality impact on the environment. In addition, this project is not expected to expose sensitive receptors to substantial pollutant concentrations. Since the construction and operational emissions are below the significance thresholds, emissions mitigation measures are not required” (MS Hatch Consulting 2021). Emission thresholds applicable to this project have been set by the MDAQMD and are contained within the Air Quality Study (MS Hatch Consulting 2021).</p> <p>The Air Quality Study was based on an approximately 50,000 square foot facility, whereas the project has been scaled down to an 18,600 square foot facility making the emissions even less than the projection.</p> | | | | |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | X | | |
| <p>Given that greenhouse gases were estimated to be well below the applicable MDAQMD Significant Emissions Thresholds no conflict could occur. The San Bernardino County Regional Greenhouse Gas Reduction Plan shall be applied and current GHG screening table shall be followed. Mitigation measures are listed within the MMRP (Appendix E).</p> | | | | |

| 9. Hazards and Hazardous Materials | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|--------------------------------|---------------------------------------|-----------------------|-----------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | X |
| Other than common hazardous materials used during construction such as petroleum-based fuels, oils, etc. no hazardous materials usage is planned during operations. If there were any or if there are in the future Federal regulations rigorously regulate the transport, use, and disposal of hazardous materials. Regulations would be followed in every aspect. | | | | |
| 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? | | | | X |
| Note a) above. | | | | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| No schools are within one-quarter mile. In addition, this project is located in an area zoned and already developed as heavy industrial. | | | | |
| d) Be located on a site which is included on a list of hazardous materials 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? | | | | X |
| An Envirostor search was completed for the project site. No hazardous materials sites were within 0.5 miles of the project site (distance that was researched). Only one previous operation has taken place on this project site and that was a parking lot. Prior to construction of the parking lot the site was relatively untouched vacant land. | | | | |
| 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 for people residing or working in the project area? | | | | X |
| Based on review of Google Earth aerial photography no public airport or public use airport is located within two miles and therefore would not be within an airport land use plan. | | | | |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| This project is not located within the vicinity of a private airstrip. | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| Development of this project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This project is in an appropriately zoned area where these issues were previously considered when zoned. | | | | |

| | | | | |
|---|--|--|--|---|
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X |
| <p>The project site is located within an urban area with facilities bordering the east and south, a major road to the west and north. Vacant land with low growing vegetation is present for a short distance to the west and then residential housing. Vacant land with low growing vegetation is present to the north. The context of the project site is such that a risk to wildland fires would be anticipated to be low to nonexistent.</p> | | | | |

| 10. Hydrology and Water Quality | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|--------------------------------|---------------------------------------|-----------------------|-----------|
| a) Violate any water quality standards or waste discharge requirements? | | X | | |
| The project will apply National Pollutant Discharge Elimination System (NPDES) best management practices to ensure water quality standards and waste discharge requirements are met. The required Stormwater Pollution Prevention Plan (SWPPP) further ensures no violations occur. Mitigation measures to be applied are listed in the MMRP (Appendix E). | | | | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | | X |
| The City of Victorville's General Plan requires water conservation measures be applied to new development through their General Plan Resource Element Objective 1.1 (City of Victorville 2008). Xerophytic landscaping and water conserving measures help to prevent depletion of ground water. Groundwater impacts were evaluated within the General Plan Environmental Impact Report. This development is consistent with those analyzed and determined to not substantially deplete groundwater supplies or interfere substantially with recharge. | | | | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in: i)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? | | | | X |
| Best management practices as required by both NPDES and the SWPPP as overseen by Lahontan Water Quality Control Board ensures control of erosion and siltation during construction. The site plan and Hydrology Report show the drainage controls which are a part of the development of this project and would control surface runoff and flood flows to maintain pre-development hydrology (Figure 4, Duke Engineering 2022, Appendix D). Mitigation measures to be applied are listed in the MMRP (Appendix E). | | | | |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | X |
| Not applicable. | | | | |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | X |
| The proposed project is being developed within an already evaluated area zoned for heavy industrial. This development is small, normal construction, and normal operations fitting within the bounds expected within the General Plan for build out (City of Victorville 2008). | | | | |

| 11. Land Use and Planning | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|---------------------------------------|--|------------------------------|------------------|
| a) Physically divide an established community? | | | | X |
| This is a previously developed site, no community would be divided. | | | | |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| No conflict with any applicable plan or regulation would occur. The project site is zoned appropriately for the planned project. | | | | |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | X |
| Currently there are no habitat conservation or natural community conservation plans that cover this area. | | | | |

| 12. Mineral Resources | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|---------------------------------------|--|------------------------------|------------------|
| b) 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? | | | | X |
| This project site is in an area that has already been developed, is small in nature, and is located within an already established area with major roads and facilities surrounding it. No loss of known mineral resources would occur due to development of this site. | | | | |
| c) 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? | | | | X |
| This project site is in an area that has already been developed, is small in nature, and is located within an already established area with major roads and facilities surrounding it. No loss of known mineral resources would occur due to development of this site. | | | | |

| 13. Noise | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|--------------------------------|---------------------------------------|-----------------------|-----------|
| 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? | | | | X |
| Construction of the site would be required to follow established standards within the General Plan (City of Victorville 2008). This area is within an industrial area where noise sensitive receptors are not present. Construction noise would be considered normal conventional standard for this type of development. | | | | |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | | X |
| Normal conventional construction noise would be expected during development of this project. Operations would be consistent with an industrial area. | | | | |
| 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? | | | | X |
| Not applicable | | | | |

| 14. Population and Housing | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|---------------------------------------|--|------------------------------|------------------|
| a) Induce substantial 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)? | | | | X |
| No new homes are being proposed. This project is a relatively small business which would not generate substantial population growth. | | | | |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| No housing would be displaced due to development of this project site. | | | | |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |
| No people would be displaced due to development of this project site. | | | | |

| 15. Public Services: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|--------------------------------|---------------------------------------|-----------------------|-----------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, 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: | | | | X |
| Fire Protection | | | | X |
| Police Protection | | | | X |
| Schools, parks, other public facilities | | | | X |
| The project is compatible with the City's land designation and impacts on public services were evaluated within the General Plan (City of Victorville 2008). Construction would be required to meet all current fire codes. This facility is not expected to increase population levels that would impact or cause a need for new facilities. Additionally, as noted in the General Plan, Policy 3.1.1, Implementation Measure 3.1.1.1, the City collects and applies a development impact fee to pay for infrastructure improvements. | | | | |

| 16. Recreation | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | 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? | | | | X |
| This is a relatively small business that would not be expected to have a significant impact on parks or other recreational facility. | | | | |
| 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? | | | | X |
| No recreational facilities nor need for recreational facilities will occur due to development of this project site. | | | | |

| 17. Transportation Would the project: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|---------------------------------------|--|------------------------------|------------------|
| a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | | X |
| b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? | | | | X |
| The City Traffic Engineer (Victorville) determined this project would not require a traffic study provided no parking signs were posted along the east side of Enterprise Way and an adjacent curve was clear of any sight obstructions (Wagdy 2021). These were listed as mitigations in Appendix E. | | | | |
| 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 |
| Major roads already border the project site, no redesign of these roads is planned and no incompatible vehicle types will be used. | | | | |
| d) Result in inadequate emergency access? | | | | X |
| Roads bordering the project site are sufficient to provide emergency access for this planned use. The project is within an already evaluated land designation for heavy industrial use which has considered emergency access. | | | | |

| 18. Tribal Cultural Resources: 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: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|---|---------------------------------------|--|------------------------------|------------------|
| 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) | | | | X |
| There are no resources present on this site. The site was previously developed. Request for comment was made to appropriate Tribes on 9 March 2022 and ran through 7 April 2022. No comments were received. | | | | |
| b) A resource determined by the lead agency, in its discretion and is 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 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe. | | | | X |
| There are no resources present on this site. The site was previously developed. Request for comment was made to appropriate Tribes on 9 March 2022 and ran through 7 April 2022. No comments were received. However, after the close of the required tribal noticing period, the City received comments from the San Manuel Band of Mission Indians that have been included as Cultural and Tribal Mitigation Measures CUL-1 through CUL-3 and TCR-1 and TCR-2 accordingly. | | | | |

| 19. Utilities and Service Systems | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|--------------------------------|---------------------------------------|-----------------------|-----------|
| 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? | | | | X |
| The project will connect to existing utilities and not require any new or expanded facilities or infrastructure to operate. | | | | |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | | X |
| The City of Victorville 2020 Urban Water Management Plan indicates sufficient water supply exists to meet the needs of this project (City of Victorville 2020). Given this heavy industrial area was within the General Plan normal conventional water usage would be expected during the original planning decisions for the City (City of Victorville 2008). | | | | |
| 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? | | | | X |
| During initial review of the project it is subject to review by the City Engineer to determine adequate sewer capacity. This project is conventional use, has a small staff, and relatively small operation. The wastewater treatment facility has adequate capacity to service this project. | | | | |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals? | | | | X |
| Based on CalRecycle the estimated closure date of the Victorville Sanitary Landfill is 2047. Sufficient landfill space is available for the project. This project is not anticipated to impact attainment of solid waste reduction goals. Recycling protocols are part of normal operating functions. | | | | |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | | X |
| This new development would have to implement recycling programs with a 50% diversion of solid waste based on Assembly Bill 939 and the County Integrated Waste Management Plan. The project will comply with all federal, state, local management and reduction statutes/regulations for solid waste. | | | | |

| 20. Mandatory Findings of Significances | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant | No Impact |
|--|--------------------------------|---------------------------------------|-----------------------|-----------|
| a) Does the project have the potential to 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, 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? | | | | X |
| No, there are no valuable habitats, plants, or wildlife within this project site and no examples of California history or prehistory. This site was previously developed into a parking lot. It was completely graded and recontoured. No native or natural features exist within the site. | | | | |
| 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)? | | | | X |
| No cumulatively considerable impacts are expected from this project. The project has a small footprint, is within an already zoned heavy industrial area which had been planned and evaluated within the General Plan (City of Victorville 2008). | | | | |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | | | X |
| As noted in the individual elements of this checklist there are no significant impacts any of the categories. There is nothing unusual or large about this project. This is a conventional straightforward project that will not cause substantial adverse effects on human beings directly or indirectly. | | | | |

Literature Cited

- American Geosciences Institute 2022. Earthquake zones of required investigation for victorville, california (map). <https://maps.conservation.ca.gov/cgs/EQZApp/app/> Accessed 30 January 2022.
- Bruce Love Consulting. 2022. Cultural resources report for victorville warehouse project, apn 3090-431-07, se corner of ottawa street and enterprise way, victorville, ca and addendum. Bruce Love, 29709 104th Street East, Littlerock, California 93543. 21pp.
- California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. Calif. Dept. of Fish and Wildlife, Wildlife Branch, Sacramento, CA. 36pp.
- Caltrans 2022. Scenic highway systems list. [Scenic Highways | Caltrans](#) . 1pp.
- City of Victorville. 2008. General plan 2030. [General Plan | Victorville, CA \(victorvilleca.gov\)](#) 246pp.
- City of Victorville. 2020. 2020 urban water management plan. <https://www.victorvilleca.gov/home/showpublisheddocument/6593/637583035592600000> 441pp.
- Department of Conservation. 2022. California important farmland finder. [DLRP Important Farmland Finder \(ca.gov\)](#)
- Duke Engineering 2022. Hydrology study. Duke Engineering, 44732 Yucca Avenue, Lancaster, California, 93534. 15 pp.
- EnviroStor. 2022. EnviroStor map, victorville, california. www.envirostor.dtsc.ca.gov/pbulic/map/?global_id=36650008 Accessed 31 January 2022
- Hagan, Mark. 2022. Biological resource assessment of apn 3090-431-07, victorville, california. Mark Hagan, 44715 17th Street East, Lancaster, California. 12pp.
- M.S. Hatch Consulting, LLC. 2021. Air Quality Study – warehouse & office facility apn 3090-431-07 – Ottawa street and enterprise way, Victorville, ca. Duke Engineering, 44732 Yucca Avenue, Lancaster, California, 93534. 9 pp
- Wagdy, Anwar. 2021. Traffic study for apn 3090-431-07, dec 20, 2021 (email). Mark Hagan, 44715 17th Street East, Lancaster, California. 1pp.



Date: November 12, 2021
To: Ms. Jenni Duke, Duke Engineering
From: M. S. Hatch Consulting, LLC
Subject: **Air Quality Study – Warehouse & Office Facility APN 3090-431-07 – Ottawa Street and Enterprise Way, Victorville, CA**

M. S. Hatch Consulting, LLC (MSHC) appreciates the opportunity to prepare the air quality study for the proposed construction and operation of a warehouse and office facility for Duke Engineering (Duke). The project consists of a warehouse, an office, and a parking lot on 7.49 acres in the City of Victorville. This air quality study includes the estimated criteria pollutant and greenhouse gas emissions from the construction and operation of the proposed project.

Executive Summary

Table 1 and Table 2 compare the estimated annual and daily emissions summaries from the construction and operation of the proposed warehouse and office facility to the significant emission thresholds described in the Mojave Desert Air Quality Management District (MDAQMD) California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, dated February 2020, included in Attachment A. The estimated emissions of criteria pollutants and greenhouse gases for each year of construction and the total operational emissions **are well below the applicable thresholds**. Greenhouse gas emissions are presented in units of carbon dioxide equivalent (CO₂e). The proposed project is not considered one of the project types that the MDAQMD CEQA Guidelines require to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations.¹ As such, hazardous air pollutants (HAP) emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

Table 1. Annual Emissions Summary and Significance Thresholds

| Emissions Source | Total Emissions (tons per year) | | | | | | |
|--|---------------------------------|-----------------|------------|-----------------|------------------|-------------------|-------------------|
| | ROG | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} | CO ₂ e |
| Year 1 Construction Emissions (2022) | 0.08 | 0.69 | 0.62 | < 0.01 | 0.13 | 0.07 | 120 |
| Year 2 Construction Emissions (2023) | 0.33 | 1.41 | 1.77 | < 0.01 | 0.18 | 0.09 | 356 |
| Total Operational Emissions | 0.29 | 0.11 | 0.65 | < 0.01 | 0.13 | 0.04 | 243 |
| Significant Emissions Threshold | 25 | 25 | 100 | 25 | 15 | 12 | 100,000 |

¹ Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using significance threshold criteria number 4 (refer to the significance threshold discussion): any industrial project within 1000 feet; a distribution center (40 or more trucks per day) within 1000 feet; a major transportation project (50,000 or more vehicles per day) within 1000 feet; a dry cleaner using perchloroethylene within 500 feet; or a gasoline dispensing facility within 300 feet.

Table 2. Daily Emissions Summary and Significance Thresholds

| Emissions Source | Total Emissions (pounds per day) | | | | | | |
|--|----------------------------------|-----------------|------------|-----------------|------------------|-------------------|------------------|
| | ROG | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} | CO _{2e} |
| Year 1 Construction Emissions (2022) | 3.24 | 33.12 | 21.58 | 0.05 | 9.43 | 5.46 | 4,834 |
| Year 2 Construction Emissions (2023) | 15.53 | 16.49 | 21.03 | 0.05 | 2.21 | 1.08 | 4,764 |
| Total Operational Emissions | 1.75 | 0.65 | 4.35 | 0.01 | 0.84 | 0.23 | 938 |
| Significant Emissions Threshold | 137 | 137 | 548 | 137 | 82 | 65 | 548,000 |

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Project Description

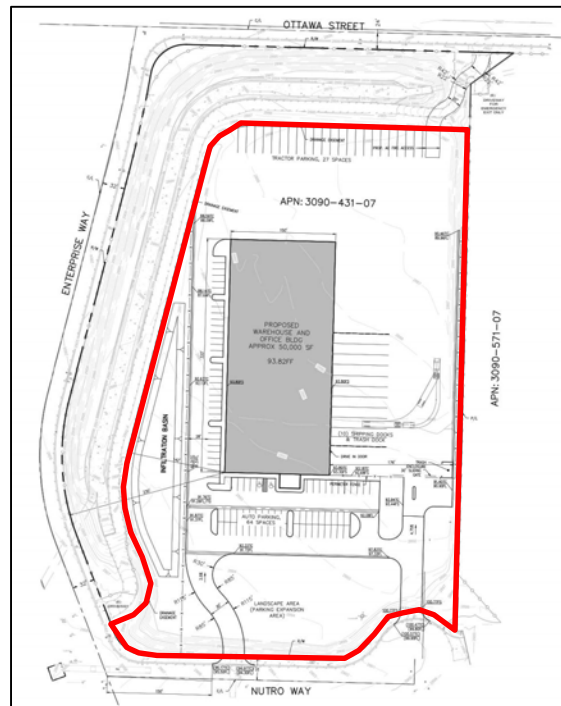
The proposed project includes the construction of a warehouse, an office, and a parking lot on 7.49 acres. The project site is currently a vacant lot² located southeast of the intersection of Ottawa Street and Enterprise Way in Victorville, CA. The site location is included in Figure 1 and the proposed site plan is included in Figure 2.

Figure 1. Regional Vicinity



² Located on assessor parcel number (APN) 3090-431-07.

Figure 2. Site Plan – Proposed Warehouse and Office Facility – APN 3090-431-07, Victorville, CA



Sources of Emissions

The emissions associated with the proposed project consist of construction and operational emissions from the warehouse and office facility. Construction emissions are temporary and include emissions of criteria pollutants and greenhouse gases from construction activities during site preparation, grading, building construction, paving, and the application of architectural coatings. Operational emissions consist of area sources (e.g., re-applying architectural coatings, consumer products, and landscaping equipment), energy use (i.e., electricity and natural gas), mobile sources (e.g., commuting), off-road equipment, solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

Emissions Estimates

Tables 3 and 4 present the annual and daily emissions summaries from the construction and operation of the proposed project, respectively. Emissions were estimated using CalEEMod Version 2020.4.0. The detailed emissions model outputs are included in Attachment B.

This project is not considered one of the project types that the MDAQMD CEQA Guidelines require to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations. As such, HAP emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

Table 3. Annual Construction and Operational Emissions Summary

| Emissions Source | Total Emissions (tons per year) | | | | | | |
|--|---------------------------------|-----------------|-------------|------------------|------------------|-------------------|------------------|
| | ROG | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} | CO _{2e} |
| Construction Emissions | | | | | | | |
| Year 1 Construction Emissions (2022) | 0.08 | 0.69 | 0.62 | < 0.01 | 0.13 | 0.07 | 120 |
| Year 2 Construction Emissions (2023) | 0.33 | 1.41 | 1.77 | < 0.01 | 0.18 | 0.09 | 356 |
| Operational Emissions | | | | | | | |
| Area Sources | 0.22 | 0.00 | < 0.01 | 0.00 | 0.00 | 0.00 | < 1 |
| Energy | < 0.01 | 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 47 |
| Mobile | 0.07 | 0.11 | 0.65 | < 0.01 | 0.13 | 0.04 | 124 |
| Offroad (Electric Equipment) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Waste | N/A | N/A | N/A | N/A | 0.00 | 0.00 | 24 |
| Water | N/A | N/A | N/A | N/A | 0.00 | 0.00 | 48 |
| Total Operational Emissions | 0.29 | 0.11 | 0.65 | < 0.01 | 0.13 | 0.04 | 243 |
| Significant Emissions Threshold | 25 | 25 | 100 | 25 | 15 | 12 | 100,000 |

Table 4. Daily Construction and Operational Emissions Summary

| Emissions Source | Total Emissions (pounds per day) | | | | | | |
|--|----------------------------------|-----------------|-------------|-----------------|------------------|-------------------|------------------|
| | ROG | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} | CO _{2e} |
| Construction Emissions | | | | | | | |
| Year 1 Construction Emissions (2022) | 3.24 | 33.12 | 21.58 | 0.05 | 9.43 | 5.46 | 4,834 |
| Year 2 Construction Emissions (2023) | 15.53 | 16.49 | 21.03 | 0.05 | 2.21 | 1.08 | 4,764 |
| Operational Emissions | | | | | | | |
| Area Sources | 1.22 | < 0.01 | 0.01 | 0.00 | < 0.01 | < 0.01 | < 1 |
| Energy | < 0.01 | 0.03 | 0.03 | < 0.01 | < 0.01 | < 0.01 | 36 |
| Mobile | 0.53 | 0.62 | 4.31 | 0.01 | 0.84 | 0.23 | 902 |
| Offroad (Electric Equipment) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Waste | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Operational Emissions | 1.75 | 0.65 | 4.35 | 0.01 | 0.84 | 0.23 | 938 |
| Significant Emissions Threshold | 137 | 137 | 548 | 137 | 82 | 65 | 548,000 |

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Emissions Calculation Methodology

Construction and operational emissions were based on four CalEEMod land use types: *Unrefrigerated Warehouse – No Rail*, *General Office Building*, *Parking Lot*, and *City Park*. A discussion on the land use types that were used for the emissions modeling is included below.

CalEEMod Land Use Type: Unrefrigerated Warehouse – No Rail

The *Unrefrigerated Warehouse- No Rail* land use type was used to model the emissions associated with the proposed facility's warehouse. The building square footage (42,300 square feet) was provided by Duke.³ The warehouse acreage (0.97 acres) was calculated from the building square footage.

CalEEMod Land Use Type: General Office Building

The *General Office Building* land use type was used to model the emissions associated with the proposed facility's office space. The office space square footage (7,700 square feet) was provided by Duke and the acreage (0.18 acres) was calculated from the square footage.

CalEEMod Land Use Type: Parking Lot

The *Parking Lot* land use type was used to model the emissions associated with the 97 parking spaces for the proposed facility. The parking lot acreage (4.12 acres) was provided by Duke.

CalEEMod Land Use Type: City Park

The *City Park* land use type was used to model the emissions associated with the proposed facility's open space (e.g., natural detention basins, landscaped area, etc.). The acreage (2.23 acres) was provided by Duke.

Construction Emissions

Construction emissions were calculated using CalEEMod defaults and input provided by Duke. The construction equipment and the anticipated construction schedule was reviewed and verified by Duke.

Table 5 provides the anticipated construction schedule. Duke provided the proposed start date (10/3/2022) for the project⁴ and indicated that work would be conducted five days per week. Apart from the *Building Construction* phase, all phase durations are based on CalEEMod default values. The *Building Construction* phase was shortened to meet the estimated construction timeline expected by Duke.⁵

Table 6 provides the anticipated number of equipment that will be used during each construction phase, the hours per day the equipment will be operated, and the horsepower of the equipment. The values in Table 6 are based on CalEEMod default values.

Based on input from Duke, this project will not require any material import or export. For fugitive dust emissions, CalEEMod defaults do not include any control of fugitive dust from construction sites.

³ Duke provided the total square footage of the warehouse via phone call on 11/8/21.

⁴ The construction start date (10/3/2022) was provided by Duke via email on 11/8/21.

⁵ Duke provided an initial timeline of one year for the project's construction.

MDAQMD Rule 403 requires that “any person shall not cause or allow the emissions of Fugitive Dust from any transport, handling, construction or storage activity so that the Visible Fugitive Dust remains visible in the atmosphere beyond the property line of the emission source”; to meet this requirement, it is assumed that the construction site will be watered three times per day. Although the addition of watering for dust control is listed as a mitigation measure in CalEEMod, within the MDAQMD this is a requirement, and is therefore included.

For architectural coating operations, VOC emissions were calculated based on the assumption that the coatings would be compliant with the VOC content limits of MDAQMD Rule 1113.⁶

Table 5. Construction Schedule

| Construction Phase | Start Date | End Date | Days/week | Workdays |
|-----------------------|------------|------------|-----------|----------|
| Demolition | N/A | N/A | N/A | N/A |
| Site Preparation | 10/3/2022 | 10/14/2022 | 5 | 10 |
| Grading | 10/15/2022 | 11/11/2022 | 5 | 20 |
| Building Construction | 11/12/2022 | 8/7/2023 | 5 | 191 |
| Paving | 8/8/2023 | 9/4/2023 | 5 | 20 |
| Architectural Coating | 9/5/2023 | 10/2/2023 | 5 | 20 |

Table 6. Construction Equipment

| Construction Phase | Equipment | Number of Equipment | Hours per day | Horsepower |
|-----------------------|---------------------------|---------------------|---------------|------------|
| Site Preparation | Rubber Tired Dozers | 3 | 8 | 247 |
| | Tractors/Loaders/Backhoes | 4 | 8 | 97 |
| Grading | Excavators | 1 | 8 | 158 |
| | Graders | 1 | 8 | 187 |
| | Rubber Tired Dozers | 1 | 8 | 247 |
| | Tractors/Loaders/Backhoes | 3 | 8 | 97 |
| Building Construction | Cranes | 1 | 7 | 231 |
| | Forklifts | 3 | 8 | 89 |
| | Generator Sets | 1 | 8 | 84 |
| | Tractors/Loaders/Backhoes | 3 | 7 | 97 |
| | Welders | 1 | 8 | 46 |
| Paving | Pavers | 2 | 8 | 130 |
| | Paving Equipment | 2 | 8 | 132 |
| | Rollers | 2 | 8 | 80 |
| Architectural Coating | Air Compressors | 1 | 6 | 78 |

⁶ For building coatings, assumed to be 90% flat paints (50 g/L) and 10% non-flat paints (100 g/L). For the parking lot coatings, assumed to be compliant with the Traffic Marking Coating category (100 g/L). VOC limits based on MDAQMD Rule 1113. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L – for a conservative estimate (to account for the sell-through period) assumed that non-flat coatings will still have a VOC of 100 g/L.

Operational Emissions

Operational emissions consist of area sources (e.g., re-applying architectural coatings, consumer products, and landscaping equipment), energy use (i.e., electricity and natural gas), mobile sources (e.g., commuting), off-road equipment, solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

For architectural coating operations (i.e., re-applying coatings), VOC emissions were calculated based on the assumption that the coatings would be compliant with the VOC content limits of MDAQMD Rule 1113.⁷

For operational off-road equipment, Duke indicated that an electric air compressor, an electric welder, and an electric forklift are expected to be used at the facility. The emissions from the equipment were based on CalEEMod default factors.

For mobile sources, it was assumed that there would not be any external vehicle trips to the project's open space, modeled under the *City Park* land use type. All other operational emissions sources were calculated using CalEEMod default factors.

Findings

The estimated emissions of criteria pollutants and greenhouse gases for each year of construction and the total operational emissions **are well below the applicable MDAQMD Significant Emissions Thresholds**; therefore, this project does not have a significant air quality impact on the environment. In addition, this project is not expected to expose sensitive receptors to substantial pollutant concentrations. Since the construction and operational emissions are below the significance thresholds, emissions mitigation measures are not required.

⁷For building coatings, assumed to be 90% flat paints (50 g/L) and 10% non-flat paints (100 g/L). For the parking lot coatings, assumed to be compliant with the Traffic Marking Coating category (100 g/L). VOC limits based on MDAQMD Rule 1113. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L – for a conservative estimate (to account for the sell-through period) assumed that non-flat coatings will still have a VOC of 100 g/L.

**ATTACHMENT A – Mojave Desert AQMD California Environmental Quality Act (CEQA)
and Federal Conformity Guidelines**



MDAQMD

**California Environmental Quality Act
(CEQA)**

And

Federal Conformity

Guidelines

February 2020

Planning and Rule Making Section
Air Monitoring Section

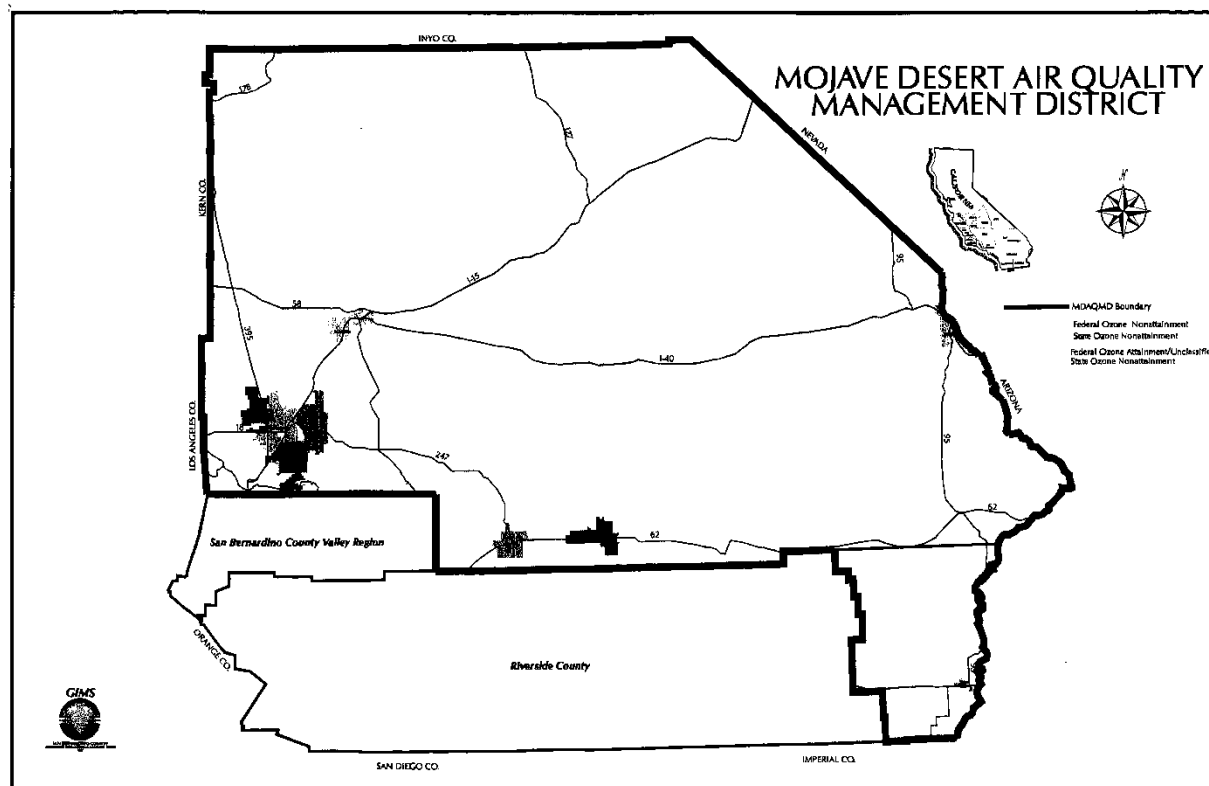
Table of Contents

| | |
|--|----|
| Background | 2 |
| Recommended Environmental Setting Elements..... | 5 |
| Recommended Impacts Discussion Elements | 7 |
| Recommended Substantiation Discussion Elements | 9 |
| Significance Thresholds..... | 9 |
| District Contacts..... | 10 |
| Appendix A – Basic Definitions of Major Air Pollutants | 11 |

Background

Under CEQA, the Mojave Desert Air Quality Management District (District) is an expert commenting agency on air quality and related matters within its jurisdiction or impacting on its jurisdiction. Under the Federal Clean Air Act the District has adopted federal attainment plans for ozone and PM₁₀. The District has dedicated assets to reviewing projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan. These Guidelines are intended to assist persons preparing environmental analysis or review documents for any project within the jurisdiction of the District by providing background information and guidance on the preferred analysis approach.

Map 1 - District Boundaries



Jurisdiction

The District has jurisdiction over the desert portion of San Bernardino County and the far eastern end of Riverside County (please refer to Map 1). This region includes the incorporated communities of Adelanto, Apple Valley, Barstow, Blythe, Hesperia, Needles, Twentynine Palms, Victorville, and Yucca Valley. This region also includes the National Training Center at Fort Irwin, the Marine Corps Air Ground Combat Center, the Marine Corps Logistics Base, the eastern portion of Edwards Air Force Base, and a portion of the China Lake Naval Air Weapons Station.

Non-attainment Designations and Classification Status

The United States Environmental Protection Agency and the California Air Resources Board have designated portions of the District non-attainment for a variety of pollutants, and some of those designations have an associated classification. Please refer to Table 1 for a chart of these designations and classifications.

Table 1 - Designations and Classifications

| Ambient Air Quality Standard | MDAQMD |
|--|---|
| One-hour Ozone (Federal) – standard has been revoked | Proposed attainment in 2014; historical classification Severe-17* |
| Eight-hour Ozone (Federal 84 ppb (1997)) | Subpart 2 Nonattainment; classified Severe-15** |
| Eight-hour Ozone (Federal 75 ppb (2008)) | Nonattainment, classified Severe-15** |
| Eight-hour Ozone (Federal 70 ppb (2015)) | Expected nonattainment; classified Severe-15** |
| Ozone (State) | Nonattainment; classified Moderate |
| PM ₁₀ 24-hour (Federal) | Nonattainment; classified Moderate (portion of MDAQMD in Riverside County is unclassifiable/attainment) |
| PM _{2.5} Annual (Federal) | Unclassified/attainment |
| PM _{2.5} 24-hour (Federal) | Unclassified/attainment |
| PM _{2.5} (State) | Nonattainment** |
| PM ₁₀ (State) | Nonattainment |
| Carbon Monoxide (State and Federal) | Unclassifiable/Attainment |
| Nitrogen Dioxide (State and Federal) | Unclassifiable/Attainment |
| Sulfur Dioxide (State and Federal) | Attainment/unclassified |
| Lead (State and Federal) | Unclassifiable/Attainment |
| Particulate Sulfate (State) | Attainment |
| Hydrogen Sulfide (State) | Unclassified (Searles Valley Planning Area is nonattainment) |
| Visibility Reducing Particles (State) | Unclassified |

*Note: Portion of MDAQMD outside of Southeast Desert Modified AQMA is unclassified/attainment

**Note: Portion of MDAQMD outside of Western Mojave Desert Ozone Nonattainment Area is unclassifiable/attainment

Attainment Plans

The District has adopted a variety of attainment plans for a variety of nonattainment pollutants. Please refer to Table 2 for a chart of these attainment plans.

Table 2 – MDAQMD Attainment Plans

| Name of Plan | Date of Adoption | Standard(s) Targeted | Applicable Area | Pollutant(s) Targeted | Attainment Date* |
|--|-------------------------|---|---|------------------------------|--------------------------|
| MDAQMD Federal 75 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area) | 27-Feb-17 | Federal eight hour ozone (75 ppb) | Western Mojave Desert Nonattainment Area (MDAQMD portion) | NO _x and VOC | 2027 |
| Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Nonattainment Area) | 9-Jun-08 | Federal eight hour ozone (84 ppb) | Western Mojave Desert Nonattainment Area (MDAQMD portion) | NO _x and VOC | 2019 (revised from 2021) |
| 2004 Ozone Attainment Plan (State and Federal) | 26-Apr-04 | Federal one hour ozone | Entire District | NO _x and VOC | 2007 |
| Attainment Demonstration, Maintenance Plan, and Redesignation Request for the Trona Portion of the Searles Valley PM ₁₀ Non-attainment Area | 25-Mar-96 | Federal daily and annual PM ₁₀ | Searles Valley Planning Area | PM ₁₀ | N/A |
| Triennial Revision to the 1991 Air Quality Attainment Plan | 22-Jan-96 | State one hour ozone | Entire District | NO _x and VOC | 2005 |
| Mojave Desert Planning Area Federal Particulate Matter Attainment Plan | 31-Jul-95 | Federal daily and annual PM ₁₀ | Mojave Desert Planning Area | PM ₁₀ | 2000 |
| Searles Valley PM ₁₀ Plan | 28-Jun-95 | Federal daily and annual PM ₁₀ | Searles Valley Planning Area | PM ₁₀ | 1994 |
| Post 1996 Attainment Demonstration and Reasonable Further Progress Plan | 26-Oct-94 | Federal one hour ozone | Southeast Desert Modified AQMA | NO _x and VOC | 2007 |
| Reasonable Further Progress Rate-Of-Progress Plan | 26-Oct-94 | Federal one hour ozone | Southeast Desert Modified AQMA | NO _x and VOC | 2007 |

| Name of Plan | Date of Adoption | Standard(s) Targeted | Applicable Area | Pollutant(s) Targeted | Attainment Date* |
|----------------------------------|------------------|----------------------|-------------------------------|-------------------------|------------------|
| 1991 Air Quality Attainment Plan | 26-Aug-91 | State one hour ozone | San Bernardino County portion | NO _x and VOC | 1994 |

*Note: A historical attainment date given in an attainment plan does not necessarily mean that the affected area has been re-designated to attainment; please refer to Table 1.

Rules and Regulations

The District maintains a set of Rules and Regulations to improve air quality and maintain good air quality. Please visit www.mdaqmd.ca.gov.

Recommended Environmental Setting Elements

Air Quality Data

The District gathers a variety of air quality data from a variety of monitoring sites (from the USMC AGCC site on contract). Table 3 details the data available from the District for each monitoring site. Each site with current PM₁₀ monitoring is operating a Beta Attenuation Monitor (or BAM) with realtime hourly data, and BAMs replaced TEOMs and Hi-Vols beginning in 2011.

Table 3 - Available Air Quality Data

| Site | Address | Pollutants | Dates |
|------------------|-------------------------|--|--------------------|
| Barstow | 225 E. Mountain View | O ₃ , NO _x , CO, PM ₁₀ | 5/1/80 to present |
| Hesperia | 17288 Olive | O ₃ , PM ₁₀ | 1/2/86 to present |
| Lucerne Valley | 8560 Aliento Road | PM ₁₀ | 6/1/89 to present |
| Phelan | Beekley and Phelan Road | O ₃ | 1/1/88 to present |
| Trona | Market Street | O ₃ , NO _x , SO ₂ , H ₂ S, PM ₁₀ | 8/1//80 to 2/13/93 |
| Trona | Athol Street | O ₃ , NO _x , SO ₂ , H ₂ S, PM ₁₀ | 1/25/93 to 3/1997 |
| Trona | Telescope | O ₃ , NO _x , SO ₂ , H ₂ S, PM ₁₀ | 4/1997 to present |
| Twentynine Palms | 6136 Adobe Road | O ₃ , NO _x , SO ₂ , CO, PM ₁₀ | 8/1/80 to 12/2005 |
| Victorville | County Fairgrounds | O ₃ , NO _x , SO ₂ , CO, TSP | 8/1980 to 12/1985 |
| Victorville | Eighth Street | O ₃ , NO _x , SO ₂ , CO, TSP | 1/1985 to 12/1989 |
| Victorville | County Fairgrounds | O ₃ , NO _x , SO ₂ , CO, PM ₁₀ | 1/1990 to 4/1991 |
| Victorville | 14029 Amargosa Rd | O ₃ , NO _x , SO ₂ , CO, PM ₁₀ | 4/1991 to 12/1999 |
| Victorville | 14306 Park Avenue | O ₃ , NO _x , SO ₂ , CO, PM _{2.5} (dual co-located), PM ₁₀ | 1/2000 to present |

Meteorological Data

A variety of meteorological data is available from the District for several monitoring sites

throughout the District. Table 4 contains a list of monitoring sites and the date range the following data is available for: wind speed (hourly average and peak), wind direction, temperature, barometric pressure, and relative humidity.

Table 4 - Available Meteorological Data

| Site | Address | Dates |
|------------------|-------------------------|-------------------|
| Barstow | 225 E. Mountain View | 1/1988 to present |
| Hesperia | 17288 Olive Street | 1/1988 to present |
| Lucerne Valley | 8560 Aliento Road | 3/2020 to present |
| Phelan | Beekley and Phelan Road | 1/88 to present |
| Trona | Athol Street | 2/1993 to 3/1997 |
| Trona | Telescope | 4/1997 to present |
| Twentynine Palms | 6136 Adobe Road | 1/1988 to 12/2005 |
| Victorville | 14029 Amargosa Road | 4/91 to 12/1999 |
| Victorville | 14306 Park Avenue | 1/2000 to present |

Topography and Climate Discussion

The District covers the majority of the Mojave Desert Air Basin (MDAB). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevadas in the north by the Tehachapi Pass (3,800 ft elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 ft). The Mojave Desert is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriels by the Cajon Pass (4,200 ft). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley).

The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley) whose primary channel is the San Gorgonio Pass (2,300 ft) between the San Bernardino and San Jacinto Mountains.

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. As can be seen from Table 5, the MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert

climate (BWh), with portions classified as dry-very hot desert (BWhh), to indicate at least three months have maximum average temperatures over 100.4° F.

Table 5 - MDAB Average Precipitation and Evaporation History

| Location | Precipitation (inches) | Precipitation (days) | Evaporation (inches) | Length of Observations (years) |
|-------------------|-----------------------------------|---------------------------------|---------------------------------|---|
| Trona | 3.82 | 16 | | 48 |
| Randsburg | 5.89 | 23 | | 48 |
| China Lake | 4.42 | | | 34 |
| Goldstone Echo | 5.42 | 20 | | 23 |
| Daggett Airport | 3.87 | 23 | | 48 |
| Barstow Fire | 4.60 | 23 | | 16 |
| Barstow CIMIS | 5.10 | 27 | 70 | 22 |
| Granite Mountain | 5.76 | 22 | | 5 |
| Victorville CIMIS | 7.30 | 29 | 63 | 15 |
| Mitchell Caverns | 10.41 | 32 | | 38 |
| Mountain Pass | 7.63 | 28 | | 41 |
| Parker Reservoir | 5.38 | 24 | | 48 |
| Needles Airport | 4.55 | 23 | | 48 |
| Twentynine Palms | 3.95 | 19 | | 48 |
| Blythe Airport | 3.57 | 17 | | 48 |
| Iron Mountain | 3.40 | 19 | | 48 |

Recommended Impacts Discussion Elements

Direct Impacts

Direct impacts are the result of the project itself (from its construction and operation), in the form of project activity and trips generated by the project. For example, in the case of a subdivision project, construction emissions (equipment exhaust, wind erosion, vehicle exhaust), housing use activity (natural gas consumption) and trips to and from the housing (vehicle exhaust, tire wear) represent direct impacts. In the case of a new mine project, construction emissions (equipment exhaust, wind erosion, vehicle exhaust), material handling (drilling, blasting, transfers, crushing, screening, bagging), operational emissions (wind erosion, vehicle travel, vehicle exhaust, tire wear), and employee/customer/delivery travel (vehicle exhaust, tire wear) represent direct impacts.

Indirect Impacts

Indirect impacts are the result of changes that would not occur without the project. In the case of a subdivision project, indirect impacts on the surrounding community can be generated in many ways: nearby construction of roadways (or roadway modifications) and other infrastructure to support the subdivision, construction and operation of new commercial/retail establishments, changes in traffic/circulation patterns that result in increased congestion/delays, etc. In the case of a new mine project, indirect impacts can be generated by nearby construction of infrastructure

to support the mine, housing constructed and/or occupied by mine employees, changes in traffic/circulation patterns that result in increased congestion/delays, etc.

Cumulative Impacts

Cumulative impacts are similar to direct and indirect impacts of the project, which the project contributes to. In the case of a subdivision project, a given project has a cumulative impact with all other subdivision projects, from the standpoint of each type of impact (cumulative construction emissions, residential natural gas consumption, solvent use, transportation emissions, congestion, etc.). Similarly, a new mine project has a cumulative impact with all other mining projects, from the standpoint of each type of impact (cumulative construction emissions, diesel equipment emissions, blasting emissions, fugitive emissions, transportation, congestion, etc.).

Conformity Impacts

A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. An example of a non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area (relative to the applicable land use plan).

Sensitive Receptor Land Uses

Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using significance threshold criteria number 4 (refer to the significance threshold discussion):

- Any industrial project within 1000 feet;
- A distribution center (40 or more trucks per day) within 1000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

Friant Ranch Decision

The MDAQMD does not currently have a methodology that would correlate the expected air quality emissions of project to the likely health consequences of those emissions. However, the MDAQMD does recommend the use of specific tools which are available (such as CalEEMod) for the purposes of project evaluation. Outside of existing tools, the MDAQMD does not currently have methodologies that would provide lead agencies and the public with a consistent, reliable and meaningful analysis to correlate specific health impacts that may result from a

proposed project's air emissions.

Recommended Substantiation Discussion Elements

For projects applying the emissions-based significance thresholds, project emissions quantification is required. In addition the environmental documentation must include support for the quantification methodology used, including emission factors, emission factors source, assumptions, and sample calculations where necessary. For projects using a calculation tool such as CalEEMod or URBEMIS, the support section must specify the inputs and settings used for the evaluation.

Significance Thresholds

Any project is significant if it triggers or exceeds the most appropriate evaluation criteria. The District will clarify upon request which threshold is most appropriate for a given project; in general, the emissions comparison (criteria number 1) is sufficient:

1. Generates total emissions (direct and indirect) in excess of the thresholds given in Table 6;
2. Generates a violation of any ambient air quality standard when added to the local background;
3. Does not conform with the applicable attainment or maintenance plan(s) ¹;
4. Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.*

**Refer to the Sensitive Receptor Land Use discussion above*

A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation. Note that the emission thresholds are given as a daily value and an annual value, so that multi-phased project (such as project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

Table 6 – Significant Emissions Thresholds

| Criteria Pollutant | Annual Threshold (short tons) | Daily Threshold (pounds) |
|--|----------------------------------|-----------------------------|
| Greenhouse Gases (CO ₂ e) | 100,000 | 548,000 |
| Carbon Monoxide (CO) | 100 | 548 |
| Oxides of Nitrogen (NO _x) | 25 | 137 |
| Volatile Organic Compounds (VOC) | 25 | 137 |
| Oxides of Sulfur (SO _x) | 25 | 137 |
| Particulate Matter (PM ₁₀) | 15 | 82 |

¹ A project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold.

| Criteria Pollutant | Annual Threshold (short tons) | Daily Threshold (pounds) |
|---|--|-------------------------------------|
| Particulate Matter (PM _{2.5}) | 12 | 65 |
| Hydrogen Sulfide (H ₂ S) | 10 | 54 |
| Lead (Pb) | 0.6 | 3 |

District Contacts

If an address is not listed, use the general address for the District, to the attention of the listed individual.

| | |
|--|---|
| Mojave Desert Air Quality Management District General | (760) 245-1661 14306 Park Avenue Victorville, CA 92392-2310 |
| Planning and Rules | Tracy Walters (760) 245-1661 x6122 |
| Air Quality and Meteorological Data | Chris Collins (760) 245-1661 x6282 |
| CEQA and Conformity | Alan De Salvio (760) 245-1661 x6726 |
| Permitting | Sheri Haggard (760) 245-1661 x1864 |

Appendix A – Basic Definitions of Major Air Pollutants

Technical and/or legal definitions exist for many of these pollutants, depending on context. The following definitions are for general, introductory purposes only:

Carbon Dioxide (CO₂) – Common product of combustion. Not a criteria pollutant, but considered an important greenhouse gas. Important on a national or global scale.

Carbon Monoxide (CO) – Common product of incomplete combustion. A criteria pollutant with state and federal standards. Not a primary photochemical reaction compound, but involved in photochemical reactions. Dissipates rapidly, and is therefore only important on a local scale near sources.

Criteria Pollutants – Those air pollutants specifically identified for control under the Federal Clean Air Act (currently six: carbon monoxide, nitrogen oxides, lead, sulfur oxides, ozone and particulates).

Lead (Pb) – A heavy metal, present in the environment mainly due to historical use in motor vehicle fuel. Primarily associated with lead smelting operations. A criteria pollutant with state and federal standards. Primarily of concern near sources.

Oxides of Nitrogen (NO_x) – Common product of combustion in the presence of nitrogen. Includes NO₂, which is a criteria pollutant with state and federal standards. Locally and regionally important due to its involvement in the photochemical formation of ozone.

Oxides of Sulfur (SO_x) – Common product of combustion in the presence of sulfur. Associated primarily with diesel and coal burning. Includes SO₂, a criteria pollutant with state and federal standards. Primarily of concern near sources.

Ozone (O₃) – A gas mainly produced by a photochemical reaction between reactive organic gases and oxides of nitrogen in the presence of sunlight (also produced by molecular oxygen in the presence of ultraviolet light or electrical discharge). A strong oxidant that is damaging at ground level but necessary at high altitude (in the stratosphere, where it absorbs dangerous ultraviolet light). Also considered an important greenhouse gas. A criteria pollutant with state and federal standards.

Particulate Matter (TSP or PM₃₀) – Solid or liquid matter suspended in the atmosphere, excluding water. Includes aerosols and droplets that form in the atmosphere. Locally and regionally important.

Reactive/Volatile Organic Compounds/Gases (ROG, VOC, NMOG, NMOC) – A portion of total organic compounds or gases, excludes methane, ethane and acetone (due to low photochemical reactivity). “ROG” is generally used by the California Air Resources Board, “VOC” is generally used by the United States Environmental Protection Agency, but all four terms are interchangeable for most uses. Regionally important due to its involvement in the photochemical reaction that produces ozone.

Respirable Particulate Matter (coarse or PM₁₀, and fine or PM_{2.5}) – That portion of particulate matter that tends to penetrate into the human lung. The subscript refers to aerodynamic diameter. Criteria pollutants with state and federal standards. Locally and regionally important.

Total Organic Compounds/Gases (TOC or TOG) – Compounds containing at least one atom of carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and metallic carbonates. Primarily methane in the atmosphere, a greenhouse gas.

ATTACHMENT B – CalEEMod Emissions Model Output

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA****Mojave Desert AQMD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------------|-------|----------|-------------|--------------------|------------|
| General Office Building | 7.70 | 1000sqft | 0.18 | 7,700.00 | 0 |
| Unrefrigerated Warehouse-No Rail | 42.30 | 1000sqft | 0.97 | 42,300.00 | 0 |
| Parking Lot | 4.12 | Acre | 4.12 | 179,467.20 | 0 |
| City Park | 2.23 | Acre | 2.23 | 97,138.80 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|-------------------------|----------------------------|-------------------------|-------|---------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.6 | Precipitation Freq (Days) | 30 |
| Climate Zone | 10 | | | Operational Year | 2023 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MWhr) | 390.98 | CH4 Intensity (lb/MWhr) | 0.033 | N2O Intensity (lb/MWhr) | 0.004 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Information provided by client.

Construction Phase - Schedule adjusted based on client input.

Architectural Coating - VOC limits from MDAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L - for conservative estimate (to account for the sell-through period) it is assumed that non-flat coatings will still have a VOC of 100 g/L.

Vehicle Trips - All areas modeled as City Park are within the development and no vehicle trips are expected.

Area Coating - VOC limits from MDAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L - for conservative estimate (to account for the sell-through period) it is assumed that non-flat coatings will still have a VOC of 100 g/L.

Construction Off-road Equipment Mitigation - Assumes that construction site will be watered 3 times per day to be in compliance with MDAQMD Rule 403.

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Area Mitigation - VOC limits from MDAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L - for conservative estimate (to account for the sell-through period) it is assumed that non-flat coatings will still have a VOC of 100 g/L.

Operational Off-Road Equipment - Type of equipment, number of equipment, and fuel type was provided by client.

| Table Name | Column Name | Default Value | New Value |
|--------------------------------|---------------------------------|---------------|------------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior | 250.00 | 55.00 |
| tblArchitecturalCoating | EF_Nonresidential_Interior | 250.00 | 55.00 |
| tblArchitecturalCoating | EF_Parking | 250.00 | 100.00 |
| tblArchitecturalCoating | EF_Residential_Exterior | 250.00 | 55.00 |
| tblArchitecturalCoating | EF_Residential_Interior | 250.00 | 55.00 |
| tblAreaCoating | Area_EF_Nonresidential_Exterior | 250 | 55 |
| tblAreaCoating | Area_EF_Nonresidential_Interior | 250 | 55 |
| tblAreaCoating | Area_EF_Parking | 250 | 100 |
| tblAreaCoating | Area_EF_Residential_Exterior | 250 | 55 |
| tblAreaCoating | Area_EF_Residential_Interior | 250 | 55 |
| tblConstructionPhase | NumDays | 230.00 | 191.00 |
| tblConstructionPhase | PhaseEndDate | 11/24/2023 | 10/2/2023 |
| tblConstructionPhase | PhaseEndDate | 9/29/2023 | 8/7/2023 |
| tblConstructionPhase | PhaseEndDate | 10/27/2023 | 9/4/2023 |
| tblConstructionPhase | PhaseStartDate | 10/28/2023 | 9/5/2023 |
| tblConstructionPhase | PhaseStartDate | 9/30/2023 | 8/8/2023 |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | Electrical |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | Electrical |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | Electrical |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 1.00 |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 1.00 |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 1.00 |
| tblVehicleTrips | CC_TL | 7.30 | 0.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 0.00 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | | | |
|-----------------|---------|-------|------|
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PR_TP | 66.00 | 0.00 |
| tblVehicleTrips | ST_TR | 1.96 | 0.00 |
| tblVehicleTrips | SU_TR | 2.19 | 0.00 |
| tblVehicleTrips | WD_TR | 0.78 | 0.00 |

2.0 Emissions Summary

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 | | | | | |
| 2022 | 0.0756 | 0.6944 | 0.6248 | 1.3300e-003 | 0.1966 | 0.0323 | 0.2288 | 0.0922 | 0.0300 | 0.1222 | 0.0000 | 118.4773 | 118.4773 | 0.0242 | 3.0500e-003 | 119.9921 |
| 2023 | 0.3327 | 1.4119 | 1.7729 | 3.9400e-003 | 0.1171 | 0.0623 | 0.1794 | 0.0318 | 0.0586 | 0.0903 | 0.0000 | 351.2188 | 351.2188 | 0.0522 | 0.0129 | 356.3706 |
| Maximum | 0.3327 | 1.4119 | 1.7729 | 3.9400e-003 | 0.1966 | 0.0623 | 0.2288 | 0.0922 | 0.0586 | 0.1222 | 0.0000 | 351.2188 | 351.2188 | 0.0522 | 0.0129 | 356.3706 |

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 | | | | | |
| 2022 | 0.0756 | 0.6944 | 0.6248 | 1.3300e-003 | 0.0934 | 0.0323 | 0.1257 | 0.0405 | 0.0300 | 0.0705 | 0.0000 | 118.4772 | 118.4772 | 0.0242 | 3.0500e-003 | 119.9920 |
| 2023 | 0.3327 | 1.4119 | 1.7729 | 3.9400e-003 | 0.1171 | 0.0623 | 0.1794 | 0.0318 | 0.0586 | 0.0903 | 0.0000 | 351.2186 | 351.2186 | 0.0522 | 0.0129 | 356.3703 |
| Maximum | 0.3327 | 1.4119 | 1.7729 | 3.9400e-003 | 0.1171 | 0.0623 | 0.1794 | 0.0405 | 0.0586 | 0.0903 | 0.0000 | 351.2186 | 351.2186 | 0.0522 | 0.0129 | 356.3703 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | 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 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 32.88 | 0.00 | 25.27 | 41.72 | 0.00 | 24.33 | 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 | 10-3-2022 | 1-2-2023 | 0.7650 | 0.7650 |
| 2 | 1-3-2023 | 4-2-2023 | 0.6014 | 0.6014 |
| 3 | 4-3-2023 | 7-2-2023 | 0.6058 | 0.6058 |
| 4 | 7-3-2023 | 9-30-2023 | 0.5150 | 0.5150 |
| | | Highest | 0.7650 | 0.7650 |

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 | 0.2231 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |
| Energy | 6.0000e-004 | 5.4600e-003 | 4.5900e-003 | 3.0000e-005 | | 4.2000e-004 | 4.2000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 47.0397 | 47.0397 | 3.5800e-003 | 5.3000e-004 | 47.2871 |
| Mobile | 0.0687 | 0.1087 | 0.6478 | 1.3200e-003 | 0.1323 | 1.1900e-003 | 0.1335 | 0.0353 | 1.1100e-003 | 0.0364 | 0.0000 | 121.6717 | 121.6717 | 7.4700e-003 | 6.7500e-003 | 123.8711 |
| Offroad | 0.0000 | 0.0000 | 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 | 9.5629 | 0.0000 | 9.5629 | 0.5652 | 0.0000 | 23.6917 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.5375 | 32.6365 | 36.1741 | 0.3661 | 8.9100e-003 | 47.9824 |
| Total | 0.2923 | 0.1142 | 0.6529 | 1.3500e-003 | 0.1323 | 1.6100e-003 | 0.1339 | 0.0353 | 1.5300e-003 | 0.0369 | 13.1004 | 201.3490 | 214.4494 | 0.9423 | 0.0162 | 242.8333 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 | 0.2231 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |
| Energy | 6.0000e-004 | 5.4600e-003 | 4.5900e-003 | 3.0000e-005 | | 4.2000e-004 | 4.2000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 47.0397 | 47.0397 | 3.5800e-003 | 5.3000e-004 | 47.2871 |
| Mobile | 0.0687 | 0.1087 | 0.6478 | 1.3200e-003 | 0.1323 | 1.1900e-003 | 0.1335 | 0.0353 | 1.1100e-003 | 0.0364 | 0.0000 | 121.6717 | 121.6717 | 7.4700e-003 | 6.7500e-003 | 123.8711 |
| Offroad | 0.0000 | 0.0000 | 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 | 9.5629 | 0.0000 | 9.5629 | 0.5652 | 0.0000 | 23.6917 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.5375 | 32.6365 | 36.1741 | 0.3661 | 8.9100e-003 | 47.9824 |
| Total | 0.2923 | 0.1142 | 0.6529 | 1.3500e-003 | 0.1323 | 1.6100e-003 | 0.1339 | 0.0353 | 1.5300e-003 | 0.0369 | 13.1004 | 201.3490 | 214.4494 | 0.9423 | 0.0162 | 242.8333 |

| | 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 |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 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 | Site Preparation | Site Preparation | 10/3/2022 | 10/14/2022 | 5 | 10 | |
| 2 | Grading | Grading | 10/15/2022 | 11/11/2022 | 5 | 20 | |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | | | | | | |
|---|-----------------------|-----------------------|------------|-----------|---|-----|
| 3 | Building Construction | Building Construction | 11/12/2022 | 8/7/2023 | 5 | 191 |
| 4 | Paving | Paving | 8/8/2023 | 9/4/2023 | 5 | 20 |
| 5 | Architectural Coating | Architectural Coating | 9/5/2023 | 10/2/2023 | 5 | 20 |

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 20****Acres of Paving: 4.12****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,000; Non-Residential Outdoor: 25,000; Striped Parking Area: 10,768 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

Trips and VMT

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| 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 |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 136.00 | 54.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 27.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 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 | | | | | |
| Fugitive Dust | | | | | 0.0983 | 0.0000 | 0.0983 | 0.0505 | 0.0000 | 0.0505 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0159 | 0.1654 | 0.0985 | 1.9000e-004 | | 8.0600e-003 | 8.0600e-003 | | 7.4200e-003 | 7.4200e-003 | 0.0000 | 16.7197 | 16.7197 | 5.4100e-003 | 0.0000 | 16.8549 |
| Total | 0.0159 | 0.1654 | 0.0985 | 1.9000e-004 | 0.0983 | 8.0600e-003 | 0.1064 | 0.0505 | 7.4200e-003 | 0.0579 | 0.0000 | 16.7197 | 16.7197 | 5.4100e-003 | 0.0000 | 16.8549 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 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 | 3.0000e-004 | 2.2000e-004 | 2.3800e-003 | 1.0000e-005 | 7.3000e-004 | 0.0000 | 7.3000e-004 | 1.9000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 0.5770 | 0.5770 | 2.0000e-005 | 2.0000e-005 | 0.5830 |
| Total | 3.0000e-004 | 2.2000e-004 | 2.3800e-003 | 1.0000e-005 | 7.3000e-004 | 0.0000 | 7.3000e-004 | 1.9000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 0.5770 | 0.5770 | 2.0000e-005 | 2.0000e-005 | 0.5830 |

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 | | | | | 0.0383 | 0.0000 | 0.0383 | 0.0197 | 0.0000 | 0.0197 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0159 | 0.1654 | 0.0985 | 1.9000e-004 | | 8.0600e-003 | 8.0600e-003 | | 7.4200e-003 | 7.4200e-003 | 0.0000 | 16.7197 | 16.7197 | 5.4100e-003 | 0.0000 | 16.8549 |
| Total | 0.0159 | 0.1654 | 0.0985 | 1.9000e-004 | 0.0383 | 8.0600e-003 | 0.0464 | 0.0197 | 7.4200e-003 | 0.0271 | 0.0000 | 16.7197 | 16.7197 | 5.4100e-003 | 0.0000 | 16.8549 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 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 | 3.0000e-004 | 2.2000e-004 | 2.3800e-003 | 1.0000e-005 | 7.3000e-004 | 0.0000 | 7.3000e-004 | 1.9000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 0.5770 | 0.5770 | 2.0000e-005 | 2.0000e-005 | 0.5830 |
| Total | 3.0000e-004 | 2.2000e-004 | 2.3800e-003 | 1.0000e-005 | 7.3000e-004 | 0.0000 | 7.3000e-004 | 1.9000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 0.5770 | 0.5770 | 2.0000e-005 | 2.0000e-005 | 0.5830 |

3.3 Grading - 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 | | | | | |
| Fugitive Dust | | | | | 0.0708 | 0.0000 | 0.0708 | 0.0343 | 0.0000 | 0.0343 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0195 | 0.2086 | 0.1527 | 3.0000e-004 | | 9.4100e-003 | 9.4100e-003 | | 8.6600e-003 | 8.6600e-003 | 0.0000 | 26.0548 | 26.0548 | 8.4300e-003 | 0.0000 | 26.2654 |
| Total | 0.0195 | 0.2086 | 0.1527 | 3.0000e-004 | 0.0708 | 9.4100e-003 | 0.0802 | 0.0343 | 8.6600e-003 | 0.0429 | 0.0000 | 26.0548 | 26.0548 | 8.4300e-003 | 0.0000 | 26.2654 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 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 | 3.6000e-004 | 3.9700e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9617 | 0.9617 | 3.0000e-005 | 3.0000e-005 | 0.9717 |
| Total | 5.0000e-004 | 3.6000e-004 | 3.9700e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9617 | 0.9617 | 3.0000e-005 | 3.0000e-005 | 0.9717 |

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 | | | | | 0.0276 | 0.0000 | 0.0276 | 0.0134 | 0.0000 | 0.0134 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0195 | 0.2086 | 0.1527 | 3.0000e-004 | | 9.4100e-003 | 9.4100e-003 | | 8.6600e-003 | 8.6600e-003 | 0.0000 | 26.0547 | 26.0547 | 8.4300e-003 | 0.0000 | 26.2654 |
| Total | 0.0195 | 0.2086 | 0.1527 | 3.0000e-004 | 0.0276 | 9.4100e-003 | 0.0370 | 0.0134 | 8.6600e-003 | 0.0220 | 0.0000 | 26.0547 | 26.0547 | 8.4300e-003 | 0.0000 | 26.2654 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 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 | 3.6000e-004 | 3.9700e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9617 | 0.9617 | 3.0000e-005 | 3.0000e-005 | 0.9717 |
| Total | 5.0000e-004 | 3.6000e-004 | 3.9700e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9617 | 0.9617 | 3.0000e-005 | 3.0000e-005 | 0.9717 |

3.4 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 | 0.0299 | 0.2733 | 0.2864 | 4.7000e-004 | | 0.0142 | 0.0142 | | 0.0133 | 0.0133 | 0.0000 | 40.5519 | 40.5519 | 9.7200e-003 | 0.0000 | 40.7948 |
| Total | 0.0299 | 0.2733 | 0.2864 | 4.7000e-004 | | 0.0142 | 0.0142 | | 0.0133 | 0.0133 | 0.0000 | 40.5519 | 40.5519 | 9.7200e-003 | 0.0000 | 40.7948 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 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 | 1.7300e-003 | 0.0408 | 0.0179 | 1.9000e-004 | 6.3200e-003 | 5.4000e-004 | 6.8600e-003 | 1.8200e-003 | 5.2000e-004 | 2.3400e-003 | 0.0000 | 18.3541 | 18.3541 | 9.0000e-005 | 2.5100e-003 | 19.1054 |
| Worker | 7.8900e-003 | 5.7700e-003 | 0.0630 | 1.7000e-004 | 0.0192 | 1.0000e-004 | 0.0193 | 5.1000e-003 | 9.0000e-005 | 5.1900e-003 | 0.0000 | 15.2582 | 15.2582 | 5.2000e-004 | 4.9000e-004 | 15.4169 |
| Total | 9.6200e-003 | 0.0465 | 0.0809 | 3.6000e-004 | 0.0255 | 6.4000e-004 | 0.0262 | 6.9200e-003 | 6.1000e-004 | 7.5300e-003 | 0.0000 | 33.6123 | 33.6123 | 6.1000e-004 | 3.0000e-003 | 34.5224 |

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 | 0.0299 | 0.2733 | 0.2864 | 4.7000e-004 | | 0.0142 | 0.0142 | | 0.0133 | 0.0133 | 0.0000 | 40.5519 | 40.5519 | 9.7200e-003 | 0.0000 | 40.7948 |
| Total | 0.0299 | 0.2733 | 0.2864 | 4.7000e-004 | | 0.0142 | 0.0142 | | 0.0133 | 0.0133 | 0.0000 | 40.5519 | 40.5519 | 9.7200e-003 | 0.0000 | 40.7948 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 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 | 1.7300e-003 | 0.0408 | 0.0179 | 1.9000e-004 | 6.3200e-003 | 5.4000e-004 | 6.8600e-003 | 1.8200e-003 | 5.2000e-004 | 2.3400e-003 | 0.0000 | 18.3541 | 18.3541 | 9.0000e-005 | 2.5100e-003 | 19.1054 |
| Worker | 7.8900e-003 | 5.7700e-003 | 0.0630 | 1.7000e-004 | 0.0192 | 1.0000e-004 | 0.0193 | 5.1000e-003 | 9.0000e-005 | 5.1900e-003 | 0.0000 | 15.2582 | 15.2582 | 5.2000e-004 | 4.9000e-004 | 15.4169 |
| Total | 9.6200e-003 | 0.0465 | 0.0809 | 3.6000e-004 | 0.0255 | 6.4000e-004 | 0.0262 | 6.9200e-003 | 6.1000e-004 | 7.5300e-003 | 0.0000 | 33.6123 | 33.6123 | 6.1000e-004 | 3.0000e-003 | 34.5224 |

3.4 Building Construction - 2023**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 | 0.1227 | 1.1220 | 1.2670 | 2.1000e-003 | | 0.0546 | 0.0546 | | 0.0514 | 0.0514 | 0.0000 | 180.8077 | 180.8077 | 0.0430 | 0.0000 | 181.8830 |
| Total | 0.1227 | 1.1220 | 1.2670 | 2.1000e-003 | | 0.0546 | 0.0546 | | 0.0514 | 0.0514 | 0.0000 | 180.8077 | 180.8077 | 0.0430 | 0.0000 | 181.8830 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****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 | 6.2300e-003 | 0.1514 | 0.0747 | 8.3000e-004 | 0.0282 | 1.4600e-003 | 0.0296 | 8.1300e-003 | 1.4000e-003 | 9.5200e-003 | 0.0000 | 79.4098 | 79.4098 | 3.5000e-004 | 0.0108 | 82.6446 |
| Worker | 0.0325 | 0.0226 | 0.2571 | 7.2000e-004 | 0.0856 | 4.1000e-004 | 0.0860 | 0.0227 | 3.8000e-004 | 0.0231 | 0.0000 | 65.8154 | 65.8154 | 2.0900e-003 | 2.0100e-003 | 66.4656 |
| Total | 0.0387 | 0.1740 | 0.3317 | 1.5500e-003 | 0.1137 | 1.8700e-003 | 0.1156 | 0.0309 | 1.7800e-003 | 0.0326 | 0.0000 | 145.2252 | 145.2252 | 2.4400e-003 | 0.0128 | 149.1102 |

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 | 0.1227 | 1.1220 | 1.2670 | 2.1000e-003 | | 0.0546 | 0.0546 | | 0.0514 | 0.0514 | 0.0000 | 180.8075 | 180.8075 | 0.0430 | 0.0000 | 181.8828 |
| Total | 0.1227 | 1.1220 | 1.2670 | 2.1000e-003 | | 0.0546 | 0.0546 | | 0.0514 | 0.0514 | 0.0000 | 180.8075 | 180.8075 | 0.0430 | 0.0000 | 181.8828 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****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 | 6.2300e-003 | 0.1514 | 0.0747 | 8.3000e-004 | 0.0282 | 1.4600e-003 | 0.0296 | 8.1300e-003 | 1.4000e-003 | 9.5200e-003 | 0.0000 | 79.4098 | 79.4098 | 3.5000e-004 | 0.0108 | 82.6446 |
| Worker | 0.0325 | 0.0226 | 0.2571 | 7.2000e-004 | 0.0856 | 4.1000e-004 | 0.0860 | 0.0227 | 3.8000e-004 | 0.0231 | 0.0000 | 65.8154 | 65.8154 | 2.0900e-003 | 2.0100e-003 | 66.4656 |
| Total | 0.0387 | 0.1740 | 0.3317 | 1.5500e-003 | 0.1137 | 1.8700e-003 | 0.1156 | 0.0309 | 1.7800e-003 | 0.0326 | 0.0000 | 145.2252 | 145.2252 | 2.4400e-003 | 0.0128 | 149.1102 |

3.5 Paving - 2023**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 | 0.0103 | 0.1019 | 0.1458 | 2.3000e-004 | | 5.1000e-003 | 5.1000e-003 | | 4.6900e-003 | 4.6900e-003 | 0.0000 | 20.0269 | 20.0269 | 6.4800e-003 | 0.0000 | 20.1888 |
| Paving | 5.4000e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0157 | 0.1019 | 0.1458 | 2.3000e-004 | | 5.1000e-003 | 5.1000e-003 | | 4.6900e-003 | 4.6900e-003 | 0.0000 | 20.0269 | 20.0269 | 6.4800e-003 | 0.0000 | 20.1888 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****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 | 4.6000e-004 | 3.2000e-004 | 3.6300e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9307 | 0.9307 | 3.0000e-005 | 3.0000e-005 | 0.9398 |
| Total | 4.6000e-004 | 3.2000e-004 | 3.6300e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9307 | 0.9307 | 3.0000e-005 | 3.0000e-005 | 0.9398 |

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 | 0.0103 | 0.1019 | 0.1458 | 2.3000e-004 | | 5.1000e-003 | 5.1000e-003 | | 4.6900e-003 | 4.6900e-003 | 0.0000 | 20.0268 | 20.0268 | 6.4800e-003 | 0.0000 | 20.1888 |
| Paving | 5.4000e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0157 | 0.1019 | 0.1458 | 2.3000e-004 | | 5.1000e-003 | 5.1000e-003 | | 4.6900e-003 | 4.6900e-003 | 0.0000 | 20.0268 | 20.0268 | 6.4800e-003 | 0.0000 | 20.1888 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****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 | 4.6000e-004 | 3.2000e-004 | 3.6300e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9307 | 0.9307 | 3.0000e-005 | 3.0000e-005 | 0.9398 |
| Total | 4.6000e-004 | 3.2000e-004 | 3.6300e-003 | 1.0000e-005 | 1.2100e-003 | 1.0000e-005 | 1.2200e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 0.9307 | 0.9307 | 3.0000e-005 | 3.0000e-005 | 0.9398 |

3.6 Architectural Coating - 2023**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 | 0.1524 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9200e-003 | 0.0130 | 0.0181 | 3.0000e-005 | | 7.1000e-004 | 7.1000e-004 | | 7.1000e-004 | 7.1000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.5000e-004 | 0.0000 | 2.5571 |
| Total | 0.1543 | 0.0130 | 0.0181 | 3.0000e-005 | | 7.1000e-004 | 7.1000e-004 | | 7.1000e-004 | 7.1000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.5000e-004 | 0.0000 | 2.5571 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****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 | 8.3000e-004 | 5.8000e-004 | 6.5400e-003 | 2.0000e-005 | 2.1800e-003 | 1.0000e-005 | 2.1900e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.6752 | 1.6752 | 5.0000e-005 | 5.0000e-005 | 1.6917 |
| Total | 8.3000e-004 | 5.8000e-004 | 6.5400e-003 | 2.0000e-005 | 2.1800e-003 | 1.0000e-005 | 2.1900e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.6752 | 1.6752 | 5.0000e-005 | 5.0000e-005 | 1.6917 |

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 | 0.1524 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9200e-003 | 0.0130 | 0.0181 | 3.0000e-005 | | 7.1000e-004 | 7.1000e-004 | | 7.1000e-004 | 7.1000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.5000e-004 | 0.0000 | 2.5571 |
| Total | 0.1543 | 0.0130 | 0.0181 | 3.0000e-005 | | 7.1000e-004 | 7.1000e-004 | | 7.1000e-004 | 7.1000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.5000e-004 | 0.0000 | 2.5571 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****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 | 8.3000e-004 | 5.8000e-004 | 6.5400e-003 | 2.0000e-005 | 2.1800e-003 | 1.0000e-005 | 2.1900e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.6752 | 1.6752 | 5.0000e-005 | 5.0000e-005 | 1.6917 |
| Total | 8.3000e-004 | 5.8000e-004 | 6.5400e-003 | 2.0000e-005 | 2.1800e-003 | 1.0000e-005 | 2.1900e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.6752 | 1.6752 | 5.0000e-005 | 5.0000e-005 | 1.6917 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | 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 | 0.0687 | 0.1087 | 0.6478 | 1.3200e-003 | 0.1323 | 1.1900e-003 | 0.1335 | 0.0353 | 1.1100e-003 | 0.0364 | 0.0000 | 121.6717 | 121.6717 | 7.4700e-003 | 6.7500e-003 | 123.8711 |
| Unmitigated | 0.0687 | 0.1087 | 0.6478 | 1.3200e-003 | 0.1323 | 1.1900e-003 | 0.1335 | 0.0353 | 1.1100e-003 | 0.0364 | 0.0000 | 121.6717 | 121.6717 | 7.4700e-003 | 6.7500e-003 | 123.8711 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------------------------------|-------------------------|----------|--------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| General Office Building | 75.00 | 17.02 | 5.39 | 135,669 | 135,669 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Unrefrigerated Warehouse-No Rail | 73.60 | 73.60 | 73.60 | 214,882 | 214,882 |
| Total | 148.60 | 90.62 | 78.99 | 350,551 | 350,551 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|-----------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| General Office Building | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Unrefrigerated Warehouse-No | 9.50 | 7.30 | 7.30 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 |

4.4 Fleet Mix

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| City Park | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |
| General Office Building | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |
| Parking Lot | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |
| Unrefrigerated Warehouse-No Rail | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |

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 | 41.0932 | 41.0932 | 3.4700e-003 | 4.2000e-004 | 41.3052 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 41.0932 | 41.0932 | 3.4700e-003 | 4.2000e-004 | 41.3052 |
| Natural Gas Mitigated | 6.0000e-004 | 5.4600e-003 | 4.5900e-003 | 3.0000e-005 | | 4.2000e-004 | 4.2000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 5.9465 | 5.9465 | 1.1000e-004 | 1.1000e-004 | 5.9819 |
| Natural Gas Unmitigated | 6.0000e-004 | 5.4600e-003 | 4.5900e-003 | 3.0000e-005 | | 4.2000e-004 | 4.2000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 5.9465 | 5.9465 | 1.1000e-004 | 1.1000e-004 | 5.9819 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 |
| General Office Building | 26411 | 1.4000e-004 | 1.2900e-003 | 1.0900e-003 | 1.0000e-005 | | 1.0000e-004 | 1.0000e-004 | | 1.0000e-004 | 1.0000e-004 | 0.0000 | 1.4094 | 1.4094 | 3.0000e-005 | 3.0000e-005 | 1.4178 |
| 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 |
| Unrefrigerated Warehouse-No Rail | 85023 | 4.6000e-004 | 4.1700e-003 | 3.5000e-003 | 3.0000e-005 | | 3.2000e-004 | 3.2000e-004 | | 3.2000e-004 | 3.2000e-004 | 0.0000 | 4.5372 | 4.5372 | 9.0000e-005 | 8.0000e-005 | 4.5641 |
| Total | | 6.0000e-004 | 5.4600e-003 | 4.5900e-003 | 4.0000e-005 | | 4.2000e-004 | 4.2000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 5.9465 | 5.9465 | 1.2000e-004 | 1.1000e-004 | 5.9819 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****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 |
| General Office Building | 26411 | 1.4000e-004 | 1.2900e-003 | 1.0900e-003 | 1.0000e-005 | | 1.0000e-004 | 1.0000e-004 | | 1.0000e-004 | 1.0000e-004 | 0.0000 | 1.4094 | 1.4094 | 3.0000e-005 | 3.0000e-005 | 1.4178 |
| 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 |
| Unrefrigerated Warehouse-No Rail | 85023 | 4.6000e-004 | 4.1700e-003 | 3.5000e-003 | 3.0000e-005 | | 3.2000e-004 | 3.2000e-004 | | 3.2000e-004 | 3.2000e-004 | 0.0000 | 4.5372 | 4.5372 | 9.0000e-005 | 8.0000e-005 | 4.5641 |
| Total | | 6.0000e-004 | 5.4600e-003 | 4.5900e-003 | 4.0000e-005 | | 4.2000e-004 | 4.2000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 5.9465 | 5.9465 | 1.2000e-004 | 1.1000e-004 | 5.9819 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 |
| General Office Building | 70763 | 12.5495 | 1.0600e-003 | 1.3000e-004 | 12.6142 |
| Parking Lot | 62813.5 | 11.1397 | 9.4000e-004 | 1.1000e-004 | 11.1972 |
| Unrefrigerated Warehouse-No Rail | 98136 | 17.4040 | 1.4700e-003 | 1.8000e-004 | 17.4938 |
| Total | | 41.0932 | 3.4700e-003 | 4.2000e-004 | 41.3052 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****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 |
| General Office Building | 70763 | 12.5495 | 1.0600e-003 | 1.3000e-004 | 12.6142 |
| Parking Lot | 62813.5 | 11.1397 | 9.4000e-004 | 1.1000e-004 | 11.1972 |
| Unrefrigerated Warehouse-No Rail | 98136 | 17.4040 | 1.4700e-003 | 1.8000e-004 | 17.4938 |
| Total | | 41.0932 | 3.4700e-003 | 4.2000e-004 | 41.3052 |

6.0 Area Detail**6.1 Mitigation Measures Area**

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | 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 | 0.2231 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |
| Unmitigated | 0.2231 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-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 | 0.0152 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.2078 | | | | | 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 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |
| Total | 0.2231 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****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 | 0.0152 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.2078 | | | | | 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 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |
| Total | 0.2231 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.0100e-003 | 1.0100e-003 | 0.0000 | 0.0000 | 1.0700e-003 |

7.0 Water Detail**7.1 Mitigation Measures Water**

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|-------------|---------|
| Category | MT/yr | | | |
| Mitigated | 36.1741 | 0.3661 | 8.9100e-003 | 47.9824 |
| Unmitigated | 36.1741 | 0.3661 | 8.9100e-003 | 47.9824 |

7.2 Water by Land Use**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| City Park | 0 / 2.657 | 5.2351 | 4.4000e-004 | 5.0000e-005 | 5.2621 |
| General Office Building | 1.36855 / 0.838789 | 5.2471 | 0.0450 | 1.1000e-003 | 6.7006 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unrefrigerated Warehouse-No Rail | 9.78187 / 0 | 25.6918 | 0.3207 | 7.7600e-003 | 36.0197 |
| Total | | 36.1741 | 0.3661 | 8.9100e-003 | 47.9824 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| City Park | 0 / 2.657 | 5.2351 | 4.4000e-004 | 5.0000e-005 | 5.2621 |
| General Office Building | 1.36855 / 0.838789 | 5.2471 | 0.0450 | 1.1000e-003 | 6.7006 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unrefrigerated Warehouse-No Rail | 9.78187 / 0 | 25.6918 | 0.3207 | 7.7600e-003 | 36.0197 |
| Total | | 36.1741 | 0.3661 | 8.9100e-003 | 47.9824 |

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|---------|
| | MT/yr | | | |
| Mitigated | 9.5629 | 0.5652 | 0.0000 | 23.6917 |
| Unmitigated | 9.5629 | 0.5652 | 0.0000 | 23.6917 |

8.2 Waste by Land Use**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| City Park | 0.19 | 0.0386 | 2.2800e-003 | 0.0000 | 0.0956 |
| General Office Building | 7.16 | 1.4534 | 0.0859 | 0.0000 | 3.6008 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unrefrigerated Warehouse-No Rail | 39.76 | 8.0709 | 0.4770 | 0.0000 | 19.9954 |
| Total | | 9.5629 | 0.5652 | 0.0000 | 23.6917 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| City Park | 0.19 | 0.0386 | 2.2800e-003 | 0.0000 | 0.0956 |
| General Office Building | 7.16 | 1.4534 | 0.0859 | 0.0000 | 3.6008 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unrefrigerated Warehouse-No Rail | 39.76 | 8.0709 | 0.4770 | 0.0000 | 19.9954 |
| Total | | 9.5629 | 0.5652 | 0.0000 | 23.6917 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|-----------------|--------|-----------|-----------|-------------|-------------|------------|
| Air Compressors | 1 | 8.00 | 260 | 78 | 0.48 | Electrical |
| Forklifts | 1 | 8.00 | 260 | 89 | 0.20 | Electrical |
| Welders | 1 | 8.00 | 260 | 46 | 0.45 | Electrical |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**UnMitigated/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 |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Equipment Type | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Air Compressors | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Forklifts | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Welders | 0.0000 | 0.0000 | 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 |

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

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA****Mojave Desert AQMD Air District, Summer****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------------|-------|----------|-------------|--------------------|------------|
| General Office Building | 7.70 | 1000sqft | 0.18 | 7,700.00 | 0 |
| Unrefrigerated Warehouse-No Rail | 42.30 | 1000sqft | 0.97 | 42,300.00 | 0 |
| Parking Lot | 4.12 | Acre | 4.12 | 179,467.20 | 0 |
| City Park | 2.23 | Acre | 2.23 | 97,138.80 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|----------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.6 | Precipitation Freq (Days) | 30 |
| Climate Zone | 10 | | | Operational Year | 2023 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MWhr) | 390.98 | CH4 Intensity (lb/MWhr) | 0.033 | N2O Intensity (lb/MWhr) | 0.004 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Information provided by client.

Construction Phase - Schedule adjusted based on client input.

Architectural Coating - VOC limits from MDAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L - for conservative estimate (to account for the sell-through period) it is assumed that non-flat coatings will still have a VOC of 100 g/L.

Vehicle Trips - All areas modeled as City Park are within the development and no vehicle trips are expected.

Area Coating - VOC limits from MDAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L - for conservative estimate (to account for the sell-through period) it is assumed that non-flat coatings will still have a VOC of 100 g/L.

Construction Off-road Equipment Mitigation - Assumes that construction site will be watered 3 times per day to be in compliance with MDAQMD Rule 403.

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Area Mitigation - VOC limits from MDAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L. Effective 1/1/2022, non-flat coatings will have a VOC limit of 50 g/L - for conservative estimate (to account for the sell-through period) it is assumed that non-flat coatings will still have a VOC of 100 g/L.

Operational Off-Road Equipment - Type of equipment, number of equipment, and fuel type was provided by client.

| Table Name | Column Name | Default Value | New Value |
|--------------------------------|---------------------------------|---------------|------------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior | 250.00 | 55.00 |
| tblArchitecturalCoating | EF_Nonresidential_Interior | 250.00 | 55.00 |
| tblArchitecturalCoating | EF_Parking | 250.00 | 100.00 |
| tblArchitecturalCoating | EF_Residential_Exterior | 250.00 | 55.00 |
| tblArchitecturalCoating | EF_Residential_Interior | 250.00 | 55.00 |
| tblAreaCoating | Area_EF_Nonresidential_Exterior | 250 | 55 |
| tblAreaCoating | Area_EF_Nonresidential_Interior | 250 | 55 |
| tblAreaCoating | Area_EF_Parking | 250 | 100 |
| tblAreaCoating | Area_EF_Residential_Exterior | 250 | 55 |
| tblAreaCoating | Area_EF_Residential_Interior | 250 | 55 |
| tblConstructionPhase | NumDays | 230.00 | 191.00 |
| tblConstructionPhase | PhaseEndDate | 11/24/2023 | 10/2/2023 |
| tblConstructionPhase | PhaseEndDate | 9/29/2023 | 8/7/2023 |
| tblConstructionPhase | PhaseEndDate | 10/27/2023 | 9/4/2023 |
| tblConstructionPhase | PhaseStartDate | 10/28/2023 | 9/5/2023 |
| tblConstructionPhase | PhaseStartDate | 9/30/2023 | 8/8/2023 |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | Electrical |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | Electrical |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | Electrical |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 1.00 |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 1.00 |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 1.00 |
| tblVehicleTrips | CC_TL | 7.30 | 0.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 0.00 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | | | |
|-----------------|---------|-------|------|
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PR_TP | 66.00 | 0.00 |
| tblVehicleTrips | ST_TR | 1.96 | 0.00 |
| tblVehicleTrips | SU_TR | 2.19 | 0.00 |
| tblVehicleTrips | WD_TR | 0.78 | 0.00 |

2.0 Emissions Summary

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 | | | | | |
| 2022 | 3.2414 | 33.1234 | 21.5769 | 0.0483 | 19.8049 | 1.6133 | 21.4182 | 10.1417 | 1.4843 | 11.6259 | 0.0000 | 4,761.967 7 | 4,761.967 7 | 1.1963 | 0.1870 | 4,833.912 6 |
| 2023 | 15.5320 | 16.4881 | 21.0296 | 0.0477 | 1.4835 | 0.7237 | 2.2072 | 0.4018 | 0.6812 | 1.0830 | 0.0000 | 4,694.227 2 | 4,694.227 2 | 0.7171 | 0.1793 | 4,763.680 2 |
| Maximum | 15.5320 | 33.1234 | 21.5769 | 0.0483 | 19.8049 | 1.6133 | 21.4182 | 10.1417 | 1.4843 | 11.6259 | 0.0000 | 4,761.967 7 | 4,761.967 7 | 1.1963 | 0.1870 | 4,833.912 6 |

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 | | | | | |
| 2022 | 3.2414 | 33.1234 | 21.5769 | 0.0483 | 7.8141 | 1.6133 | 9.4274 | 3.9792 | 1.4843 | 5.4634 | 0.0000 | 4,761.967 7 | 4,761.967 7 | 1.1963 | 0.1870 | 4,833.912 6 |
| 2023 | 15.5320 | 16.4881 | 21.0296 | 0.0477 | 1.4835 | 0.7237 | 2.2072 | 0.4018 | 0.6812 | 1.0830 | 0.0000 | 4,694.227 2 | 4,694.227 2 | 0.7171 | 0.1793 | 4,763.680 2 |
| Maximum | 15.5320 | 33.1234 | 21.5769 | 0.0483 | 7.8141 | 1.6133 | 9.4274 | 3.9792 | 1.4843 | 5.4634 | 0.0000 | 4,761.967 7 | 4,761.967 7 | 1.1963 | 0.1870 | 4,833.912 6 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | 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 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 56.33 | 0.00 | 50.75 | 58.45 | 0.00 | 48.49 | 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 | 1.2226 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |
| Energy | 3.2900e-003 | 0.0299 | 0.0251 | 1.8000e-004 | | 2.2700e-003 | 2.2700e-003 | | 2.2700e-003 | 2.2700e-003 | | 35.9175 | 35.9175 | 6.9000e-004 | 6.6000e-004 | 36.1309 |
| Mobile | 0.5265 | 0.6220 | 4.3141 | 8.7200e-003 | 0.8319 | 7.3400e-003 | 0.8392 | 0.2218 | 6.8900e-003 | 0.2287 | | 887.6940 | 887.6940 | 0.0485 | 0.0444 | 902.1326 |
| Offroad | 0.0000 | 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 | 1.7524 | 0.6520 | 4.3450 | 8.9000e-003 | 0.8319 | 9.6300e-003 | 0.8415 | 0.2218 | 9.1800e-003 | 0.2310 | 0.0000 | 923.6238 | 923.6238 | 0.0492 | 0.0451 | 938.2767 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.2226 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |
| Energy | 3.2900e-003 | 0.0299 | 0.0251 | 1.8000e-004 | | 2.2700e-003 | 2.2700e-003 | | 2.2700e-003 | 2.2700e-003 | | 35.9175 | 35.9175 | 6.9000e-004 | 6.6000e-004 | 36.1309 |
| Mobile | 0.5265 | 0.6220 | 4.3141 | 8.7200e-003 | 0.8319 | 7.3400e-003 | 0.8392 | 0.2218 | 6.8900e-003 | 0.2287 | | 887.6940 | 887.6940 | 0.0485 | 0.0444 | 902.1326 |
| Offroad | 0.0000 | 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 | 1.7524 | 0.6520 | 4.3450 | 8.9000e-003 | 0.8319 | 9.6300e-003 | 0.8415 | 0.2218 | 9.1800e-003 | 0.2310 | 0.0000 | 923.6238 | 923.6238 | 0.0492 | 0.0451 | 938.2767 |

| | 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 |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 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 | Site Preparation | Site Preparation | 10/3/2022 | 10/14/2022 | 5 | 10 | |
| 2 | Grading | Grading | 10/15/2022 | 11/11/2022 | 5 | 20 | |
| 3 | Building Construction | Building Construction | 11/12/2022 | 8/7/2023 | 5 | 191 | |
| 4 | Paving | Paving | 8/8/2023 | 9/4/2023 | 5 | 20 | |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | | | | | | |
|---|-----------------------|-----------------------|----------|-----------|---|----|
| 5 | Architectural Coating | Architectural Coating | 9/5/2023 | 10/2/2023 | 5 | 20 |
|---|-----------------------|-----------------------|----------|-----------|---|----|

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 20****Acres of Paving: 4.12****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,000; Non-Residential Outdoor: 25,000; Striped Parking Area: 10,768 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

Trips and VMT

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| 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 |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 136.00 | 54.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 27.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 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 | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1701 | 33.0835 | 19.6978 | 0.0380 | | 1.6126 | 1.6126 | | 1.4836 | 1.4836 | | 3,686.0619 | 3,686.0619 | 1.1922 | | 3,715.8655 |
| Total | 3.1701 | 33.0835 | 19.6978 | 0.0380 | 19.6570 | 1.6126 | 21.2696 | 10.1025 | 1.4836 | 11.5860 | | 3,686.0619 | 3,686.0619 | 1.1922 | | 3,715.8655 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 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 | 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 |
| Worker | 0.0713 | 0.0398 | 0.5573 | 1.3800e-003 | 0.1479 | 7.4000e-004 | 0.1486 | 0.0392 | 6.8000e-004 | 0.0399 | | 139.2770 | 139.2770 | 4.1600e-003 | 3.8400e-003 | 140.5257 |
| Total | 0.0713 | 0.0398 | 0.5573 | 1.3800e-003 | 0.1479 | 7.4000e-004 | 0.1486 | 0.0392 | 6.8000e-004 | 0.0399 | | 139.2770 | 139.2770 | 4.1600e-003 | 3.8400e-003 | 140.5257 |

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 | | | | | 7.6662 | 0.0000 | 7.6662 | 3.9400 | 0.0000 | 3.9400 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1701 | 33.0835 | 19.6978 | 0.0380 | | 1.6126 | 1.6126 | | 1.4836 | 1.4836 | 0.0000 | 3,686.0619 | 3,686.0619 | 1.1922 | | 3,715.8655 |
| Total | 3.1701 | 33.0835 | 19.6978 | 0.0380 | 7.6662 | 1.6126 | 9.2788 | 3.9400 | 1.4836 | 5.4235 | 0.0000 | 3,686.0619 | 3,686.0619 | 1.1922 | | 3,715.8655 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 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 | 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 |
| Worker | 0.0713 | 0.0398 | 0.5573 | 1.3800e-003 | 0.1479 | 7.4000e-004 | 0.1486 | 0.0392 | 6.8000e-004 | 0.0399 | | 139.2770 | 139.2770 | 4.1600e-003 | 3.8400e-003 | 140.5257 |
| Total | 0.0713 | 0.0398 | 0.5573 | 1.3800e-003 | 0.1479 | 7.4000e-004 | 0.1486 | 0.0392 | 6.8000e-004 | 0.0399 | | 139.2770 | 139.2770 | 4.1600e-003 | 3.8400e-003 | 140.5257 |

3.3 Grading - 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 | | | | | |
| Fugitive Dust | | | | | 7.0826 | 0.0000 | 7.0826 | 3.4247 | 0.0000 | 3.4247 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.9486 | 20.8551 | 15.2727 | 0.0297 | | 0.9409 | 0.9409 | | 0.8656 | 0.8656 | | 2,872.0464 | 2,872.0464 | 0.9289 | | 2,895.2684 |
| Total | 1.9486 | 20.8551 | 15.2727 | 0.0297 | 7.0826 | 0.9409 | 8.0234 | 3.4247 | 0.8656 | 4.2903 | | 2,872.0464 | 2,872.0464 | 0.9289 | | 2,895.2684 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 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 | 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 |
| Worker | 0.0594 | 0.0332 | 0.4644 | 1.1500e-003 | 0.1232 | 6.2000e-004 | 0.1238 | 0.0327 | 5.7000e-004 | 0.0333 | | 116.0641 | 116.0641 | 3.4700e-003 | 3.2000e-003 | 117.1048 |
| Total | 0.0594 | 0.0332 | 0.4644 | 1.1500e-003 | 0.1232 | 6.2000e-004 | 0.1238 | 0.0327 | 5.7000e-004 | 0.0333 | | 116.0641 | 116.0641 | 3.4700e-003 | 3.2000e-003 | 117.1048 |

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 | | | | | 2.7622 | 0.0000 | 2.7622 | 1.3357 | 0.0000 | 1.3357 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.9486 | 20.8551 | 15.2727 | 0.0297 | | 0.9409 | 0.9409 | | 0.8656 | 0.8656 | 0.0000 | 2,872.0464 | 2,872.0464 | 0.9289 | | 2,895.2684 |
| Total | 1.9486 | 20.8551 | 15.2727 | 0.0297 | 2.7622 | 0.9409 | 3.7031 | 1.3357 | 0.8656 | 2.2012 | 0.0000 | 2,872.0464 | 2,872.0464 | 0.9289 | | 2,895.2684 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 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 | 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 |
| Worker | 0.0594 | 0.0332 | 0.4644 | 1.1500e-003 | 0.1232 | 6.2000e-004 | 0.1238 | 0.0327 | 5.7000e-004 | 0.0333 | | 116.0641 | 116.0641 | 3.4700e-003 | 3.2000e-003 | 117.1048 |
| Total | 0.0594 | 0.0332 | 0.4644 | 1.1500e-003 | 0.1232 | 6.2000e-004 | 0.1238 | 0.0327 | 5.7000e-004 | 0.0333 | | 116.0641 | 116.0641 | 3.4700e-003 | 3.2000e-003 | 117.1048 |

3.4 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 | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 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 | 0.0000 |
| Vendor | 0.1019 | 2.2062 | 1.0029 | 0.0110 | 0.3663 | 0.0308 | 0.3971 | 0.1055 | 0.0295 | 0.1350 | | 1,155.319 4 | 1,155.319 4 | 5.9300e- 003 | 0.1579 | 1,202.530 5 |
| Worker | 0.5386 | 0.3010 | 4.2106 | 0.0104 | 1.1172 | 5.6200e- 003 | 1.1228 | 0.2963 | 5.1800e- 003 | 0.3015 | | 1,052.314 8 | 1,052.314 8 | 0.0314 | 0.0290 | 1,061.750 0 |
| Total | 0.6404 | 2.5072 | 5.2135 | 0.0214 | 1.4835 | 0.0365 | 1.5199 | 0.4018 | 0.0347 | 0.4365 | | 2,207.634 1 | 2,207.634 1 | 0.0374 | 0.1870 | 2,264.280 4 |

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 | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.333 6 | 2,554.333 6 | 0.6120 | | 2,569.632 2 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.333 6 | 2,554.333 6 | 0.6120 | | 2,569.632 2 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 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 | 0.0000 |
| Vendor | 0.1019 | 2.2062 | 1.0029 | 0.0110 | 0.3663 | 0.0308 | 0.3971 | 0.1055 | 0.0295 | 0.1350 | | 1,155.319 4 | 1,155.319 4 | 5.9300e- 003 | 0.1579 | 1,202.530 5 |
| Worker | 0.5386 | 0.3010 | 4.2106 | 0.0104 | 1.1172 | 5.6200e- 003 | 1.1228 | 0.2963 | 5.1800e- 003 | 0.3015 | | 1,052.314 8 | 1,052.314 8 | 0.0314 | 0.0290 | 1,061.750 0 |
| Total | 0.6404 | 2.5072 | 5.2135 | 0.0214 | 1.4835 | 0.0365 | 1.5199 | 0.4018 | 0.0347 | 0.4365 | | 2,207.634 1 | 2,207.634 1 | 0.0374 | 0.1870 | 2,264.280 4 |

3.4 Building Construction - 2023**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 | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.209 9 | 2,555.209 9 | 0.6079 | | 2,570.406 1 |
| Total | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.209 9 | 2,555.209 9 | 0.6079 | | 2,570.406 1 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****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 | 0.0000 |
| Vendor | 0.0833 | 1.8381 | 0.9402 | 0.0107 | 0.3663 | 0.0187 | 0.3850 | 0.1055 | 0.0179 | 0.1234 | | 1,120.907 0 | 1,120.907 0 | 4.9600e- 003 | 0.1525 | 1,166.489 2 |
| Worker | 0.4964 | 0.2651 | 3.8454 | 0.0101 | 1.1172 | 5.2700e- 003 | 1.1225 | 0.2963 | 4.8500e- 003 | 0.3012 | | 1,018.110 3 | 1,018.110 3 | 0.0282 | 0.0267 | 1,026.784 9 |
| Total | 0.5797 | 2.1032 | 4.7856 | 0.0207 | 1.4835 | 0.0240 | 1.5074 | 0.4018 | 0.0227 | 0.4245 | | 2,139.017 2 | 2,139.017 2 | 0.0332 | 0.1793 | 2,193.274 2 |

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 | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.209 9 | 2,555.209 9 | 0.6079 | | 2,570.406 1 |
| Total | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.209 9 | 2,555.209 9 | 0.6079 | | 2,570.406 1 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****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 | 0.0000 |
| Vendor | 0.0833 | 1.8381 | 0.9402 | 0.0107 | 0.3663 | 0.0187 | 0.3850 | 0.1055 | 0.0179 | 0.1234 | | 1,120.907 0 | 1,120.907 0 | 4.9600e- 003 | 0.1525 | 1,166.489 2 |
| Worker | 0.4964 | 0.2651 | 3.8454 | 0.0101 | 1.1172 | 5.2700e- 003 | 1.1225 | 0.2963 | 4.8500e- 003 | 0.3012 | | 1,018.110 3 | 1,018.110 3 | 0.0282 | 0.0267 | 1,026.784 9 |
| Total | 0.5797 | 2.1032 | 4.7856 | 0.0207 | 1.4835 | 0.0240 | 1.5074 | 0.4018 | 0.0227 | 0.4245 | | 2,139.017 2 | 2,139.017 2 | 0.0332 | 0.1793 | 2,193.274 2 |

3.5 Paving - 2023**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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.584 1 | 2,207.584 1 | 0.7140 | | 2,225.433 6 |
| Paving | 0.5397 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.5725 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.584 1 | 2,207.584 1 | 0.7140 | | 2,225.433 6 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****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 | 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 |
| Worker | 0.0548 | 0.0292 | 0.4241 | 1.1100e-003 | 0.1232 | 5.8000e-004 | 0.1238 | 0.0327 | 5.4000e-004 | 0.0332 | | 112.2916 | 112.2916 | 3.1100e-003 | 2.9500e-003 | 113.2483 |
| Total | 0.0548 | 0.0292 | 0.4241 | 1.1100e-003 | 0.1232 | 5.8000e-004 | 0.1238 | 0.0327 | 5.4000e-004 | 0.0332 | | 112.2916 | 112.2916 | 3.1100e-003 | 2.9500e-003 | 113.2483 |

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 | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.5397 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.5725 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****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 | 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 |
| Worker | 0.0548 | 0.0292 | 0.4241 | 1.1100e-003 | 0.1232 | 5.8000e-004 | 0.1238 | 0.0327 | 5.4000e-004 | 0.0332 | | 112.2916 | 112.2916 | 3.1100e-003 | 2.9500e-003 | 113.2483 |
| Total | 0.0548 | 0.0292 | 0.4241 | 1.1100e-003 | 0.1232 | 5.8000e-004 | 0.1238 | 0.0327 | 5.4000e-004 | 0.0332 | | 112.2916 | 112.2916 | 3.1100e-003 | 2.9500e-003 | 113.2483 |

3.6 Architectural Coating - 2023**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 | 15.2417 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 15.4334 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****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 | 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 |
| Worker | 0.0986 | 0.0526 | 0.7634 | 2.0000e-003 | 0.2218 | 1.0500e-003 | 0.2229 | 0.0588 | 9.6000e-004 | 0.0598 | | 202.1248 | 202.1248 | 5.6000e-003 | 5.3100e-003 | 203.8470 |
| Total | 0.0986 | 0.0526 | 0.7634 | 2.0000e-003 | 0.2218 | 1.0500e-003 | 0.2229 | 0.0588 | 9.6000e-004 | 0.0598 | | 202.1248 | 202.1248 | 5.6000e-003 | 5.3100e-003 | 203.8470 |

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 | 15.2417 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 15.4334 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****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 | 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 |
| Worker | 0.0986 | 0.0526 | 0.7634 | 2.0000e-003 | 0.2218 | 1.0500e-003 | 0.2229 | 0.0588 | 9.6000e-004 | 0.0598 | | 202.1248 | 202.1248 | 5.6000e-003 | 5.3100e-003 | 203.8470 |
| Total | 0.0986 | 0.0526 | 0.7634 | 2.0000e-003 | 0.2218 | 1.0500e-003 | 0.2229 | 0.0588 | 9.6000e-004 | 0.0598 | | 202.1248 | 202.1248 | 5.6000e-003 | 5.3100e-003 | 203.8470 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | 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 | 0.5265 | 0.6220 | 4.3141 | 8.7200e-003 | 0.8319 | 7.3400e-003 | 0.8392 | 0.2218 | 6.8900e-003 | 0.2287 | | 887.6940 | 887.6940 | 0.0485 | 0.0444 | 902.1326 |
| Unmitigated | 0.5265 | 0.6220 | 4.3141 | 8.7200e-003 | 0.8319 | 7.3400e-003 | 0.8392 | 0.2218 | 6.8900e-003 | 0.2287 | | 887.6940 | 887.6940 | 0.0485 | 0.0444 | 902.1326 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------------------------------|-------------------------|----------|--------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| General Office Building | 75.00 | 17.02 | 5.39 | 135,669 | 135,669 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Unrefrigerated Warehouse-No Rail | 73.60 | 73.60 | 73.60 | 214,882 | 214,882 |
| Total | 148.60 | 90.62 | 78.99 | 350,551 | 350,551 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|-----------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| General Office Building | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Unrefrigerated Warehouse-No | 9.50 | 7.30 | 7.30 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 |

4.4 Fleet Mix

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| City Park | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |
| General Office Building | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |
| Parking Lot | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |
| Unrefrigerated Warehouse-No Rail | 0.526992 | 0.056742 | 0.174739 | 0.140288 | 0.030240 | 0.007815 | 0.006009 | 0.021774 | 0.000488 | 0.000160 | 0.028107 | 0.000925 | 0.005722 |

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 | 3.2900e-003 | 0.0299 | 0.0251 | 1.8000e-004 | | 2.2700e-003 | 2.2700e-003 | | 2.2700e-003 | 2.2700e-003 | | 35.9175 | 35.9175 | 6.9000e-004 | 6.6000e-004 | 36.1309 |
| NaturalGas Unmitigated | 3.2900e-003 | 0.0299 | 0.0251 | 1.8000e-004 | | 2.2700e-003 | 2.2700e-003 | | 2.2700e-003 | 2.2700e-003 | | 35.9175 | 35.9175 | 6.9000e-004 | 6.6000e-004 | 36.1309 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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 |
| General Office Building | 72.3589 | 7.8000e-004 | 7.0900e-003 | 5.9600e-003 | 4.0000e-005 | | 5.4000e-004 | 5.4000e-004 | | 5.4000e-004 | 5.4000e-004 | | 8.5128 | 8.5128 | 1.6000e-004 | 1.6000e-004 | 8.5634 |
| 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 |
| Unrefrigerated Warehouse-No Rail | 232.94 | 2.5100e-003 | 0.0228 | 0.0192 | 1.4000e-004 | | 1.7400e-003 | 1.7400e-003 | | 1.7400e-003 | 1.7400e-003 | | 27.4047 | 27.4047 | 5.3000e-004 | 5.0000e-004 | 27.5675 |
| Total | | 3.2900e-003 | 0.0299 | 0.0251 | 1.8000e-004 | | 2.2800e-003 | 2.2800e-003 | | 2.2800e-003 | 2.2800e-003 | | 35.9175 | 35.9175 | 6.9000e-004 | 6.6000e-004 | 36.1309 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****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 |
| General Office Building | 0.0723589 | 7.8000e-004 | 7.0900e-003 | 5.9600e-003 | 4.0000e-005 | | 5.4000e-004 | 5.4000e-004 | | 5.4000e-004 | 5.4000e-004 | | 8.5128 | 8.5128 | 1.6000e-004 | 1.6000e-004 | 8.5634 |
| 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 |
| Unrefrigerated Warehouse-No Rail | 0.23294 | 2.5100e-003 | 0.0228 | 0.0192 | 1.4000e-004 | | 1.7400e-003 | 1.7400e-003 | | 1.7400e-003 | 1.7400e-003 | | 27.4047 | 27.4047 | 5.3000e-004 | 5.0000e-004 | 27.5675 |
| Total | | 3.2900e-003 | 0.0299 | 0.0251 | 1.8000e-004 | | 2.2800e-003 | 2.2800e-003 | | 2.2800e-003 | 2.2800e-003 | | 35.9175 | 35.9175 | 6.9000e-004 | 6.6000e-004 | 36.1309 |

6.0 Area Detail**6.1 Mitigation Measures Area**

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | 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 | 1.2226 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |
| Unmitigated | 1.2226 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |

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 | 0.0835 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1.1386 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 5.3000e-004 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |
| Total | 1.2226 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****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 | 0.0835 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1.1386 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 5.3000e-004 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |
| Total | 1.2226 | 5.0000e-005 | 5.7500e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 0.0123 | 0.0123 | 3.0000e-005 | | 0.0131 |

7.0 Water Detail**7.1 Mitigation Measures Water****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 |
|-----------------|--------|-----------|-----------|-------------|-------------|------------|
| Air Compressors | 1 | 8.00 | 260 | 78 | 0.48 | Electrical |
| Forklifts | 1 | 8.00 | 260 | 89 | 0.20 | Electrical |
| Welders | 1 | 8.00 | 260 | 46 | 0.45 | Electrical |

Air Quality Study- APN-3090-431-07 Warehouse and Office, Victorville, CA - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**UnMitigated/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 |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|-----|---------------|
| Equipment Type | lb/day | | | | | | | | | | lb/day | | | | | |
| Air Compressors | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Forklifts | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Welders | 0.0000 | 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 |

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

Biological Resource Assessment of
APN 3090-431-07
Victorville, California

January 19, 2022

Mark Hagan, Wildlife Biologist
44715 17th Street East
Lancaster, CA 93535
(661) 723-0086
(661) 433-9956 (m)

B.S. Degree, Wildlife Management
Humboldt State University

Abstract

Development has been proposed for APN 3090-431-07, Victorville, California. The approximately 7 acres (2.8 ha) study area was located south of Ottawa Street, and east of Enterprise Way, T5N, R4W, a portion of the NE1/4 of the SW1/4 of the of Section 27, S.B.B.M. A line transect survey was conducted on 24 November 2021 to inventory biological resources. The proposed project area was characteristic of a heavily disturbed lot. A total of 11 plant species and 6 wildlife species or their sign were observed during the line transect survey. The study site did not support desert tortoise (*Gopherus agassizii*) habitat. The study site did not support Mohave ground squirrel (*Xerospermophilus mohavensis*) habitat. No burrowing owls (*Athene cunicularia*) or their sign were observed within the study site. California ground squirrel (*Citellus beecheyi*) burrows were observed within the study site. California ground squirrel burrows can provide future potential cover sites for burrowing owls. No desert kit foxes (*Vulpes macrotis*) or their sign were observed within the study site. Desert kit foxes would not be expected to use this study site due to its fenced location. The study area does not provide forage for Swainson's hawks (*Buteo swainsoni*) or other raptors due to the low wildlife presence. The study site did not provide potential nesting sites for migratory birds. No sensitive plants, specifically Joshua tree (*Yucca brevifolia*), alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*) are expected to occur within the study area due to the lack of suitable habitat. No other state or federal listed species are expected to occur within the study area. No ephemeral streams or washes occur within the study area. A channelized wash/storm drain was present outside of the fenced boundary of the study site. A pipe from a dirt parking area along the eastern boundary was observed within the study site. This pipe appeared to have been used to dump water into the study site.

Recommended Protection Measures:

A burrowing owl survey should be accomplished within 30 days prior to construction activities to ensure burrowing owls have not moved into the study area. If burrowing owls are discovered the guidance outlined in the California Department of Fish and Wildlife titled "Staff Report on Burrowing Owl Mitigation" will be used for addressing burrowing owl issues on the study site (California Department of Fish and Game 2012).

Based on the condition of the habitat, the small size of the study area, surrounding land use, and lack of sensitive wildlife sign, no other protection measures are recommended.

Significance: Given the adjacent land uses, and highly impacted condition of the study area this project would not result in an adverse impact to biological resources.

Development has been proposed for APN 3090-431-07 (Figure 1). Development may include installation of access roads, parking, and utilities (water, sewer, electric, etc.). The entire project area would be graded prior to construction activities.

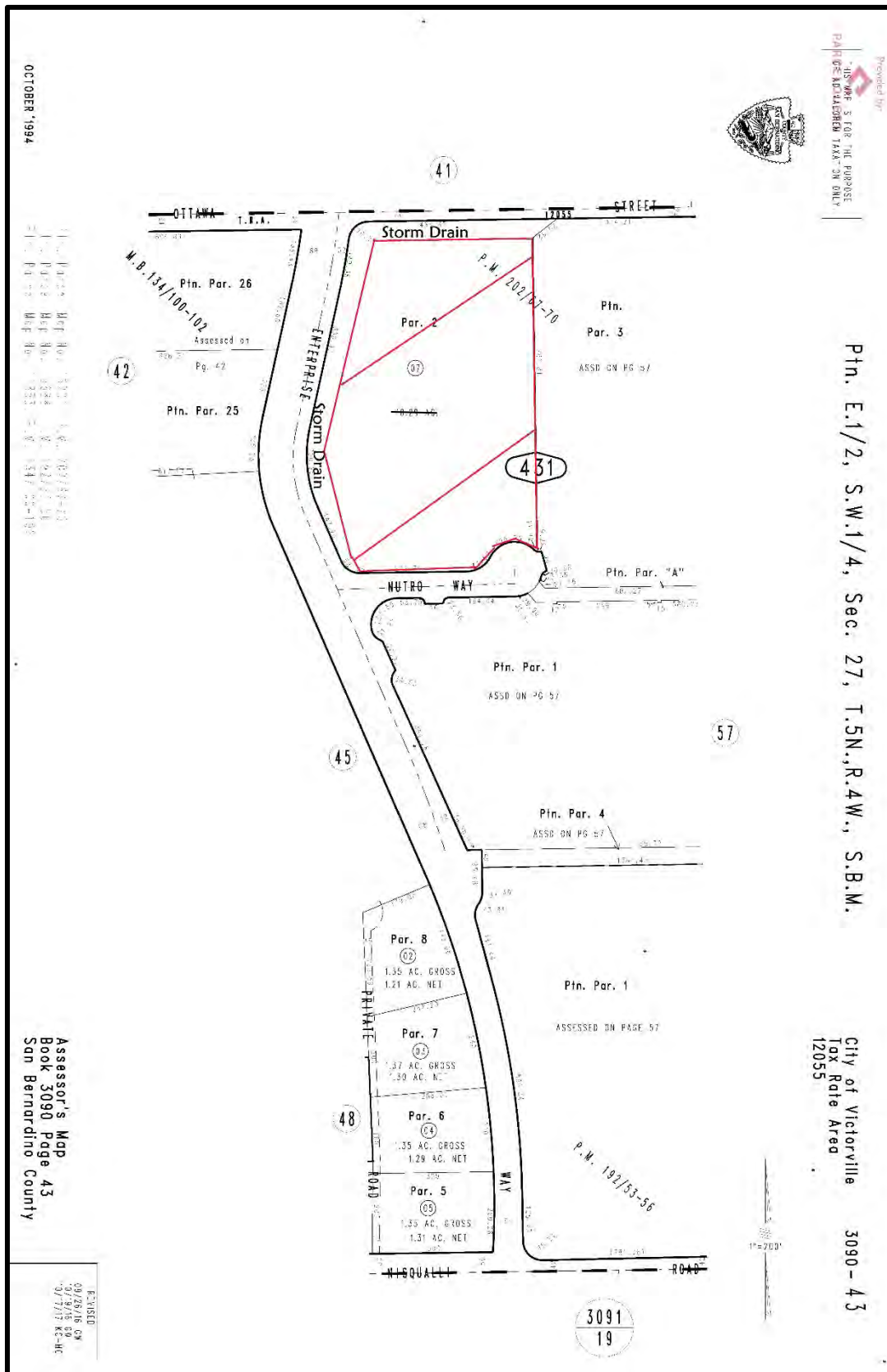


Figure 1. Location of proposed project site as depicted on APN map.

An environmental analysis should be conducted prior to any development project. An assessment of biological resources is an integral part of environmental analyses (Gilbert and Dodds 1987). The purpose of this study was to provide an assessment of biological resources potentially occurring within or utilizing the proposed project area. Specific focus was on the presence/absence of protected, rare, threatened, and endangered species of plants and wildlife that would be expected to use the existing habitat. Species of concern included the desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), desert kit fox (*Vulpes macrotis*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), Joshua tree (*Yucca brevifolia*), alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*).

Study Area

The approximately 7 acres (2.8 ha) study area was located south of Ottawa Street, and east of Enterprise Way, T5N, R4W, a portion of the NE1/4 of the SW1/4 of the of Section 27, S.B.B.M. (Figures 2 and 3). The study site had a chain link fence along the west and north boundaries. A wrought iron fence existed along the eastern boundary. A paved road existed along the southern boundary. A sidewalk existed west and north of the chain link fence. A channelized wash/storm drain existed west and north of the sidewalk. Enterprise Way was west of the study site. Ottawa Street was north of the study site. A wrought iron fence and commercial storage buildings existed adjacent to the eastern boundary. Industrial buildings were present to the east and south of the study site.

Methods

A line transect survey was conducted to inventory plant and wildlife species occurring within the proposed project area (Cooperrider et al. 1986, Davis 1990). Line transects were walked in a north-south orientation. Line transects were approximately 660 feet (201 m) long and spaced about 100 feet (30 m) apart (U.S. Fish & Wildlife Service 2010).

All observations of plant and animal species were recorded in field notes. Field guides were used to aid in the identification of plant and animal species (Arnett and Jacques 1981, Borror and White 1970, Burt and Grossenheider 1976, Gould 1981, Jaeger 1969, Knobel 1980, Robbins et al. 1983, Stark 2000,). Observations were aided with the use of 10x42 binoculars. Observations of animal tracks, scat, and burrows were also utilized to determine the presence of wildlife species inhabiting the proposed project area (Cooperrider et al. 1986, Halfpenny 1986, Lowrey 2006, Murie 1974). The USGS topographic map of the study area and surrounding vicinity was reviewed. Photographs of the study site were taken (Figures 4 and 5).

Results

A total of 4 line transects were walked on 24 November 2021. Weather conditions consisted of warm temperature (estimated 60 degrees F), 0% cloud cover, and moderate wind. Sandy clay loam surface soil texture was present in the north half of the study site. Most of the south half of the study site was covered with gravel. Topography of the study area was

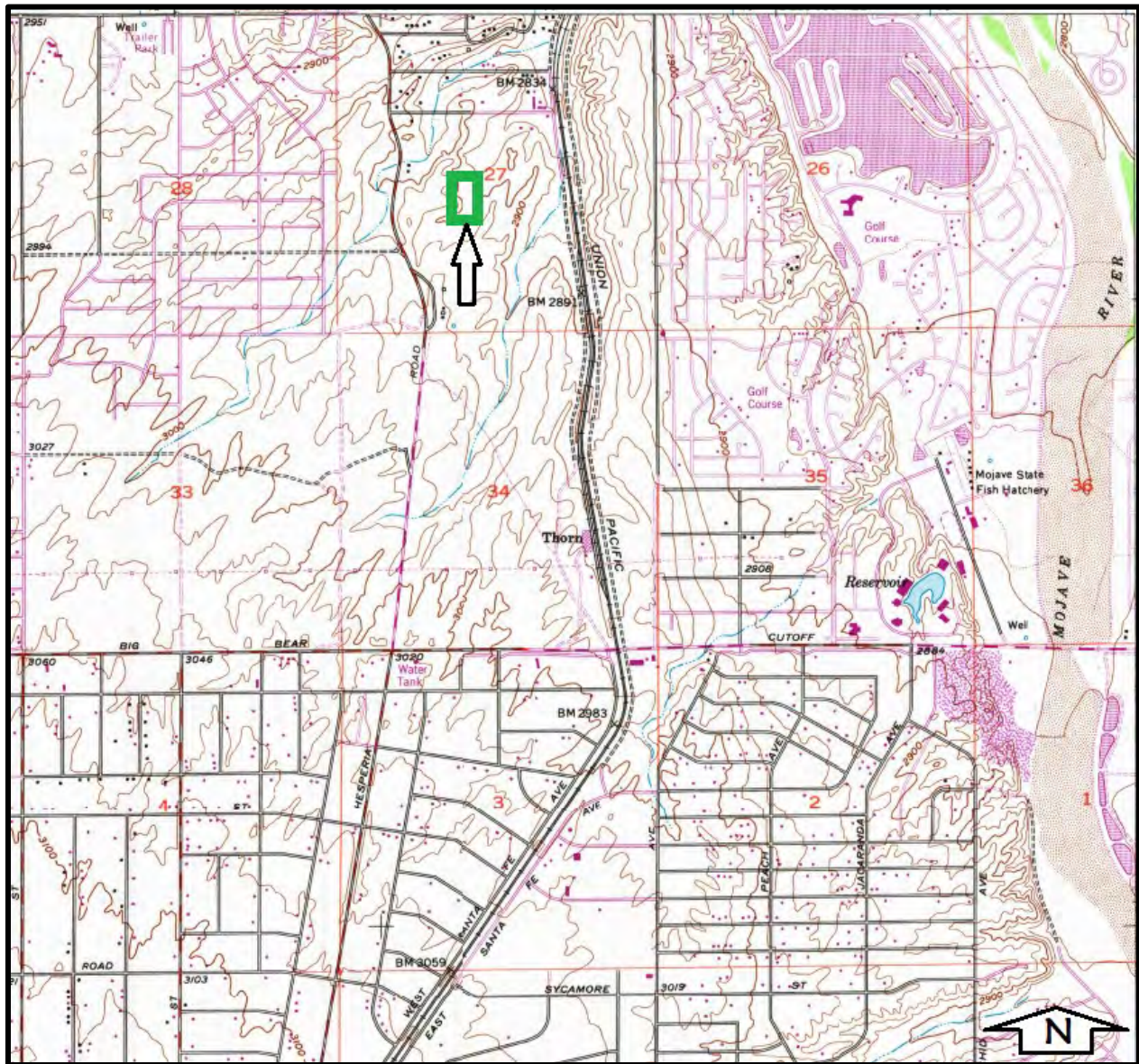


Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, Hesperia, California, 7.5' 1980.



Figure 3. Approximate location of study area, Google Earth, April 2018, showing surrounding land use.



Figure 4. Representative photographs of the study area. Top photograph of site is from the southern boundary. Bottom photograph is within the northern portion of the site.

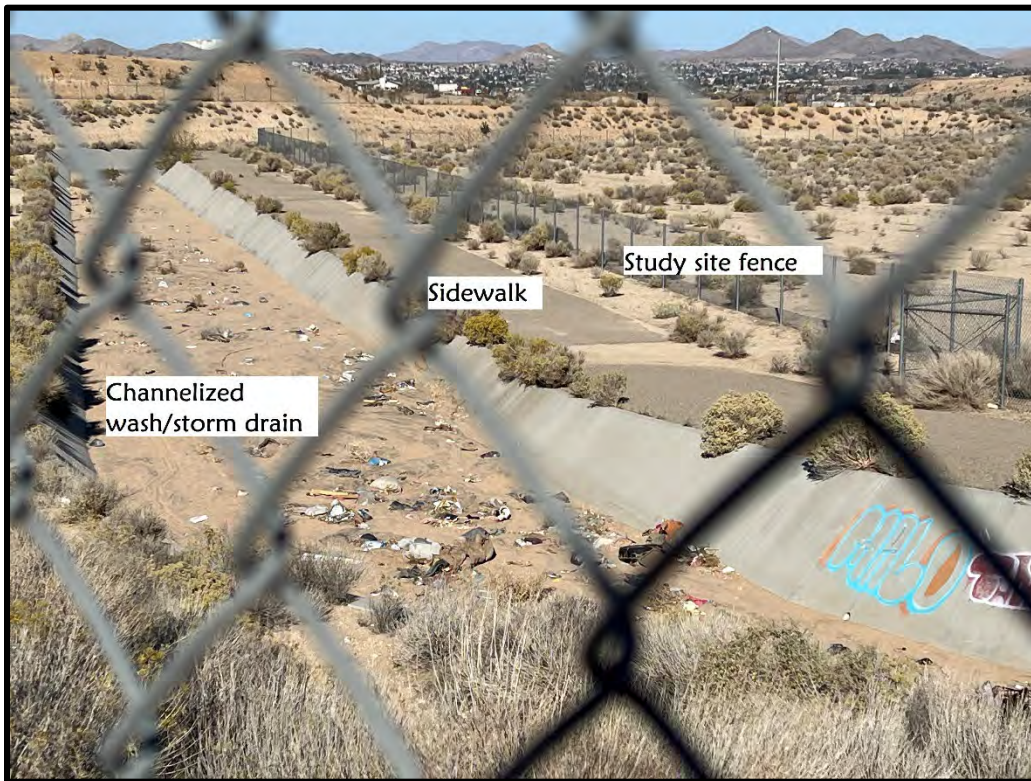


Figure 5. Representative photographs of the study area. Top photograph of site shows pipe used to drain water from adjacent property onto the study site. Bottom photograph shows the channelized wash/storm drainage present along the western and northern boundary of the site.

approximately 2,894 to 2,912 feet (882 to 888 m) above sea level. There were no blue line streams delineated on the U.S.G.S. topographic map within the study area. There were no washes or streams observed within the project site. A channelized wash/storm drain was present outside of the fenced boundary of the study site. A pipe from a dirt parking area along the eastern boundary was observed within the study site. This pipe appeared to have been used to drain water into the study site.

The proposed project area was characteristic of a highly disturbed lot. A total of 11 plant species were observed during the line transect survey (Table 1). The dominant perennial shrub species throughout the study area was rabbit brush (*Chrysothamnus nauseosus*). Annual species were sparse within the study area consisting of primarily weedy and invasive species. No Joshua trees, alkali mariposa lilies, Barstow woolly sunflowers, desert cymopterus, or suitable habitat were observed within the study site.

Six wildlife species or their sign were observed during the line transect survey (Table 2). No desert tortoises or their sign were observed during the field survey. No suitable desert tortoise habitat was observed within the study site. No burrowing owls or their sign were observed within the study site during the field survey. California ground squirrels (*Citellus beecheyi*) and their burrows were observed within the study site. No bird nests were observed within the study area. Vegetation within the study site does not provide suitable nesting habitat. No Swainson's hawk nesting sites were documented within 5 miles (8 km) of the study site (eBird 2022). No desert kit foxes, dens, or tracks were observed within the study site. No suitable Mohave ground squirrel habitat was present within the study site (CDFW 2019).

The project site had been previously graded and the southern half built up in the past. Remnants of a gravel covered area was observed within the northern half of the study site. The study site boundaries consisted of constructed banks. Several dump sites were present within the study site, primarily in the southern and northern boundaries. Scattered litter was observed within the study site.

Discussion

It is likely that some annual species were not visible during the time the field survey was performed. Nearly all the remnant annuals on the study site were invasive or weedy species (Table 1). The study area was highly disturbed from previous impacts. No sensitive plant species are expected to exist within the study site. Although not observed, several wildlife species would be expected to occur within the proposed project area (Table 3).

Human impacts within the study area are expected to continue. Habitat in the general area consisted of an urban environment. Burrowing animals within the proposed project area are not expected to survive construction activities. More mobile species, such as birds, are expected to survive construction activities. Development of this site will result in a minimal loss of cover and foraging opportunities for the common wildlife species occurring within and adjacent to the study area.

Table 1. List of plant species that were observed during the line transect survey of APN 3090-431-07, Victorville, California.

| <u>Common Name</u> | <u>Scientific Name</u> |
|--------------------|--------------------------------|
| Creosote bush | <i>Larrea tridentata</i> |
| Rabbit brush | <i>Chrysothamnus nauseosis</i> |
| Annual burweed | <i>Franseria acanthicarpa</i> |
| Red-stem filaree | <i>Erodium cicutarium</i> |
| Vinegar weed | <i>Trichostema lanceolatum</i> |
| Rattlesnake weed | <i>Euphorbia albomarginata</i> |
| Annual burweed | <i>Franseria acanthicarpa</i> |
| Mustard sp. | Brassicaceae |
| Sahara mustard | <i>Brassica tournefortii</i> |
| Russian thistle | <i>Salsola iberica</i> |
| Cheat grass | <i>Bromus tectorum</i> |

Table 2. List of wildlife species, or their sign, that were observed during the line transect survey of APN 3090-431-07, Victorville, California.

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------------|----------------------------|
| California ground squirrel | <i>Citellus beecheyi</i> |
| Desert cottontail | <i>Sylvilagus auduboni</i> |
| Black-tailed jackrabbit | <i>Lepus californicus</i> |
| Common raven | <i>Corvus corax</i> |
| Harvester ants | Order: Hymenoptera |
| Ants | Order: Hymenoptera |

Table 3. List of wildlife species that may occur within the proposed study area, APN 3090-431-07, Victorville, California.

| <u>Common Name</u> | <u>Scientific Name</u> |
|--------------------|-------------------------------|
| Rodents | Order: Rodentia |
| Deer mouse | <i>Peromyscus maniculatus</i> |
| Rock dove | <i>Columba livia</i> |
| Horned lark | <i>Eremophila alpestris</i> |
| Fly | Order: Diptera |
| Spider | Order: Araneida |

The desert tortoise is a state endangered and federal listed threatened species. The proposed project area was located within the geographic range of the desert tortoise. The proposed project site was not located in critical habitat designated for the Mojave population of the desert tortoise. Suitable habitat for desert tortoise was not present within or adjacent to the study area. Desert tortoises are not present within the study area. No protection measures are recommended for desert tortoises.

The Mohave ground squirrel (MGS) is a state listed threatened species. The study area was located within the geographic range of MGS. MGS habitat consists of a variety of desert scrub habitats, to include a specific assemblage of required shrub and annual species within those habitats, none of which occur any longer within the project site (Figures 4 and 5, Table 1). MGS foraging behavior changes depending on season and whether it has been a dry or wet season. Stems and leaves from shrubs are necessary to provide forage during times annuals are unavailable. The lack of shrubs within and around the study site preclude MGS presence. A table listing MGS habitats and a discussion of required shrubs and annuals can be found in the 2019 CDFW publication titled "A Conservation Strategy for the Mohave Ground Squirrel." California ground squirrels (CGS) are present within the study site. Since MGS prefer natural habitats, interactions with CGS would not occur often (CDFW 2019). CGS are larger and more aggressive than MGS which would seem to indicate they would be unlikely to coexist (CDFW 2019). No MGS are expected to be present within the study area. Given the lack of suitable habitat, presence of CGS, lack of adjacent habitat, no protection measures are recommended for MGS.

Burrowing owls are considered a species of special concern by the California Department of Fish and Wildlife (CDFW). No burrowing owls or their sign were observed during the field survey. CGS burrows provide future potential suitable cover sites for burrowing owls.

The study site was graded, and developed prior to 2005. The study site was constructed banks approximately 8 feet (2.4 m) high along the east and south boundaries. Aerial photographs show vehicles parked in the study area. The study site no longer appears to be used as a parking area and showed signs it was revegetating, primarily with rabbit brush and invasive weeds. No suitable habitat for sensitive plant species was present within the study site. Based on the results of the field survey sensitive plant species are not expected to occur within the study area and no protection measures are recommended. No other state or federal listed species are expected to occur within the proposed project area (California Department of Fish and Wildlife 2020, 2021, Smith and Berg 1988, U.S. Fish & Wildlife Service 2016).

Landscape design should incorporate the use of native plants to the maximum extent feasible. Native plants that have food and cover value to wildlife should be used in landscape design (Adams and Dove 1989). Diversity of native plants should be maximized in landscape design (Adams and Dove 1989).

Recommended Protection Measures:

A burrowing owl survey should be accomplished within 30 days prior to construction activities to ensure burrowing owls have not moved into the study area. If burrowing owls are discovered the guidance outlined in the California Department of Fish and Wildlife titled “Staff Report on Burrowing Owl Mitigation” will be used for addressing burrowing owl issues on the study site (California Department of Fish and Game 2012).

Based on the condition of the habitat, the small size of the study area, surrounding land use, and lack of sensitive wildlife sign, no other protection measures are recommended.

Significance: Given the adjacent land uses, and highly impacted condition of the study area this project would not result in an adverse impact to biological resources.

Literature Cited

- Adams, L.W. and L.E. Dove. 1989. Wildlife reserves and corridors in the urban environment. National Institute for Urban Wildlife, Columbia, MD. 91pp.
- Arnett, R.H., Jr. and R.L. Jacques, Jr. 1981. Simon and Schuster’s guide to insects. Simon and Schuster, Inc. New York. 511pp.
- Borror, D.J. and R.E. White. 1970. A field guide to insects. Houghton Mifflin Company, Boston. 404pp.
- Burt, W.H. and R.P. Grossenheider. 1976. A field guide to the mammals. Houghton Mifflin Company, Boston. 289pp.
- California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. Calif. Dept. of Fish and Wildlife, Wildlife Branch, Sacramento, CA. 36pp.
- California Department of Fish and Wildlife. 2020. State and federally listed endangered and threatened animals in California. Calif. Dept. of Fish and Wildlife California Natural Diversity Database, Sacramento, CA. 32pp.
- California Department of Fish and Wildlife. 2021. State and federally listed endangered, threatened, and rare plants of California. Calif. Dept. of Fish and Wildlife California Natural Diversity Database, Sacramento, CA. 25pp.
- Cooperrider, A.L., Boyd, R.J. and H.R. Stuart, Eds. 1986. Inventory and monitoring of wildlife habitat. U.S. Dept. of Inter., Bur. Land Manage. Service Center, CO. 858pp.
- Davis, D.E. 1990. Handbook of census methods for terrestrial vertebrates. CRC Press, Boca Raton, FL. 397pp.
- eBird. 2022. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: <http://www.ebird.org>. (Accessed: 19 January 2022)
- Gilbert, F.F. and D.G. Dodds. 1987. The philosophy and practice of wildlife management. Krieger Publishing Company, Malabar, FL. 279pp.
- Gould, F.W. 1981. Grasses of southwestern United States. Univ. of Arizona Press, Tucson, AZ. 343pp.
- Halfpenny, J. 1986. A field guide to mammal tracking in western America. Johnson Publishing Company, Boulder, CO. 161pp.
- Jaeger, E.C. 1969. Desert wild flowers. Stanford Univ. Press, Stanford, CA. 322pp.

- Knobel, E. 1980. Field guide to the grasses, sedges and rushes of the united states. Dover Publications Inc. New York, NY 83pp.
- Lowery, J.C. 2006. The tracker's field guide. The Globe Pequot Press, Guilford, CT 408pp.
- Murie, O.J. 1974. A field guide to animal tracks. Houghton Mifflin Company, Boston. 375pp.
- Robbins, C.S., Bruun, B. and H.S. Zim. 1983. A field guide to identification: birds of north america. Golden Press, NY. 360pp.
- Smith, J.P., Jr. and K. Berg, Eds. 1988. Inventory of rare and endangered plants vascular plants of california. Calif. Native Plant Society, Special Publication No. 1. Fourth Edition, Sacramento, CA. 168pp.
- Stark, M. 2000. A flower-watchers guide to wildflowers of the western mojave desert. Published by Milt Stark. Lancaster, CA 160pp.
- U.S. Fish & Wildlife Service. 2010. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*), 2010 field season. U.S. Fish & Wildl. Serv., 18pp.
- U.S. Fish & Wildlife Service. 2016. Listed species believed to or known to occur in California. 8pp. http://ecos.fws.gov/tess_public/reports/species-listed-by-state-report?state=CA&status=listed , accessed 22 April 2018.



Bruce Love Consulting

Archaeology-History-Cultural Resources-Native American Consultation

Cultural Resources Report

for

Victorville Warehouse Project

APN-3090-431-07

SE corner of Ottawa Street and Enterprise Way

Victorville, CA

Prepared for:

Duke Engineering
44732 Yucca Ave, Lancaster, CA 93534

Prepared by:

Bruce Love and Alexandra Jonassen
Bruce Love Consulting

December 13, 2021

29709 104th Street East, Littlerock, CA 93543
ph. 661-609-4759
bruce9@gmail.com

Executive Summary

Between October and December 2021, a cultural resources study was performed on APN-3090-431-07, 10.29 acres of vacant land located on the south-east corner of Ottawa Street and Enterprise Way in Victorville, CA in compliance with City of Victorville Department of Planning and San Bernardino County requirements and pursuant to provisions of the California Environmental Quality Act (CEQA). The study includes a Records Search at South Central Coastal Information Center at California State University at Fullerton, a Sacred Lands Search at Native American Heritage Commission in Sacramento, a historic map search, and a walk-over survey.

Although the Records Search results and the Sacred Lands Search results were not received in time to be included in this report, the results of the study are that no “historical resources” or “tribal cultural resources” as defined by CEQA were encountered on or adjacent to the subject property, although final determination on the presence or absence of “tribal cultural resources” in the project area may be made by the City of Victorville by government-to-government consultations with pertinent Native American tribes pursuant to provisions of Assembly Bill 52. In addition, if in the course of grading or construction, cultural remains are inadvertently discovered, work should be diverted while a cultural resource specialist inspects the findings and makes a determination as to their significance.

Introduction

The purpose of this study is to identify any cultural-historical resources within or adjacent to the project area, to assist the City of Victorville in determining whether such resources meet the official definition of “historical resources,” or “tribal cultural resources,” as provided in the California Public Resources Code, in particular CEQA, and to determine if the proposed project will have an effect on those resources, if they exist. According to PRC §5020.1(j), “‘historical resource’ includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.”

Statutes and Guidelines

CEQA guidelines state that the term “historical resource” applies to any such resource listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency (Title 14 CCR §15064.5(a)(1)-(3)).

Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that “generally a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

- (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.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

For “tribal cultural resources,” PRC §21074, enacted and codified as part of a 2014 amendment to CEQA through Assembly Bill 52, provides the statutory definition as follows:

“Tribal cultural resources” are either of the following:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Property Description

APN-3090-431-07, a 10.29-acre portion of vacant land, is located at the SE corner of Ottawa Street and Enterprise Way in Victorville, CA (Figure 1), and lies within the SW ¼ of the NW ¼ of Section 27, Township 4N, Range 4W in the Hesperia, CA 1:24,000 topographic quadrangle (Figure 2). The property has no existing structures and is surrounded by commercial/industrial structures (Figure 3).

Cultural/Historical Context

In the event that historical or archaeological resources are found on the subject property, they would have to be evaluated as to their significance and whether or not they had scientific or cultural value. Such an evaluation would take place against the cultural/historical background of the region.

Archaeological Context

To categorize Native American cultures prior to European contact, archaeologists have devised chronological frameworks on the basis of artifacts and site types that go back some 12,000 years. One of the more frequently used time frames for the Mojave desert divides the region's prehistory into five periods marked by changes in archaeological remains reflecting different ways in which Native peoples adapted to their surroundings. Based on Warren

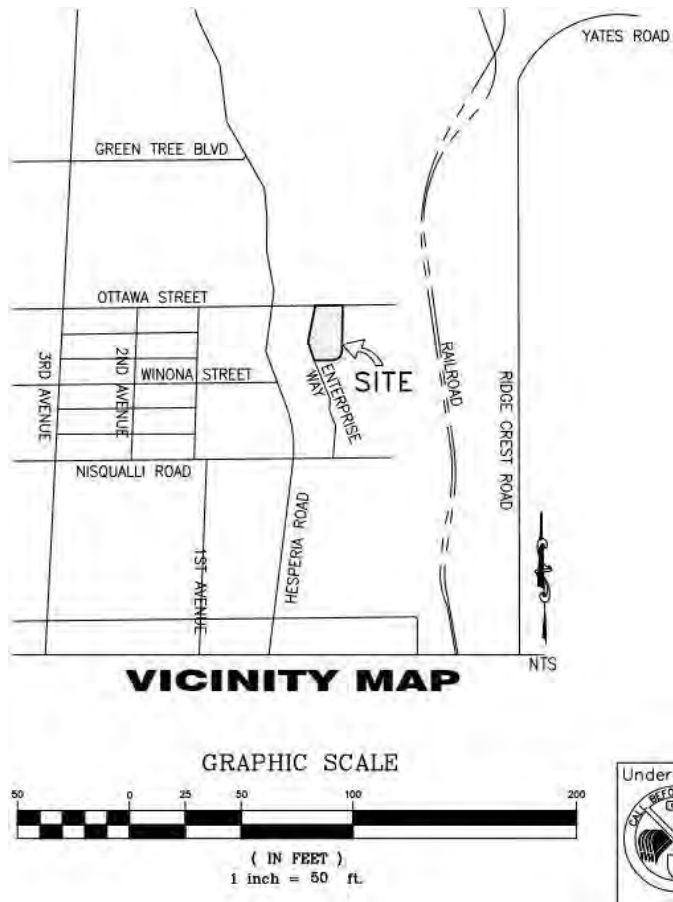


Figure 1: Vicinity Map (source: Duke Engineering).



Figure 2: Property plotted onto USGS Topographic Map 7.5 minute series, Hesperia, CA 1:24,000 quadrangle(source: <https://ngmdb.usgs.gov> [modified and annotated]).



Figure 3: Aerial view of property (source: LoopNet.com).

(1984) and Warren and Crabtree (1986), the five periods are the Lake Mojave Period (12,000 years to 7,000 years ago), the Pinto Period (7,000 years to 4,000 years ago), the Gypsum Period (4,000 years to 1,500 years ago), the Saratoga Springs Period (1,500 years to 800 years ago), and the Protohistoric Period (800 years ago to European contact).

Ethnohistorical Context

The area occupied by present-day City of Victorville was an area primarily inhabited by the Serrano Indians, whose homeland was and still is the San Bernardino Mountains and northern foothills of the San Gabriel Mountains (Bean and Smith 1978:570).

The Serrano are a small ethnic nationality whose name derives from the Spanish term meaning mountaineer or highlander. Serrano groups had a large territory, spanning the San Bernardino mountains east of Cajon Pass, at the base and north of these mountains within the desert near Victorville, eastward as far as Twentynine Palms, and south in the Yucaipa Valley (Bean and Smith 1978:570). Most villages were in the foothills, and some were located on the desert floor near water sources. The Serrano practices a hunter-gatherer subsistence strategy with some occasional fishing. Acorns and pinyon nuts were harvested by foothill groups and

honey mesquite and pinyon nuts, yucca roots, mesquite, and cacti fruits were consumed by desert dwellers. Game included deer, mountain sheep, antelope, rabbits, and quail.

Similarly, to other southern California native groups, shells, wood, bone, stone, and plant fibers were used to create tools including basketry. Contact with Europeans is thought to have occurred as early as 1771 when the San Gabriel mission was established, but Spanish influence increased about 1819 when a colonial *asistencia* or mission outlier was built near Redlands. During this period till 1834, the western Serrano were removed to the missions.

In 1975, it is stated that most Serrano then lived within the Morongo and San Manuel reservations (Bean and Smith 1978:573). Many other southern Californian tribes claim relations to them today.

Historical Context

The history of today's City of Victorville first began in 1885, at which point it was known as Victor. It was named after Jacob Nash Victor, a construction superintendent for the Santa Fe Railroad. A railroad station was constructed approximately one mile northwest of the narrows of the Mojave River. On January 18, 1886, the city's layout was planned, and the area encompassed approximately 200 acres.

The presence of water and rich lands led to agricultural development shortly after the establishment of the railroad depot. Near the turn of the century, large deposits of limestone and granite were discovered, and the cement manufacturing industry emerged. In 1901, the community's name was changed from "Victor" to "Victorville" due to the confusion associated with the community of Victor, Colorado.

In 1926, U.S. Route 66 was established, and a portion of the highway provided a transportation corridor through Victorville. During World War II, on July 23, 1941, initial construction of Victorville Army Airfield, later renamed George Air Force Base, started. The base was completed May 18, 1943. On January 5, 1989, the Secretary of Defense announced the closure of George Air Force Base under the Base Closure and Realignment Act. The base was deactivated December 15, 1992. The former military base was annexed into the City July 21, 1993 and has been renamed Southern California Logistics Airport. Since then, Victorville has had a great housing expansion and as well as continuing development of industrial production (City of Victorville 2021).

Methods

Records Search

A records search was requested from the South Central Coastal Information Center at California State University at Fullerton, which is part of the statewide system of historical resource inventories. The S.C.C.I.C. contains records and reports for San Bernardino County (as well as three other counties). Information Center staff inspect files for previously recorded archaeological resources, historical resources, and previously completed studies performed within a half-mile radius of the subject property.

Historic Map Search

The following historic maps were searched for evidence of old structures or features that may once have been present on or adjacent to the property:

1901 Southern California Sheet No. 1, CA Quadrangle 1:25,000 scale
1902 Hesperia, CA Quadrangle, 1:625,000 scale
1904 Southern California Sheet No. 1, CA Quadrangle, 1:25,000 scale
1942 Hesperia, CA Quadrangle, 1:625,000 scale
1953 San Bernardino, CA Quadrangle, 1:25,000 scale
1956 Hesperia, CA Quadrangle, 1:24,000 scale
1957 San Bernardino, CA Quadrangle, 1:25,000 scale
1958 San Bernardino, CA Quadrangle, 1:25,000 scale
1959 San Bernardino, CA Quadrangle, 1:25,000 scale
1966 San Bernardino, CA Quadrangle, 1:25,000 scale
1982 San Bernardino, CA Quadrangle, 1:100,000 scale
2012 Hesperia, CA Quadrangle, 1:24,000 scale
2015 Hesperia, CA Quadrangle, 1:24,000 scale
2018 Hesperia, CA Quadrangle, 1:24,000 scale

Sacred Lands Search

A Sacred Lands Search request was submitted by Bruce Love Consulting to the office of the Native American Heritage Commission in Sacramento on November 10, 2021. The NAHC

was established by the State legislature in 1976 to protect sacred lands and promote free expression of Native American religious practices. Consultation with the NAHC has been adopted by the City Victorville as a requisite part of cultural resource studies for land development.

Walk-over Survey

The property was visually inspected on October 26th, 2021 by Bruce Love and Alexandra Jonassen (see Appendix 1 for personnel qualifications) walking parallel east-west transects at 7-meter (24-foot) intervals. The purpose of the inspection was to identify any resources older than 50 years that could possibly be considered historical or archaeological in nature.

Results

Records Search Results

As of this writing, nine weeks since the records search request was submitted, the results have not been received. Due to the extended delay in receiving the records search results, Bruce Love spoke with Victorville planner Mike Szarzynski who in turn spoke with planner Travis Clark and they agreed that Bruce Love Consulting should submit this current cultural resources report without the records search results. At a later date when the records search results are received, an addendum can be submitted to the report.

Historic Map Search Results

A search of historic maps found no structures in the subject property during any part of the 20th century based on the map search alone. Beginning with the 1901 Southern California Sheet No. 1, CA 1:25,000 scale quadrangle, a road can be seen running to the west, adjacent to the project area. This road is likely an early version of the current Hesperia Road, which still runs across the area today. To the east of the project area was the Southern California Rail Road line which is also still present today (see Figure 4). No additional structures or features were found adjacent to the property area.

Sacred Lands Search Results

The records search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was submitted on November 10, 2021. The City of Victorville may do the additional Native American contacts as part of the AB 52 process, which addresses “tribal cultural resources.” As of this writing no results have been received for the Sacred Lands Search.

Walk-over Survey

The property was visually inspected on October 26th, 2021 by Bruce Love and Alexandra Jonassen (see Appendix 1 for personnel qualifications) walking parallel east-west transects at 7-meter (24-foot) intervals. The purpose of the inspection was to identify any resources older than 50 years that could possibly be considered historical or archaeological in nature.

Results

Records Search Results

As of this writing, nine weeks since the records search request was submitted, the results havenot been received. Due to the extended delay in receiving the records search results, Bruce Love spoke with Victorville planner Mike Szarzynski who in turn spoke with planner Travis Clark and theyagreed that Bruce Love Consulting should submit this current cultural resources report without the records search results. At a later date when the records search results are received, an addendum canbe submitted to the report.

Historic Map Search Results

A search of historic maps found no structures in the subject property during any part of the 20th century based on the map search alone. Beginning with the 1901 Southern California Sheet No. 1, CA 1:25,000 scale quadrangle, a road can be seen running to the west, adjacent to the project area. This road is likely an early version of the current Hesperia Road which still runs across the area today. To the east of the project area was the Southern California Rail Road line which is also still present today (see Figure 4). No additional structures or features were found adjacent to the property area.

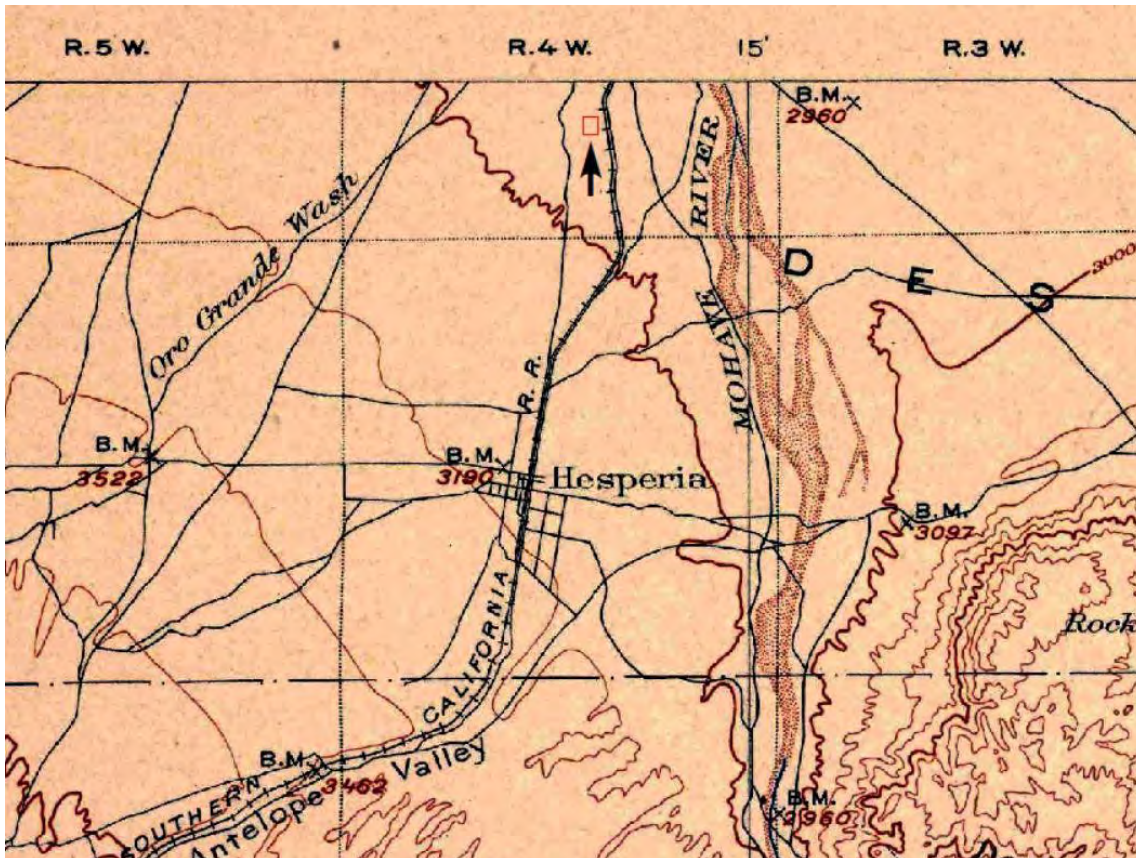


Figure 4: 1901 Southern California Sheet No. 1, CA 1:25,000 scale topographic quadrangle showing locations of Hesperia Road (to the west) and the Southern California Rail Road line (to the east). Subject property, red square in the upper middle part of the map, is indicated by an arrow.

Sacred Lands Search Results

The records search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was submitted on November 10, 2021. The City of Victorville may do the additional Native American contacts as part of the AB 52 process, which addresses “tribal cultural resources.” As of this writing no results have been received for the Sacred Lands Search.

Walk-over Survey Results

During the walk-over survey, no artifacts or features were noted that could be considered historical or archaeological in nature. The subject property appears to have been graded over previously, leveling the landscape. Gravel was present across much of the center of the parcel (Figure 5). It appears that this grading and laying down of gravel took place several years ago, as scrub brush and other plant life have since grown to some height across the area (Figure 6). Scattered throughout the property are various refuse dumps including construction and household debris. The oldest cans and bottles that were observed appeared to be from the 1970s and therefore not old enough to be considered historical.



Figure 5: Gravel in center of parcel.



Figure 6: Scrub brush and plant life over parcel, facing south.

Final Determination

Based on the findings outlined in this report, which include a historic map search and a walk-over inspection, and in light of the criteria listed above (see *Statutes and Guidelines*), the present study concludes **no “historical resources,”** as defined above, exist within or adjacent to the project area, although it must be noted that no results have been received for the Records Search or Sacred Lands Search. Nor have any “tribal cultural resources” been identified, although the final determination on the presence or absence of “tribal cultural resources” in the project area may be made by the City of Victorville by government-to-government consultations with pertinent Native American tribes pursuant to provisions of Assembly Bill 52.

References

Bean, Lowell John Bean and Charles R. Smith

1978 Serrano. In Robert F. Heizer (ed.): *Handbook of North American Indians*, Vol. 8. California, pp. 570-574. Smithsonian Institution, Washington, D.C.

Blackburn, Thomas C., and Lowell John Bean

1978 Kitanemuk. In Robert F. Heizer (ed.): *Handbook of North American Indians*, Vol. 8. California, pp. 564-569. Smithsonian Institution, Washington, D.C.

City of Victorville

2021 City of Victorville webpage: Our History. (<https://www.victorvilleca.gov/our-city/about-victorville/our-history>).

King, Chester, and Thomas C. Blackburn

1978 Tataviam. In Robert F. Heizer (ed.): *Handbook of North American Indians*, Vol. 8 California, pp. 535-537. Smithsonian Institution, Washington, D.C.

Warren, Claude N.

1984 The Desert Region. In Michael J. Moratto (ed.): *California Archaeology*, pp. 339-430. Academic Press, Orlando, FL.

Warren, Claude N., and Robert H. Crabtree

1986 Prehistory of the Southwestern Area. In Warren L. d'Azevedo (ed.): *Handbook of North American Indians*, Vol. 11 Great Basin, pp. 183-193. Smithsonian Institution, Washington, D.C.

Zigmond, Maurice L

1986 Kawaiisu. In Warren L. D'Azevedo (ed.): *Handbook of North American Indians*, Vol. 11. Great Basin, pp. 398-411. Smithsonian Institution, Washington, D.C.

Appendices

Appendix 1: Personnel Qualifications

CV/Resume

Bruce Love, Ph.D. RPA¹

EDUCATION

1986 Ph.D. Anthropology, UCLA
1981 M.A. Anthropology, UCLA
1976 B.A. Anthropology, UCLA

CURRENT POSITIONS

Owner and Principal Investigator: BRUCE LOVE CONSULTING, a Cultural Resource Management company, Littlerock, CA

President: ARC (Anthropological Research Contributions), a 501(c)(3) non-profit corporation dedicated to doing and publishing anthropological research in California and Mesoamerica.

Co-publisher: Mesoamerican Research Contributions, a web site and blog, <https://brucelove.com>

PAST POSITIONS

1993-2002 Owner and Principal: CRM TECH, a Cultural Resource Management company, Riverside, CA

1990-1993 Director: Archaeological Research Unit, Anthropology Department, University of California, Riverside

1989-1990 Coordinator: Archaeological Information Center, UCLA

1987-1990 Owner and Principal: Pyramid Archaeology, Palmdale, CA

REPORT PRODUCTION

Since 1987 Love has written more than 1,000 CRM reports ranging from simple land surveys to complex multi-phase testing and mitigation programs.

RECENT VOLUNTEER WORK

Love currently serves as Native American Tribal Liaison for the City of Lancaster Museum of Art and History (MOAH). He also works with archaeology students at Antelope Valley College, Lancaster, CA, doing survey and analyzing collections; he volunteers with the Antelope Valley Indian Museum, a California State Park; and he is Historian for the local Juniper Hills Community Association where he lives.

In 2017 Love curated an archaeological exhibit at the Museum of Art and History (MOAH) in Lancaster, and organized *Torngava*, an all-day Native American celebration.

MEMBERSHIPS

Society for American Archaeology
Society for California Archaeology
Register of Professional Archaeologists

¹ Register of Professional Archaeologists

**Resume Alexandra Karina
Jonassen**

EDUCATION

Pursuing Master's Degree in Anthropology, Fall 2021-
Present California State University Fullerton

Pursuing Certificate in Geographic Information Systems, 2020-
Present Antelope Valley College, expected to graduate Fall
2021.

Bachelor's Degree in Anthropology and Art History, 2018-2020
University of California Riverside, Summa Cum Laude, Cumulative GPA: 3.93.

WORK EXPERIENCE

May 17th, 2021- October 15th, 2021

Archaeological Field Technician at Piute Ponds
Project, Edwards AFB, CA CEMML (Center for the
Environmental Management of Military Lands) Under
Dr. Bruce Love, Ph.D.
Colorado State University, Fort Collins, CO 80523-1490

December 3rd, 2020- May 14th, 2021

Archaeological Field Technician at Edwards Solar Project, Edwards AFB,
CA Statistical Research Inc.
Under Dr. Scott Kremkau, Ph.D.,
RPA 21 W. Stuart Ave. Redlands,
CA 92374

August 7, 2020

Archaeological Field Technician Construction Monitoring, San Jacinto, CA
Scientific Resource
Surveys Under Matthew
A. Bost, Ph.D.
Consulting Archaeologist and Project Manager, SRSINC

Sept. 28, 2019-
Sept. 18, 2020

Eastern Information Center
Officer
Dept. of Anthropology University of California
Riverside Riverside, CA 92521-0418

ARCHAEOLOGICAL LABORATORY EXPERIENCE

2019 El Palmar Lowland Maya Archaeological Site, student archaeologist, excavation, and
recording.

Kiché Las Pailas, Campeche, México
Project director: Dr. Kenichiro
Tsukamoto

2017-2018 Antelope Valley College, reorganized laboratory collection artifacts and records, analyzed
lithics Laboratory director: Dr. Darcy Wiewall

SKILLS AND TRAINING

| | |
|------|--|
| 2021 | Experience in setting up and collecting data using ArcCollector and Avenza programs on iPad. Entered data into geodatabase and delivered to Edwards Airforce Base GIS department. Created all maps of sites within project area. |
| 2020 | Experience in Excel and ArcMap 10.8.1 software to create a digital database and several maps outlining the major Antelope Valley College Archaeological Sites and nearby ecological resources. |
| 2020 | Use of Adobe Illustrator to digitally draw structures and ceramics from El Palmar site, Mexico. |



Bruce Love Consulting
Archaeology-History-Cultural Resources-Native American Consultation

ADDENDUM

Date: January 11, 2022

Re: Cultural Resources Report dated Dec. 13, 2021

Subject: APN 3090-431-07

Location: SE corner of Ottawa Street and Enterprise Way, Victorville, CA

Client: Duke Engineering

Background: Under verbal agreement with Victorville Planners Mike Szarzynski and Travis Clark in December 2021, a Cultural Resource Report for the subject property, dated Dec. 13, 2021, was submitted prior to receiving the Records Search results or the Sacred Lands Search results due to the extended delay in receiving the results of those searches.

Since that time, the results have come in (Records Search Jan. 10, 2022; Sacred Lands Search Dec. 27, 2021). The Records Search shows negative results for cultural resources and thus the findings of the Dec. 13, 2021, cultural resources report have not changed and remain valid regarding cultural resources.

However, the Sacred Lands Search letter came back positive (see attached) probably due the property's close proximity to the Mojave River. The response letter recommends consultation with the Chemehuevi Indian Tribe and San Manuel Band of Mission Indians. Such consultation would be the responsibility of the City of Victorville by government-to-government consultation pursuant to provisions of Assembly Bill 52.

Submitted by:

Bruce Love, Ph.D., R.P.A.

Ref: BLC-108

29709 104th Street East, Littlerock, CA 93543
hm 661-944-1685 cel 661-609-4759
brucelove9@gmail.com



Bruce Love Consulting
Archaeology-History-Cultural Resources-Native American Consultation



STATE OF CALIFORNIA

Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

December 27, 2021

Bruce Love
Bruce Love Consulting

Via Email to: bruce9@gmail.com

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: BLC 108 Project, San Bernardino County

Dear Mr. Love:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Chemehuevi Indian Tribe and the San Manuel Band of Mission Indians on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological information center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may 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 or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment



Bruce Love Consulting
Archaeology-History-Cultural Resources-Native American Consultation

Native American Heritage Commission
Native American Contact List
San Bernardino County
12/27/2021

Chemehuevi Indian Tribe

Sierra Pencille, Chairperson
P.O. Box 1976 1990 Palo Verde Drive Chemehuevi
Havasupai Lake, CA, 92363
Phone: (760) 858 - 4219
Fax: (760) 858-5400
chairman@cit-nsn.gov

Morongo Band of Mission Indians

Robert Martin, Chairperson
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Morongo Band of Mission Indians

Ann Brierty, THPO
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Quechan Tribe of the Fort Yuma Reservation

Manfred Scott, Acting Chairman
Kwts'an Cultural Committee
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

Quechan Tribe of the Fort Yuma Reservation

Jill McCormick, Historic
Preservation Officer
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

San Fernando Band of Mission Indians

Donna Yocum, Chairperson
P.O. Box 221838 Kitanemuk
Newhall, CA, 91322 Vanyume
Phone: (503) 539 - 0933 Tataviam
Fax: (503) 574-3308
ddyocum@comcast.net

San Manuel Band of Mission Indians

Jessica Mauck, Director of
Cultural Resources
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Jessica.Mauck@sanmanuel-nsn.gov

Serrano Nation of Mission Indians

Wayne Walker, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Serrano Nation of Mission Indians

Mark Cochran, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

Twenty-Nine Palms Band of Mission Indians

Anthony Madrigal, Tribal Historic
Preservation Officer
46-200 Harrison Place Chemehuevi
Coachella, CA, 92236
Phone: (760) 775 - 3259
amadrigal@29palmsbomi-nsn.gov

This list is current only as of the date of this document. 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 assessment for the proposed BLC 108 Project, San Bernardino County.

PROJ-2021-
006022

12/27/2021 04:06 PM

1 of 2

29709 104th Street East, Littlerock, CA 93543
hm 661-944-1685 cel 661-609-4759
bruceLove9@gmail.com



Bruce Love Consulting
Archaeology-History-Cultural Resources-Native American Consultation

Native American Heritage Commission
Native American Contact List
San Bernardino County
12/27/2021

**Twenty-Nine Palms Band of
Mission Indians**

Darrell Mike, Chairperson
46-200 Harrison Place
Coachella, CA, 92236
Phone: (760) 863 - 2444
Fax: (760) 863-2449
29chairman@29palmsbomi-
nsn.gov

Chemehuevi

This list is current only as of the date of this document. 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 assessment for the proposed BLC 108 Project, San Bernardino County.

PROJ-2021-
005022

12/27/2021 04:06 PM

2 of 2

29709 104th Street East, Littlerock, CA 93543
hm 661-944-1685 cel 661-609-4759
bruce love9@gmail.com

Reyes Holdings, LLC

APN: 3090-431-07
Victorville, CA 92395

HYDROLOGY STUDY



Prepared For:

Reyes Holdings, LLC
APN 3090-431-07
Victorville, San Bernardino County, California

Duke Engineering
44732 Yucca Avenue
Lancaster, Ca 93534
Phone 661-952-7918

Date: 1/18/2022

Table of Contents

| | |
|---------------------------------------|----|
| Introduction | 3 |
| Project Location | 3 |
| Rainfall Data | 3 |
| Basin Sizing Calculations..... | 3 |
| Storm Drain Sizing Calculations | 3 |
| Conclusion | 4 |
| FIGURE 1:..... | 5 |
| FIGURE 2:..... | 7 |
| FIGURE 3:..... | 9 |
| FIGURE 4:..... | 11 |
| FIGURE 5:..... | 13 |
| FIGURE 6:..... | 15 |

Introduction

The purpose of this report is to address the drainage conditions for the onsite development of a new warehouse and parking lot on the subject property at APN 3090-431-07 in Victorville. The results of this report will quantify the sub area storm runoff, size the above ground detention system, and ribbon gutter to safely convey storm water generated from the project site to above ground detention system. The intention of this hydrology study is to show that the detention system will be able to retain all of the 100-yr 1-hr and 10-yr 24hr storms, and the drainage devices are sized to convey the peak flow from the same storms. The pre-developed flow rates will not be analyzed in this study as all of the post-developed runoff will be retained with the current design.

Project Location

The project site is located on at the corner of Ottawa St and Enterprise Way. The site is 7.5 acres of undeveloped land; there is an existing drainage easement on the eastern and northern portions of the site that will not be considered in the hydrology study.

Rainfall Data

The rainfall data used for sizing the drainage devices is from the San Bernardino County Hydrology Manual. The rainfall data used for the basin sizing calculations is from the NOAA Atlas 14.

Basin Sizing Calculations

The total area of development is 5.2 Acres. The 10-yr, 24-hr storm will produce more runoff than the 100-yr, 1-hr storm. The depth of rainfall for the 10-yr, 24-hr storm is 2.28 inches according to the NOAA Atlas 14 table shown in Figure 1. Based on this data, the maximum runoff produced from the 10-yr storm can be calculated below:

$$\text{Runoff Volume} = (5.2 \text{ ac}) * (2.28 \text{ in}) * (43560 \text{ ft}^2 / 1 \text{ ac}) * (1 \text{ ft} / 12 \text{ in}) = 43,037 \text{ Cu. Ft.}$$

This is a conservative approach as no losses are considered for this calculation. As the basin sizing calculations show in Figure 2, the volume of the basin (62,663 Cu. Ft) is significantly larger than the runoff. The top of the basin is considered to be at an elevation of 90.00 as this is the elevation of the lowest catch basin.

Storm Drain Sizing Calculations

The San Bernardino County Rational Method was used to calculate the peak flow rate for the storm drain system. The peak runoff rate for the 100-year, 1-hr storm was used as it produces a much larger flow rate than the 10-yr, 24-hr storm. See Figure 3 for peak flow rate calculations and Figure 5 for storm drain sizing calculations. These calculations show that the 15" storm drain at a minimum slope of 0.4% has capacity (at 12" deep) for the peak flow rate of 5.6 CFS produced by the 100-yr storm.

Conclusion

In conclusion, the proposed storm drain, and onsite detention basin have been analyzed to ensure proper capacity for a 10-yr, 24-hr and 100-yr, 1-hr storm event. It is recommended that the site be developed with pre-cautions as described in this report to account for the storm water runoff from the areas within the project site.

The onsite storm water detention facility shall comply with the Victorville requirements for storm water volume storage.

It is of our opinion that this analysis sufficiently quantifies the onsite tributary area and calculates the required storm drain devices on-site to safely collect and convey the storm water runoff.

Please contact our office for any additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'RD', with a long horizontal flourish extending to the right.

Ryan Duke P.E.
RCE 79729
Principle Engineer

FIGURE 1:
NOAA Atlas 14



NOAA Atlas 14, Volume 6, Version 2
 Location name: Victorville, California, USA*
 Latitude: 34.4915°, Longitude: -117.2884°
 Elevation: 2914.08 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypanuk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchon

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

| PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹ | | | | | | | | | | |
|--|-------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Duration | Average recurrence interval (years) | | | | | | | | | |
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | 500 | 1000 |
| 5-min | 0.092 (0.078-0.113) | 0.128 (0.108-0.157) | 0.178 (0.146-0.219) | 0.221 (0.180-0.273) | 0.282 (0.223-0.361) | 0.332 (0.257-0.434) | 0.386 (0.291-0.517) | 0.444 (0.326-0.611) | 0.527 (0.371-0.758) | 0.595 (0.405-0.884) |
| 10-min | 0.132 (0.109-0.161) | 0.184 (0.151-0.225) | 0.255 (0.210-0.313) | 0.316 (0.258-0.392) | 0.405 (0.319-0.518) | 0.477 (0.369-0.623) | 0.553 (0.418-0.741) | 0.636 (0.467-0.878) | 0.756 (0.532-1.08) | 0.853 (0.581-1.27) |
| 15-min | 0.160 (0.132-0.195) | 0.222 (0.183-0.272) | 0.309 (0.254-0.379) | 0.383 (0.312-0.474) | 0.489 (0.388-0.626) | 0.576 (0.448-0.753) | 0.669 (0.505-0.896) | 0.770 (0.565-1.06) | 0.914 (0.643-1.31) | 1.03 (0.702-1.53) |
| 30-min | 0.217 (0.179-0.268) | 0.302 (0.249-0.370) | 0.420 (0.345-0.515) | 0.520 (0.425-0.644) | 0.666 (0.525-0.852) | 0.784 (0.606-1.02) | 0.910 (0.687-1.22) | 1.05 (0.788-1.44) | 1.24 (0.875-1.78) | 1.40 (0.955-2.08) |
| 60-min | 0.262 (0.217-0.321) | 0.365 (0.301-0.447) | 0.507 (0.417-0.622) | 0.629 (0.513-0.778) | 0.804 (0.635-1.03) | 0.947 (0.732-1.24) | 1.10 (0.830-1.47) | 1.26 (0.928-1.74) | 1.50 (1.08-2.15) | 1.70 (1.15-2.52) |
| 2-hr | 0.370 (0.305-0.452) | 0.497 (0.410-0.609) | 0.673 (0.554-0.826) | 0.823 (0.672-1.02) | 1.04 (0.820-1.33) | 1.21 (0.939-1.58) | 1.40 (1.05-1.87) | 1.60 (1.17-2.19) | 1.88 (1.32-2.59) | 2.11 (1.43-3.13) |
| 3-hr | 0.446 (0.368-0.545) | 0.594 (0.490-0.727) | 0.796 (0.655-0.978) | 0.969 (0.791-1.20) | 1.22 (0.959-1.55) | 1.41 (1.09-1.85) | 1.62 (1.22-2.17) | 1.85 (1.38-2.54) | 2.16 (1.52-3.10) | 2.42 (1.65-3.59) |
| 6-hr | 0.607 (0.501-0.742) | 0.803 (0.662-0.983) | 1.07 (0.879-1.31) | 1.29 (1.08-1.60) | 1.61 (1.27-2.06) | 1.87 (1.44-2.44) | 2.13 (1.61-2.85) | 2.42 (1.77-3.32) | 2.81 (1.98-4.04) | 3.13 (2.13-4.65) |
| 12-hr | 0.778 (0.643-0.952) | 1.04 (0.859-1.27) | 1.40 (1.15-1.71) | 1.69 (1.38-2.09) | 2.10 (1.68-2.69) | 2.43 (1.88-3.17) | 2.77 (2.09-3.70) | 3.12 (2.29-4.30) | 3.62 (2.55-5.19) | 4.01 (2.73-5.98) |
| 24-hr | 1.02 (0.902-1.17) | 1.39 (1.23-1.60) | 1.88 (1.66-2.17) | 2.28 (2.00-2.66) | 2.85 (2.41-3.43) | 3.29 (2.73-4.04) | 3.74 (3.03-4.71) | 4.22 (3.32-5.45) | 4.87 (3.68-6.58) | 5.39 (3.94-7.53) |
| 2-day | 1.17 (1.03-1.34) | 1.61 (1.43-1.88) | 2.21 (1.95-2.55) | 2.70 (2.37-3.15) | 3.38 (2.87-4.07) | 3.92 (3.25-4.82) | 4.47 (3.62-5.63) | 5.05 (3.98-6.54) | 5.86 (4.43-7.91) | 6.50 (4.75-9.07) |
| 3-day | 1.27 (1.12-1.46) | 1.76 (1.58-2.03) | 2.43 (2.15-2.81) | 2.98 (2.61-3.47) | 3.74 (3.17-4.51) | 4.34 (3.60-5.34) | 4.96 (4.02-6.25) | 5.62 (4.42-7.27) | 6.52 (4.93-8.81) | 7.25 (5.29-10.1) |
| 4-day | 1.35 (1.20-1.55) | 1.88 (1.67-2.17) | 2.59 (2.29-3.00) | 3.18 (2.79-3.71) | 4.00 (3.39-4.81) | 4.64 (3.85-5.70) | 5.30 (4.29-6.67) | 5.99 (4.72-7.76) | 6.96 (5.28-9.39) | 7.72 (5.64-10.8) |
| 7-day | 1.46 (1.30-1.69) | 2.02 (1.79-2.33) | 2.77 (2.45-3.20) | 3.39 (2.97-3.95) | 4.25 (3.60-5.11) | 4.91 (4.08-6.04) | 5.60 (4.54-7.05) | 6.32 (4.98-8.18) | 7.31 (5.53-9.87) | 8.10 (5.92-11.3) |
| 10-day | 1.55 (1.37-1.78) | 2.13 (1.89-2.46) | 2.91 (2.57-3.36) | 3.56 (3.12-4.14) | 4.45 (3.77-5.35) | 5.14 (4.26-6.32) | 5.85 (4.74-7.37) | 6.60 (5.20-8.55) | 7.63 (5.77-10.3) | 8.44 (6.16-11.8) |
| 20-day | 1.78 (1.58-2.05) | 2.47 (2.19-2.85) | 3.39 (3.00-3.92) | 4.16 (3.64-4.84) | 5.23 (4.43-6.29) | 6.06 (5.03-7.45) | 6.93 (5.61-8.73) | 7.83 (6.17-10.1) | 9.08 (6.87-12.3) | 10.1 (7.35-14.1) |
| 30-day | 2.02 (1.80-2.33) | 2.82 (2.49-3.25) | 3.90 (3.44-4.50) | 4.80 (4.21-5.60) | 6.08 (5.15-7.32) | 7.09 (5.89-8.72) | 8.14 (6.60-10.3) | 9.25 (7.29-12.0) | 10.8 (8.16-14.6) | 12.0 (8.78-16.8) |
| 45-day | 2.37 (2.10-2.72) | 3.31 (2.93-3.81) | 4.61 (4.07-5.32) | 5.72 (5.01-6.66) | 7.31 (6.20-8.81) | 8.60 (7.14-10.6) | 9.95 (8.06-12.5) | 11.4 (8.98-14.8) | 13.4 (10.2-18.1) | 15.1 (11.0-21.0) |
| 60-day | 2.59 (2.30-2.98) | 3.61 (3.20-4.16) | 5.06 (4.47-5.85) | 6.31 (5.53-7.36) | 8.14 (6.90-9.80) | 9.64 (8.00-11.8) | 11.2 (9.10-14.2) | 13.0 (10.2-16.8) | 15.4 (11.7-20.8) | 17.5 (12.8-24.4) |

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
 Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
 Please refer to NOAA Atlas 14 document for more information.

FIGURE 2:
Basin Volume Calculation

FIGURE 3:
Rational Method Calculations

The following calculation in the rational equation given in the San Bernardino County Hydrology Manual to calculate the peak flow rate for a given storm.

$$I = 1.2 \frac{\text{in}}{\text{hr}} = \text{rainfall intensity (obtained from Figure 4, 100yr, 1hr isohyet)}$$

$$C = \text{runoff coefficient} = 0.9 \left[a_i + \frac{(I - F_p)a_p}{I} \right] = 0.9$$

for: $a_i = 0.9$ = impervious fraction

$a_p = 0.1$ = pervious fraction

$F_p = 0$ = infiltration rate for pervious area

$a_p = 0.1$ = pervious fraction

$A = 5.19$ acres = area of project

Then

$$Q = \text{peak runoff rate} = CIA = 5.605 \text{ cfs}$$

FIGURE 4:
100-yr, 1-hr Isohyet

FIGURE 5:
Storm Drain Sizing Calculation

FIGURE 6:
Site Map

Appendix E. Mitigation, Monitoring and Reporting Plan

| AIR QUALITY: | Mitigation Measure |
|---|---|
| <p>Permits for miscellaneous process equipment may be required.</p> <p>Project construction will temporarily increase dust in the area.</p> | <p>Per MDAQMD response letter to planned project:</p> <p>AIR-1 Facility must obtain permits for all miscellaneous process equipment not exempt under Rule 219.</p> <p>AIR-2 Prepare and submit a dust control plan acceptable to the MDAQMD which includes all applicable dust control measures to be implemented.</p> <p>AIR-3 Signage compliant with Rule 403 Attachment B shall be erected at each project site entrance not later than the commencement of construction.</p> <p>AIR-4 Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from sand/fines deposits.</p> <p>AIR-5 All perimeter fencing shall be wind fencing or the equivalent, to a minimum of four feet of height or the top of all perimeter fencing. The owner/operator shall maintain the wind fencing requirement may be superseded by local ordinance, rule or project-specific biological mitigation prohibiting wind fencing.</p> <p>AIR-6 All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related trackout onto paved surfaces, and clean any project-related trackout within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.</p> |
| Timing: Prior to and during development | |
| Implementing Entity: Developer and/or Property Owner | |
| Monitoring Agency: City of Victorville Planning Department or it's designee | |

| BIOLOGICAL RESOURCES | Mitigation Measure |
|---|--|
| <p>No burrowing owl cover sites were observed within the study site. A few California ground squirrel burrows were observed on the constructed banks which make the south and east boundaries. It is possible for burrowing owls to take up residence within these burrows at some time in the future. Therefore, the following measures will be implemented.</p> | <p>Per Biological Resource Assessment of APN 3090-431-07, January 2022 (Appendix B).</p> <p>BIO-1 A burrowing owl survey shall be accomplished within 30 days prior to construction activities to ensure burrowing owls have not moved into the study area. If burrowing owls are discovered the guidance outlined in the California Department of Fish and Wildlife titled “Staff Report on Burrowing Owl Mitigation” will be used for addressing burrowing owl issues on the study site (California Department of Fish and Game 2012).</p> |
| <p>Timing: Prior to development</p> | |
| <p>Implementing Entity: Developer will include as part of construction contract/specifications.</p> | |
| <p>Monitoring Agency: City of Victorville Planning Department or it’s designee</p> | |
| | |

| CULTURAL RESOURCES | Mitigation Measure |
|---|---|
| <p>In the event resources or remains are discovered during project activities the following measures will be implemented.</p> | <p>CUL-1: Inadvertent Discovery of Archaeological Resources. If archaeological resources are encountered during implementation of the Project, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, to provide Tribal input with regards to significance and treatment.</p> <p>CUL-2: Human Remains. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.</p> <p>CUL-3: If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.</p> |
| Timing: During development | |
| Implementing Entity: Developer will include as part of construction contract/specifications. | |
| Monitoring Agency: City of Victorville Planning Department or it's designee | |
| | |

| GEOLOGY AND SOILS | Mitigation Measure |
|--|---|
| <p>In the event of inadvertent findings are during construction activities the following measures will be implemented.</p> | <p>GEO-1: Inadvertent Discovery of Paleontological Resources. If paleontological resources are encountered during implementation of the Project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist (the “Project Paleontologist”) shall be retained by the developer to make an evaluation of the find. If the resource is significant, Mitigation Measure GEO-2 shall apply.</p> <p>GEO-2: Paleontological Treatment Plan. If a significant paleontological resource(s) is discovered on the property, in consultation with the Project proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.</p> |
| Timing: During development | |
| Implementing Entity: Developer will include as part of construction contract/specifications. | |
| Monitoring Agency: City of Victorville Planning Department or it’s designee | |
| | |

| GREENHOUSE GAS EMISSIONS | Mitigation Measure |
|---|---|
| Compliance with the current GHG screening table shall be demonstrated through implementation of these measures. | <p>GHG-1 Prior to the issuance of building permits, the applicant/developer shall complete a Greenhouse Gas Emissions Screening Table in accordance with the City's adopted version of the San Bernardino County Regional Greenhouse Gas Reduction Plan 2021, while achieving the minimum number of points necessary to comply with the City of Victorville Greenhouse Gas reductions goals.</p> <p>GHG-2 To the extent feasible, the City of Victorville Planning Department shall verify incorporation of the identified Screening Table Measures within the Project building plans/site designs and/or verify compliance with an updated version of the City's Greenhouse Gas Screening Table prior to the issuance of building permit(s).</p> |
| Timing: Prior to development | |
| Implementing Entity: Developer will include as part of construction contract/specifications. City to verify. | |
| Monitoring Agency: City of Victorville Planning Department or it's designee | |
| | |

| HYDROLOGY AND WATER QUALITY | Mitigation Measure |
|--|--|
| <p>Best management practices as required by both NPDES and the SWPPP will be accomplished through implementation of the following measures.</p> | <p>WQ-1 Prior to issuance of a grading permit the applicant shall obtain coverage under the statewide general NPDES permit for control of construction and post-construction related storm water in accordance with the requirements of the Small MS4 General Permit. In addition, the applicant shall:</p> <ul style="list-style-type: none"> • Prepare a project specific Storm Water Pollution Prevention Plan (SWPPP) as required in the NPDES permit and shall identify site-specific erosion and sediment control best management practices that will be implemented; • The SWPPP shall be applicable to all areas of the project site including construction areas, access roads to and through the site, and staging and stockpile areas; • Temporary best management practices for all components of the project must be implemented until such time as permanent post-construction best management practices are in place and functioning; and • All excess sediment excavated as part of the Project that is not used onsite should be stockpiled in a location such that it will not be transported by wind or water into a surface water. An adequate combination of sediment and erosion control BMPs must be implemented and maintained to temporarily stabilize all stockpiled sediment until such time that it is reused and/or permanently stabilized. <p>WQ-2 The applicant/developer shall prepare and implement a comprehensive Spill Prevention and Response Plan for the Project, subject to review and approval by the City Planner and City Engineer (or their designee) prior to the issuance of any associated building or grading permit. This plan should outline the site-specific monitoring requirements and list the best management practices necessary to prevent hazardous material spills or to contain and cleanup a hazardous material spill, should one occur.</p> |
| Timing: Prior to and during development | |
| Implementing Entity: Developer will include as part of construction contract/specifications. Lahontan Water Quality Control Board (permits) | |
| Monitoring Agency: City of Victorville Planning Department or it's designee | |
| | |

| TRANSPORTATION | Mitigation Measure |
|--|--|
| To ensure good sight distance from Nutro Way and the existing driveway off Enterprise Way the following mitigations will be implemented. | TR-1 Post “No Parking Anytime” along the east side of Enterprise Way. TR-2 The onsite strip adjacent to the curve needs to be clear of any objects, such as shrubs. |
| Timing: Prior to development completion | |
| Implementing Entity: Developer will include as part of construction contract/specifications. | |
| Monitoring Agency: City of Victorville Planning Department or it’s designee | |
| | |

| TRIBAL CULTURAL RESOURCES | Mitigation Measure |
|---|--|
| <p>In the event resources or remains are discovered during project activities the following measures will be implemented.</p> | <p>TCR-1 The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.</p> <p>TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.</p> |
| Timing: During development | |
| Implementing Entity: Developer will include as part of construction contract/specifications. | |
| Monitoring Agency: City of Victorville Planning Department or it's designee | |