To: Office of Planning and Research

P.O. Box 3044, Room 113 Sacramento, CA 95812-3044 From: West Bay Sanitary District

500 Laurel Street

Menlo Park CA 94025 D ENDORSED IN THE OFFICE OF THE COUNTY CLERK RECORDER SAN MATEO COUNTY CALIF

**To:** San Mateo County Clerk Attention Special Services

555 County Center, First Floor Redwood City, CA 94063 DEC 21 2021

MARK CHURCH, County Clerk

**Project Title:** 

Avy Altschul Pump Station Project

By BEST Deputy Clerk

Project Location – Specific:

1011 Altschul Avenue and Altschul Avenue right-of-way

Project Location – City: Menlo Park

Project Location - County: San Mateo

Description of Project: West Bay Sanitary District (WBSD) is proposing construction and operation of the Avy Altschul Pump Station Project to route additional wastewater flows (approximately 98,000 gallons of wastewater per day) to WBSD's Sharon Heights Water Reclamation Plant to meet existing recycled water demands and offset potable water currently used for irrigation. The pump station would be located on Las Lomitas Elementary School District property along Altschul Avenue. The pump station would encompass approximately 210 square feet and would include a wet well, 10 horsepower pump, valve vault, motor control center, and new fencing and an access gate. The fencing, access gate, and motor control center would protrude above the ground, with the remaining facilities located below ground. Approximately 150 linear feet of new pipelines would be constructed in Altschul Avenue to connect the pump station to the existing sewer and force main. Three new sanitary sewer manholes would also be constructed at points along the sewer pipeline. A new Pacific Gas & Electric service would also be installed for the pump station. Construction would include excavation to a depth of approximately 20 feet for the pump station and wet well and 12 feet for pipelines. Construction is anticipated to begin in early summer 2023, and require 30 to 60 days to complete.

Name of Public Agency Approving Project: West Bay Sanitary District

Name of Person or Agency Carrying Out Project: West Bay Sanitary District

Exempt Status:	
Ministorial (Soc	•

	Ministerial	(Sec. 21080(b)(1)); 15268);
$\neg$	D	(0 04000/1)/0

Declared Emergency (Sec. 21080(b)(3); 15269(a));Emergency Project (Sec. 21080(b)(4); 15269(b)(c))

Categorical Exemption: State CEQA Guidelines Sec. 15303 (New Construction or

Conversion of Small Structures)

Statutory Exempt: State code number:

#### Reasons why Project is Exempt:

Class 3 (New Construction or Conversion of Small Structures) consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the

structure. The Project would have a limited disturbance area and minimal aboveground components, and thus would be considered a small facility. An environmental checklist was prepared for the Project, which documents that the Project would not trigger any exceptions to a categorical exemption (i.e., would not impact scenic highways, is not located on a hazardous waste site, would not impact a historical resource, and would not have a significant impact due to its location, cumulative impacts, or other unusual circumstances). Thus, the Project is exempt under State CEQA Guidelines Sec. 15303.

Lead Agency Contact Person: Sergio Ramirez, District Manager, (650) 321-0384

Date: 12/16/2021 Title: District Manager



# Avy Altschul Pump Station Project: Environmental Checklist

## Prepared by:

West Bay Sanitary District 500 Laurel Street Menlo Park, CA 94025

## With Assistance From:



2175 N. California Boulevard, Suite 315 Walnut Creek, CA 94596 925.627.4100

December 2021



## **TABLE OF CONTENTS**

SE	CTION		PAGE
1.	INTR	ODUCTION	1-1
	1.1	Purpose of This Document	1-1
	1.2	Scope of This Document	
	1.3	Impact Terminology	
2.	PRO	JECT DESCRIPTION	
	2.1	Project Overview	2-1
	2.2	Project Purpose and Need	
	2.3	Project Location	
		2.3.1 Existing Facilities	
	2.4	Environmental Setting	
	2	2.4.1 Sensitive Receptors	
	2	2.4.2 Utilities	2-5
	2	2.4.3 Air Quality and Water Quality	2-6
	2	2.4.4 Transportation	
	2.5	Project Description	
	2	2.5.1 Construction Methods and Schedule	2-9
	2	2.5.2 Operation	
	2.6	Construction Best Management Practices	
	2.7	Required Permits and Approvals	2-14
3.	ENVI	RONMENTAL CHECKLIST FORM	3-1
	3.1	Aesthetics	3-4
	3.2	Agriculture and Forestry Resources	3-6
	3.3	Air Quality	3-7
	3.4	Biological Resources	3-10
	3.5	Cultural Resources	3-13
	3.6	Energy	3-14
	3.7	Geology and Soils	
	3.8	Greenhouse Gas Emissions	
	3.9	Hazards and Hazardous Materials	
	3.10	Hydrology and Water Quality	
	3.11	Land Use and Planning	
	3.12	Mineral Resources	
	3.13	Noise	
	3.14	Population and Housing	
	3.15	Public Services	
	3.16	Recreation	
	3.17	Transportation	
	3.18	Tribal Cultural Resources	
	3.19	Utilities and Service Systems	3-33



	3.20	Wildfire	
	3.21	Mandatory Findings of Significance	
4.		RAL CROSS-CUTTING ENVIRONMENTAL REGULATION EVALUA	
	4.1	Archaeological and Historic Preservation Act	
	4.2	Clean Air Act	4-1
	4.3	Coastal Barriers Resource Act	
	4.4	Coastal Zone Management Act	
	4.5	Endangered Species Act, Section 7	
	4.6	Environmental Justice	
	4.7	Farmland Protection Policy Act	
	4.8	Fish and Wildlife Coordination Act	
	4.9	Floodplain Management - Executive Order 11988	4-5
	4.10	Magnuson-Stevens Fishery Conservation and Management Act	
	4.11	Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, ar	
		Executive Order 13168	4-6
	4.12	National Historic Preservation Act, Section 106	4-6
	4.13	Protection of Wetlands - Executive Order 11990	4-7
	4.14	Rivers and Harbors Act, Section 10	4-7
	4.15	Safe Drinking Water Act	
	4.16	Wild and Scenic Rivers Act	4-7
	4.17	Wilderness Act	4-8
5.	REFE	RENCES	5-1
		Figures	
Figu	ıre 2-1:	Vicinity Map	2-2
Figu	ıre 2-2:	Project Area	2-3
		Site Plan	
Figu	ıre 2-4:	Rendering of Aboveground Structures	2-8



## **Tables**

Table 2-1: Permits and Approvals	2-14
Table 3-1: Project Maximum Daily Construction Emissions	
Table 3-2: Project Maximum Daily Operational Emissions	3-9
Table 3-3: Annual Project Operational Emissions	3-9
Table 3-4: Typical Construction Equipment Noise Levels	3-26
Table 3-5: Vibration Source Levels for Construction Equipment	3-27
Table 4-1: General Conformity De Minimis Emission Rates for the SFBAAB	4-2
Table 4-2: Annual Project Emissions Compared to De Minimis Thresholds	4-2

## **Appendices**

Appendix A: CalEEMod Results



## **ACRONYMS**

Acronym	Definition
ABAG	Association of Bay Area Governments
BAAQMD	Bay Area Air Quality Management District
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CWSRF	Clean Water State Revolving Fund
C/CAG	City/County Association of Governments
DAC	Disadvantaged community
dB	decibel
dBA	A-weighted decibel
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EO	Executive Order
FESA	Federal Endangered Species Act
kWh	Kilowatt-hours
LLESD	Las Lomitas Elementary School District
mgd	Million gallons per day
МНІ	Median household income
MTC	Metropolitan Transportation Commission
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
OPR	California Office of Planning and Research
PG&E	Pacific Gas and Electric
PM	Particulate matter



Acronym	Definition
PPV	Peak particle velocity
PVC	Polyvinyl chloride
RWQCB	Regional Water Quality Control Board
SFBAAB	San Francisco Bay Area Air Basin
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
VdB	Vibration decibel
VMT	Vehicle Miles Traveled
WBSD	West Bay Sanitary District
WRP	Water Reclamation Plant



#### 1. INTRODUCTION

#### 1.1 Purpose of This Document

West Bay Sanitary District (WBSD) has prepared this environmental checklist to assess potential environmental impacts associated with the proposed Avy Altschul Pump Station Project ("Project"), which consists of construction and operation of a new pump station to route additional influent wastewater to WBSD's Sharon Heights Water Reclamation Plant (WRP).

WBSD is the lead agency under the California Environmental Quality Act (CEQA) for the Project. WBSD has determined that the Project is categorically exempt from CEQA pursuant to State CEQA Guidelines §15303 (New Construction or Conversion of Small Structures) and will file a Notice of Exemption for the Project. WBSD is seeking financing for the Project under the Clean Water State Revolving Fund (CWSRF) program administered by the State Water Resources Control Board (SWRCB). This environmental checklist document is intended to assist the SWRCB in its concurrence that the Project is exempt from CEQA.

### 1.2 Scope of This Document

This environmental checklist evaluates the potential for environmental impacts to resource areas identified in Appendix G of the State CEQA Guidelines (as amended in December 2018). Additionally, the CWSRF program is partially funded by the United States Environmental Protection Agency (USEPA). To support compliance with the federal environmental review requirements of the CWSRF program, this document includes analysis pertinent to several federal regulations (also referred to as federal cross-cutters).

#### 1.3 Impact Terminology

The level of significance for each environmental resource area is provided using CEQA terminology as specified below:

- **No Impact.** No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable.
- Less than Significant Impact. Potential adverse environmental consequences have been identified. However, they are not adverse enough to meet the significance threshold criteria for that resource. No mitigation measures are required.
- Less than Significant with Mitigation Incorporated. Adverse environmental consequences that have the potential to be significant but can be reduced to less than significant levels through the application of identified mitigation strategies that have not already been incorporated into the Project.



• **Potentially Significant.** Adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report must be prepared to meet the requirements of CEQA.



#### 2. PROJECT DESCRIPTION

#### 2.1 Project Overview

WBSD is proposing construction and operation of the Avy Altschul Pump Station Project to route additional wastewater flows to WBSD's Sharon Heights WRP. The Avy Altschul Pump Station would be located on Las Lomitas Elementary School District property along Altschul Avenue, near its intersection with Avy Avenue in the City of Menlo Park. The Avy Altschul Pump Station would be connected to the existing sanitary sewer and force main in Altschul Avenue and would allow additional wastewater flows (approximately 98,000 gallons of wastewater per day) to be conveyed to WBSD's main pump station at Sand Hill Road and Oak Avenue by way of the previously installed four-inch force main on Sharon Road. From there, wastewater travels to the Sharon Heights WRP for treatment and use at the Sharon Heights Golf Course.

#### 2.2 Project Purpose and Need

WBSD's main pump station at Sand Hill Road and Oak Avenue has sufficient pumping capacity to transport wastewater flows to the Sharon Heights WRP. However, wastewater flows have decreased due to indoor water conservation practices since design of that pump station. In order for WBSD to continue producing the planned volume of recycled water at the Sharon Heights WRP to meet customer demands, additional wastewater flows need to be transported to the plant. The Project would route additional flows to the Sharon Heights WRP for treatment to help compensate for reduced sewer flows upstream of the main pump station and allow WBSD to sustain planned levels of recycled water production.

#### 2.3 Project Location

The Project would be located at the Las Lomitas Elementary School District (LLESD) at 1011 Altschul Avenue, Menlo Park, California, 94025, and in the adjacent City of Menlo Park roadway right-of-way in Altschul Avenue. The Project vicinity is shown in Figure 2-1, and the Project location relative to the intersection of Altschul Avenue and Avy Avenue is shown in Figure 2-2. The pump station would be located on LLESD property, and connections to the existing force main and sewer pipelines would be constructed in Altschul Avenue. As shown in Figure 2-3, WBSD has an existing 5-feet wide easement on the LLESD property and would expand this easement to a width of 15 feet to cover the pump station. The LLESD property consists of approximately 22-acres on four adjoining parcels that encompass the La Entrada Middle School (approximately 730 students, grades 4-8, late-August to mid-June academic calendar) and the Phillips Brooks School (approximately 270 students, grades preschool-5, late-August to mid-June academic calendar with summer programs). The parcels include school buildings, landscaped areas with trees, hardscape paths, parking lots, sport courts, and playgrounds. The Project site and LLESD property are surrounded by residential neighborhoods.



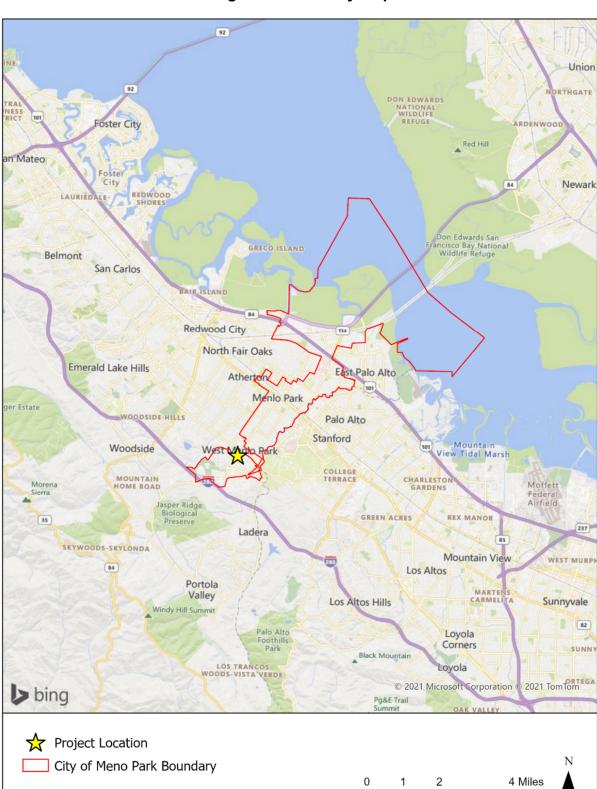


Figure 2-1: Vicinity Map





Figure 2-2: Project Area

Source: Freyer & Laureta, 2021



2196 2199 NEW SSMH 145.23 (8" TO PS) ALTSCHUL AVE. ALTSCHUL AVE. FLBCRATE 156.25 BNV (18"RCP) OUT NE 153.92 FREYER LAURETALING. SHEET 1 OF 2 SHEETS JOB NO. 1089

Figure 2-3: Site Plan

Source: Freyer & Laureta, 2021



#### 2.3.1 Existing Facilities

WBSD maintains and operates over 200 miles of main line sewer in the City of Menlo Park and portions of the cities of East Palo Alto and Redwood City, the towns of Atherton, Woodside and Portola Valley, and portions of unincorporated San Mateo and Santa Clara Counties (WBSD 2011). Existing WBSD facilities in the Project vicinity consist of a 4-inch force main in Altschul Avenue, an existing 8-inch sewer main on LLESD property, and sewer lines ranging from 6 to 12 inches in the intersection of Avy Avenue and Altschul Avenue. The existing storm drain and sewer mains in Avy Avenue, Altschul Avenue, and the easement on LLESD property are installed at depths of 10 to 11 feet, while the other utilities (water, electrical) are installed at depths of 3 to 4 feet. The proposed Avy Altschul Pump Station would be an extension of the existing 4-inch force main in Altschul Avenue. WBSD's main pump station is located at Sand Hill Road and Oak Avenue (approximately 0.7 miles east of the Project site), and its Sharon Heights WRP is located approximately 1.2 miles southwest of the Project site at the Sharon Heights Golf & Country Club.

#### 2.4 Environmental Setting

The Project area is located in the Sharon Heights community of the City of Menlo Park, in southern San Mateo County. The area is built-out. Surrounding land uses include residential and public/quasi-public lands in the City of Menlo Park. The City of Menlo Park boundary meets unincorporated San Mateo County at the intersection of Avy and Altschul Avenues. In the nearby West Menlo Park community (unincorporated San Mateo County), land uses consist of residential and neighborhood commercial uses.

#### 2.4.1 Sensitive Receptors

Sensitive receptors within the Project vicinity include single-family residences and schools. The nearest residences are located along Altschul Avenue, approximately 40 feet from the proposed pump station location and 25 feet from the sewer and force main connections. The Phillips Brooks School and La Entrada Middle School are located on the same LLESD property as the proposed pump station site. The University Heights Montessori School is located within 0.25 miles northeast of the proposed pump station site.

#### 2.4.2 Utilities

Electrical and natural gas services in the Project area are provided by Pacific Gas & Electric (PG&E). Street lights are located along the south side of Altschul Avenue (attached to telephone poles), and a standalone street light is located at the northern corner of the intersection of Avy Avenue and Altschul Avenue. Water is supplied by Menlo Park Municipal Water. Other portions of Menlo Park, including homes north of Altschul Avenue, are served by California Water Service (Bear Gulch District). WBSD provides wastewater collection and conveyance services in the Project area. Solid waste services are provided by Recology Incorporated.



#### 2.4.3 Air Quality and Water Quality

The Project is located within the Bay Area Air Quality Management District (BAAQMD). Water quality is regulated by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The storm drain system in the Project area is maintained by the City of Menlo Park Public Works Department. The Project area is underlain by the San Mateo Plain groundwater subbasin.

#### 2.4.4 Transportation

Major roadways in the vicinity of the Project include Interstate 280, located south of the Project site; Sand Hill Road, a primary arterial which is south and east of the Project site; and Alameda de las Pulgas, a minor arterial north of the Project site (Menlo Park 2016b).

Bicycle routes in the Project area include Class II bicycle lanes along Alameda de las Pulgas (approximately 800 feet from the Project site); and a Class III bicycle route along the east/west portion of Santa Cruz Avenue (approximately 0.3 miles from the Project site) (Google Maps 2021, Menlo Park 2016a).

San Mateo County Transit District (SamTrans) provides local and regional bus service. SamTrans routes in the Project area include Route 286, which includes Avy Avenue through the intersection with Altschul Avenue (SamTrans 2021). The nearest bus stop to the Project site is located along Avy Avenue north of Alameda de las Pulgas.

In terms of pedestrian access, many roads in Menlo Park have no sidewalks on one side, or partial sidewalks on both sides (Menlo Park 2009). In the immediate Project vicinity, there is a sidewalk on the south side of Altschul Avenue adjacent to the LLESD property. There is no sidewalk on the opposite side of Altschul Avenue. Avy Avenue has sidewalks along both sides. The intersection of Altschul Avenue and Avy Avenue has a striped crosswalk at all four crossings. Harkins Avenue is located southeast of Avy Avenue, and terminates at Altschul Avenue, with the LLESD driveway on the opposite side of this intersection. One crosswalk at the intersection of Harkins Avenue and Altschul Avenue is striped (across Altschul Avenue on the southeast side of the intersection).

#### 2.5 Project Description

The Project includes construction of a new influent pump station, electrical service, and new pipelines to connect the pump station to WBSD's existing sanitary sewer and force main. The Project components are shown in Figure 2-3.

**Pump Station.** The pump station would be constructed on LLESD property on the southwest side of Altschul Avenue. The pump station would be located on the LLESD side of the existing chain-link fence between LLESD and the sidewalk along the south side of Altschul Avenue. The overall footprint of the pump station would be approximately 210 square feet and would lie within WBSD's planned expanded



easement. The pump station equipment on LLESD property within the easement would include a 6-foot diameter wet well (approximately 18 feet deep) housing a single 10 horsepower pump, an approximately 5 foot-by-5-foot valve vault, a 10-foot-wide gate for access, a motor control center that operates the pump, and new fencing surrounding the pump station.

Once construction is completed, the only above ground structure would be the motor control center. The top of the wet well and the top of the valve pit would be visible at the ground surface but would not protrude above the ground surface. New fencing with an access gate that opens onto the sidewalk along Altschul would surround the new pump station. Figure 2-4 shows a rendering of the pump station equipment that would be visible at ground level.

**Electrical Service.** To provide electrical service to the pump station, PG&E would install a 200-ampere, 240 or 480-volt, 3 phase utility service. Power is anticipated to be distributed via the motor control center from a pole mounted transformer, similar to other electrical services in the area.

**Sewer Pipelines.** The Project would also include new pipelines connecting the pump station to the existing sewer and a nearby force main. New sanitary sewer piping would be constructed to divert water from the intersection of Avy and Altschul to the new pump station. Approximately 100 linear feet of 8-inch PVC pipeline would be constructed in Altschul Avenue to connect the pump station to the existing sewer (Figure 2-3). Three new sanitary sewer manholes would be constructed at points along this pipeline to allow WBSD to access the proposed facilities for weekly maintenance and for seasonal operational changes. Three manholes within 100 feet are necessary to access both sides of a proposed slide gate. In addition, approximately 50 linear feet of 4-inch PVC would be constructed to connect the pump station to the existing force main in Altschul Avenue.



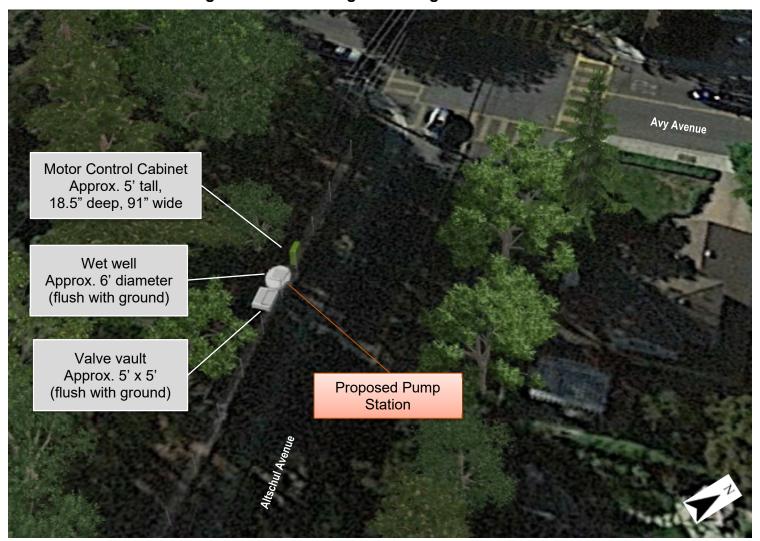


Figure 2-4: Rendering of Aboveground Structures

Source: Adapted from Freyer & Laureta 2021.



#### 2.5.1 Construction Methods and Schedule

Construction of the Project would include site preparation, excavation, pump station construction, pipeline installation, electrical work, startup/testing, and pavement restoration. Construction is anticipated to last 30 to 60 days and occur during the summer months when the adjacent schools are not in session. Construction equipment is anticipated to include a backhoe, excavator, and trucks for materials hauling and deliveries, and approximately 6 workers each day.

Minimal site preparation would be required, lasting approximately one week, and may include removing brush from the pump station site. A dead tree on the LLESD property would be removed prior to construction of the Project. The pump station and pipelines would be constructed using an open cut method. Excavation would be up to 20 feet below ground surface for the pump station and wet well, and up to 12 feet for the pipelines. Excavation is anticipated to last 3 to 4 weeks. Excavated materials are not anticipated to be used as backfill. Based on the approximate depth of the pump station and pipelines, it is estimated that approximately 300 cubic yards of material would be exported (assuming a trench width of 4 feet for the pipelines and excavation footprint of 8 feet in diameter and depth of 20 feet for the pump station). If dewatering is required during excavation, water would be discharged into the sanitary sewer.

Construction of the sewer pipelines would last approximately one week, and construction of the pump station would last one to two weeks. Lane and sidewalk closures would be required in Altschul Avenue and the intersection of Altschul Avenue and Avy Avenue. Road closures are anticipated to last two weeks and would be conducted in accordance with a Traffic Management Plan (see Construction Best Management Practices). Following installation of the pipelines, the roadway would be repaved and restored to its original condition over approximately one week.

A new PG&E electrical service will be required for the pump station. PG&E's work would include installation of the motor control center and utility service (200A, 240 or 480V, 3-phase requested). The motor control center would be connected to the pole mounted power supply at a location to be determined by PG&E but anticipated to be within 300 feet of the pump station. Electrical work would last approximately one week.

Once construction is complete, startup and testing activities would be performed to ensure that the new pipelines and pump station are operating properly and meets design standards; these activities would last one week.

Project staging is anticipated to occur at the LLESD property. The staging area would be approximately 400 square feet and would include the pump station footprint.

Construction is anticipated to begin in early summer 2023 and require up to two months to complete. If practicable, construction would be scheduled during the summer break for the nearby schools.



#### 2.5.2 Operation

The Project would pump approximately 0.1 million gallons per day (mgd) to the existing force main and main pump station for conveyance to the Sharon Heights WRP during the summer peak demand months for recycled water. The recycled water would offset potable water currently used for irrigation. The Project is anticipated to be shut off during winter months by way of a slide gate at the manhole, corresponding with reduced recycled water demand at the Sharon Heights Golf Course. The Project is anticipated to consume up to approximately 22,400 kilowatt-hours (kWh)/year for operation of the pump (10 hp ÷ 1.341 hp/kw × 3,000 hours/year). Operation of the Project would consist of weekly visits to the site by WBSD staff in order to inspect and maintain equipment.

#### 2.6 Construction Best Management Practices

Construction best management practices (BMPs) are those environmental commitments that WBSD has committed to as part of the Project and thus are incorporated as part of the Project Description:

- Construction Schedule Project construction will occur during summer when Phillips Brooks School and La Entrada Middle School are not in session, if feasible.
- Air Quality WBSD or its contractor(s) will implement standard dust control
  measures in compliance with BAAQMD Regulation 6 (Particulate Matter),
  Regulation 1-301 (Public Nuisance), and BAAQMD CEQA Air Quality Guidelines
  (BAAQMD 2017b), including the following basic construction measures:
  - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
  - All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - All vehicle speeds on unpaved roads shall be limited to 15 mph.
  - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
  - o Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.



- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
- Archaeological Resources In the event of an accidental discovery of a
  possible unique archaeological resource during construction of the Project, the
  contractor will stop work within 100 feet of archaeological materials until a
  professional archaeologist certified by the Society of California Archaeology or
  the Society of Professional Archaeology has evaluated the significance of the
  find. If the find is determined to be a unique archaeological resource, WBSD will
  take appropriate steps to implement appropriate avoidance or mitigation
  measures. Work on nonaffected portions of the Project, as determined by WBSD,
  may continue during the process.
- Human Remains If human remains are found, regulations outlined in the California Health and Safety Code Section 7050.5 state no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant. The most likely descendant shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner. WBSD will work with the most likely descendant to implement the recommendations for treatment of the remains.
- Protected Animal and Plant Life If protected animal or plant life is discovered during earthwork or trenching, work shall be stopped within 100 feet of the protected animal or plant life. WBSD will notify the effective agency and evaluate the significance of the find.
- **Nesting Birds and Raptors –** WBSD will implement the following procedures to protect nesting birds and raptors:
  - Unless project-related activities occur outside of the bird breeding season (February 1 to August 31) a preconstruction bird survey will be completed. No more than two weeks prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a



- 300-foot buffer. If the proposed Project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird and raptor survey will be required prior to each phase of construction within the area of potential effect.
- O Pre-construction nesting bird and raptor surveys will be conducted during the time of day when birds are active and factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird and raptor survey results, if applicable, will be submitted to WBSD for review and approval prior to ground and/or vegetation disturbance activities.
- o If nests are found, their locations will be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for passerines, and up to 250 feet for raptors, depending upon the species and the proposed work activity, will be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Buffers will be determined in conjunction with CDFW through the development of a nesting bird management plan. Active nests will be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance will occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If Project activities must occur within the buffer, they will be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.
- Tree Protection WBSD Specifications will require the contractor to exercise
  due care to avoid injury or damage to existing trees not to be removed. The
  Contractor will provide and install suitable safeguards, approved by WBSD (and
  in compliance with a Tree Protection Plan approved by the City of Menlo Park, if
  applicable), to protect existing trees from injury or damage.
- Fire Prevention WBSD Specifications will require the contractor to implement standard fire prevention measures. WBSD will require that the entire work and site, including storage areas, is inspected at frequent intervals to verify that fire prevention measures are constantly enforced; fully charged fire extinguishers of the appropriate type, supplemented with temporary fire hoses wherever an adequate water supply exists, are furnished and maintained; and flammable materials are stored in a manner that prevents spontaneous combustion or dispersion.
- Dewatering Groundwater encountered during construction, if any, will be discharged to WBSD's sewer system for treatment and reuse.
- Storm Water All construction activities will utilize standardized storm water management methods. Standard BMPs will be implemented to prevent



construction pollutants from contacting storm water and to keep products of erosion from moving off site into receiving waters. Such BMPs may include the following:

- Revegetation or repaving of disturbed areas as soon as feasible after completion of grading.
- Covering stockpiled excavated and/or fill materials to reduce potential offsite sediment transport.
- Use of sediment catchment structures such as hay bales, gravel or sand bags, silt fencing, fiber rolls, matting, berms, or similar devices along storm drains to prevent off-site sediment transport.
- Daily backfill, compaction, and/or covering of excavated trenches to minimize erosion potential.
- Regular inspection and maintenance of all erosion control and sediment catchment facilities to ensure proper function and effectiveness.
- **Noise** The following measures will be implemented during construction to minimize noise impacts to surrounding neighborhoods:
  - Maintain construction equipment, including vehicles, generators and compressors, in proper operating condition and equip with manufacturers' standard noise control devices or better (e.g., mufflers, acoustical lagging, and/or engine enclosures).
  - Limit construction work, including on-site equipment maintenance and repair, to the hours specified in the City of Menlo Park noise ordinance.
  - Locate staging areas for construction equipment as far as practical from residences.
  - Provide notice to residential property owners adjacent to the proposed pump station site at least one week prior to the start of construction.
     Notices would include an anticipated construction schedule and description of anticipated construction activities.
- Traffic Control During construction, surrounding roads are expected to remain open. Access along portions of affected roadways may be limited, but would remain open to traffic. A Traffic Management Plan will be implemented by the construction contractor to manage entry and exit of construction equipment to the LLESD property and surrounding roadways. The Traffic Management Plan will be prepared in accordance with the latest edition of the "Manual of Uniform Traffic Control Devices for Construction and Maintenance Work Zones" issued by the California Department of Transportation (Caltrans). The Traffic Management Plan will contain provisions including, but not limited to, the following:
  - Utilize appropriate signage to warn pedestrians, bicyclists, and vehicles of any potential traffic hazards.



- Cover all trenches at the end of the working day.
- Flag traffic around the work site if Project construction limits traffic to one lane.
- Identify safe ingress and egress points from staging areas and the Project site.
- Identify alternative safe routes to maintain pedestrian and bicyclist safety during construction, if required.
- Notify all property owners, business owners and residents who may be affected by traffic disruption at least 48 prior to any construction.
- Notify emergency services (police, fire, and others) about anticipated closures and potential delays due to construction.
- Utilities The contractor(s) will contact Underground Services Alert (USA) to identify existing underground utilities and service connections prior to commencing any excavation work. If required as part of the design documents in development, the exact utility locations will be determined by test pits dug at locations determined and approved by the contractor's construction manager (also referred to as "pot-holing"). No temporary disruption of potable water or sewer service will be required during construction; however, service on the recycled water pipeline at this location will be disrupted during construction.

## 2.7 Required Permits and Approvals

Anticipated permit and approvals are identified in Table 2-1.

**Table 2-1: Permits and Approvals** 

Agency	Permit/Approval
City of Menlo Park	Encroachment Permit
City of Menlo Park	Tree Protection Plan (if construction activities will be performed within the tree protection zone of a heritage tree, as determined by a City-approved certified arborist)
Pacific Gas & Electric	New electrical service
State Water Resources Control Board	Financing through Clean Water State Revolving Fund



#### 3. ENVIRONMENTAL CHECKLIST FORM

1. Project title: Avy Altschul Pump Station Project

2. Lead agency name and address: West Bay Sanitary District

500 Laurel Street Menlo Park, CA 94025

3. Contact person and phone number: Sergio Ramirez

District Manager

SRamirez@westbaysanitary.org

(650) 321-0384

**4. Project location:** City of Menlo Park

San Mateo County, California

5. Project sponsor's name and address: Same as Lead Agency

**6. General plan designations:** Public/Quasi-Public, City of Menlo Park

Right-of-Way

**7. Zoning:** PF (Public Facilities District), City of Menlo

Park Right-of-Way

- 8. Description of project: WBSD is proposing construction and operation of the Avy Altschul Pump Station Project to route additional wastewater flows (approximately 98,000 gallons of wastewater per day) to WBSD's Sharon Heights WRP. The pump station would be located on LLESD property along Altschul Avenue. The pump station would encompass approximately 210 square feet and would include a wet well, 10 horsepower pump, valve vault, motor control center, new fencing, and an access gate. Approximately 150 linear feet of new pipelines would be constructed in Altschul Avenue to connect the pump station to the existing sewer and force main. Three new sanitary sewer manholes would also be constructed at points along the sewer pipeline. The Project would help meet existing recycled water demands.
- 9. Surrounding land uses and setting: The Project is located on the northern edge of the LLESD property (public land use), which is surrounded in all directions by residential land uses.
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
  - City of Menlo Park: Encroachment Permit: Tree Protection Plan, if requested
  - Pacific Gas & Electric: New electrical service
  - State Water Resources Control Board: Financing through the CWSRF program



11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 2180.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? The Lead Agency, WBSD, has determined the proposed project is categorically exempt from CEQA. Native American tribes affiliated with the project have not been consulted.

#### **Environmental Factors Potentially Affected**

The Project could potentially affect ("Potentially Significant Impact" or "Less than Significant Impact with Mitigation Incorporated") the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and present mitigation measures that would reduce all impacts to less than significant.

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



## **DETERMINATION:** (To be completed by Lead Agency)

On the	e basis of this initial study:	
$\boxtimes$	I find that the proposed project IS EXEMPTION will be filed.	EMPT from CEQA and a NOTICE OF
	I find that the proposed project COU environment, and a NEGATIVE DEC	LD NOT have a significant effect on the LARATION will be prepared.
	environment, there will not be a signi	ect could have a significant effect on the ficant effect in this case because revisions agreed to by the project proponent. A TON will be prepared.
	I find that the proposed project MAY environment, and an environmental i	
	"potentially significant unless mitigate one effect 1) has been adequately an applicable legal standards, and 2) has based on the earlier analysis as desc	have a "potentially significant impact" or ed" impact on the environment, but at least nalyzed in an earlier document pursuant to is been addressed by mitigation measures cribed on attached sheets. An RT is required, but it must analyze only the
	environment, because all potentially adequately in an earlier EIR or NEG applicable standards, and (b) have b	een avoided or mitigated pursuant to that TION, including revisions or mitigation proposed project, no further
Signat	Sagio Raming	12/16/2021 Date
	Engio Raminez d Name	West Bay Sanitary District For



#### 3.1 Aesthetics

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

#### a) No Impact

The City of Menlo Park General Plan identifies view corridors/scenic vistas in the city. These include a portion of Sand Hill Road south of the Project, and views from east to west across the southern portion of the Sharon Heights neighborhood (Menlo Park 2016a). Neither of these viewsheds include the Project site. Due to the low profile of the Project facilities and coverage provided by trees, buildings, and hills between the Project and view corridors, the Project would not be visible from scenic viewpoints. The Project would have no impact on scenic vistas.

#### b) No Impact

Interstate 280 in San Mateo County is a State-designated scenic highway and is approximately 1 mile southwest of the Project site (Caltrans 2019). The Project would not be visible from Interstate 280 due to vegetation along the highway, surrounding hills, existing trees and buildings in Menlo Park, distance from the Project, and the small size of the Project. The Project would have no impact on views from a scenic highway.



#### c) Less than Significant

The Project is located in an urbanized area where scenic quality is governed by the City of Menlo Park Zoning Code and General Plan. The Project is on the LLESD property, which is zoned as Public Facilities District by Menlo Park. The purpose of the Public Facilities District zone is to accommodate governmental, public utility, and educational facilities. According to Menlo Park Zoning Code, section 16.49, all facilities of any public utility are allowed on Public Facilities District lands, provided that a use permit is obtained. The existing WBSD easement on the LLESD property for the existing sewer main would be expanded to cover the pump station, and WBSD would obtain an encroachment permit from Menlo Park for the portion of the Project footprint within the right-of-way of Altschul Avenue. Menlo Park Zoning Code, section 16.64.010 allows construction of fences, walls, hedges, or similar structures in non-residential districts as long as they are approved by the director of community development, either independently or through inclusion with another approval. The Project would replace an existing chain-link fence with a new fence and gate that would be similar to the existing fencing in terms of height and design. The fence would be part of the approval of the encroachment permit from Menlo Park. Therefore, the Project would not conflict with existing zoning.

As discussed above under Impact (a), the Project would not impact a scenic viewshed identified in the Menlo Park General Plan. The General Plan includes goals related to protecting scenic qualities and open space in Menlo Park, such as requiring open space in new development, encouraging appropriate landscaping, and supporting public access to scenic areas such as the San Francisco Bay. Construction of the Project would create temporary visual impacts due to the presence of construction equipment and materials, but these impacts would be short-term, and would only impact public views from the areas immediately surrounding the Project site. The Project would be located in a built-out area along a roadway, with existing facilities such as telephone poles, power lines, streetlights, and a chain-link fencing along the LLESD property. The Project footprint would be small with limited aboveground facilities. The top of the wet well and valve vault would be visible, but flush with the ground surface (Figure 2-4). The motor control cabinet would measure approximately 5 feet tall by 7.5 feet wide by 1.5 feet deep and a 6-inch diameter gooseneck vent would protrude approximately 12 to 18 inches above the ground (Figure 2-2, Figure 2-4). The new chain-link fence and gate would be similar to the existing fence in terms of height and design. The permanent Project facilities would be of similar scale to existing facilities in the area, such as fencing. Given the small size of the Project and the nature of its surroundings, the Project would not significantly alter the existing visual character of the area, and the impact would be less than significant.

#### d) Less than Significant

The Project does not propose the installation of permanent lighting. Because construction would occur during daytime hours, the need for additional lighting during construction is anticipated to be limited or nonexistent. Existing streetlights are located



along Altschul Avenue and Avy Avenue. Therefore, if additional lighting were needed during construction, it would not represent a significant change from existing conditions, as nighttime lighting already exists in the area. If used, temporary construction lighting would be directed downward and oriented so that the lights would not be directed toward neighboring residences, to minimize light and glare effects. Given that the Project does not include permanent lighting, potential impacts related to light and glare from temporary construction equipment would be less than significant.

## 3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
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]
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	[ ]	[ ]	[ ]	[X]
c)	Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	[ ]	[ ]	[ ]	[X]
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	[ ]	[ ]	[ ]	[X]
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	[ ]	[ ]	[ ]	[X]

#### a-e) No Impact

The Project would be located on urban and built-up land as designated by the California Department of Conservation Farmland Mapping and Monitoring Program (CDOC 2016). The Project would not be located on or adjacent to land designated as important



farmland or Williamson Act lands. Menlo Park does not maintain land use designations or zoning designations for agricultural or forest lands (Menlo Park 2016a, Menlo Park 2021a). Therefore, the Project would have no direct or indirect impacts on agricultural or forested lands and would not conflict with existing zoning. The Project would have no impact on agricultural or forestry resources.

#### 3.3 Air Quality

		Signi	ntially ificant pact	Less Than Significant with Mitigation Incorporated		Less than Significant Impact	N Imp	-
Wo	ould the Project:							
a)	Conflict with or obstruct implementation of the applicable air quality plan?	]	]	]	]	[X]	[	]
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?	]	]	]	]	[X]	]	]
c)	Expose sensitive receptors to substantial pollutant concentrations?	]	]	[	]	[X]	[	]
d)	Result in other emissions (such as those leading to odors) or adversely affecting a substantial number of people?	]	]	]	]	[X]	[	]

#### a) Less than Significant Impact

The applicable Air Quality Plan is the BAAQMD Clean Air Plan (BAAQMD 2017a). As discussed in the Clean Air Plan, a project would be considered to conflict with or obstruct implementation of the Clean Air Plan if it does not support the primary goals of the applicable air quality plan, does not include applicable control measures from the air quality plan, or disrupts or hinders implementation of any air quality plan control measures (BAAQMD 2017a).

The Project would construct a new pump station to aid in meeting existing recycled water demands. The construction and operation of the Project would not change land use, induce development, alter regulations, or result in other changes that would hinder or disrupt implementation of any air quality plan control measures. The proposed Project would not conflict with or obstruct the applicable air quality plan, and the impact would be less than significant.



#### b) Less than Significant Impact

The Project site is located in the San Francisco Bay Area Air Basin (SFBAAB), which does not meet the State PM<sub>10</sub> (particulate matter) standard, the national and State PM<sub>2.5</sub> standard, and the State 1-hour, State 8-hour and the national 8-hour ozone standards. The Project would result in emissions of criteria pollutants from short-term construction activities and long-term operation and maintenance activities. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0, which is used throughout California to quantify criteria pollutants and greenhouse gas (GHG) emissions. Emissions of reactive organic gases (ROG), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> were modeled. The CalEEMod emissions scenarios were based on Project-specific information found in *Section 2.5, Project Description*. In instances where Project-specific information was not available (e.g., construction equipment horsepower, length of worker trips, soil moisture content), the analysis relied on CalEEMod default values for construction activities. Appendix A includes detailed air quality modeling outputs.

#### Construction

Air emissions of criteria pollutants during construction would result from the use of construction equipment with internal combustion engines, and offsite vehicles to transport workers, deliver materials to the site, and haul export material from the site. WBSD or its contractor(s) would implement standard dust control measures in compliance with BAAQMD Regulation 6 (Particulate Matter), Regulation 1-301 (Public Nuisance), and BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017b), as described in *Section 2.6 Construction Best Management Practices*. Table 3-1 summarizes the maximum daily pollutant emissions during construction of the proposed Project. As shown in Table 3-1, with adherence to applicable regulations, criteria pollutant emissions from construction of the proposed Project would not exceed the BAAQMD thresholds, and therefore construction-related air quality impacts would be less than significant.

**Table 3-1: Project Maximum Daily Construction Emissions** 

	ROG	NO <sub>x</sub>	со	SO <sub>2</sub>	PM <sub>10</sub> (exhaust)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (exhaust)	PM <sub>2.5</sub> (total)
Project Maximum Daily Emissions (pounds/day)	1.1	12.4	9.0	<1	<1	3.1	<1	1.7
BAAQMD Regional Thresholds (pounds/day)	54	54			82		54	
Threshold exceeded?	No	No			No		No	

Note: In CalEEMod, environmental commitments, including measures to control fugitive dust, must be added as "mitigation measures." Therefore, these results reflect the mitigated scenario in the output tables in Appendix A.



#### **Operation**

Project operation would generate indirect emissions from energy consumption as well as a small amount of vehicle trips for operation and maintenance. CalEEMod only attributes direct emissions of criteria air pollutants to individual projects from energy sources that would combust on site, such as natural gas. Criteria pollutant emissions from power plants are associated with the power plants themselves, not individual CEQA projects, because power plants are stationary sources permitted by air districts and/or the USEPA, and are subject to local, State and federal control measures.

Operational emissions of criteria pollutants associated with operation and maintenance of the Project are included in **Table 3-2** (daily maximum) and **Table 3-3** (annual). No BAAQMD mass daily thresholds or annual thresholds would be exceeded by operation of the Project.

**Table 3-2: Project Maximum Daily Operational Emissions** 

	ROG	NO <sub>x</sub>	со	SO <sub>2</sub>	PM <sub>10</sub> (exhaust)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (exhaust)	PM <sub>2.5</sub> (total)
Project Maximum Daily Emissions (pounds/day)	<1	<1	<1	<1	<1	<1	<1	<1
BAAQMD Regional Thresholds (pounds/day)	54	54			82	-1-	54	
Threshold exceeded?	No	No			No		No	

**Table 3-3: Annual Project Operational Emissions** 

	ROG	NO <sub>x</sub>	со	SO <sub>2</sub>	PM <sub>10</sub> (exhaust)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (exhaust)	PM <sub>2.5</sub> (total)
Project Annual Emissions (tons/year)	<1	<1	<1	<1	<1	<1	<1	<1
BAAQMD Regional Thresholds (tons/year)	10	10			15		10	
Threshold exceeded?	No	No			No		No	

The Project would not exceed significance thresholds for criteria pollutants during construction or operation, therefore impacts would be less than significant.

### c) Less than Significant Impact

The Project would be sited near residences and schools, which are considered sensitive receptors. As discussed under Impact (b) above, the Project's construction and operational emissions would not exceed BAAQMD thresholds, which are set at levels that protect public health. Given the short duration of construction and emissions well below BAAQMD thresholds, sensitive receptors at the LLESD property and at nearby residences are not expected to be exposed to substantial pollutant concentrations. Thus, impacts would be less than significant.



## d) Less than Significant Impact

The Project facilities would be enclosed and would not release wastewater odors. The Project would involve emissions of typical construction odors from use of oil and diesel fuel during construction, which would be temporary. Once the Project is operational, it would not be associated with new or increased odors or other emissions that would impact substantial numbers of people. Impacts would be less than significant.

## 3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	[ ]	[ ]	[X]	[ ]
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	[ ]	[ ]	[ ]	[ X ]
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]
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]	[]
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	[ ]	[ ]	[X]	[ ]
<ul> <li>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan,</li> </ul>	[ ]	[ ]	[ ]	[X]



or other approved local, regional, or state habitat conservation plan?

#### a) Less than Significant Impact

The Project site is located in an existing paved roadway and adjacent landscaped area, within a developed suburban neighborhood. The impacts of Project construction would be limited to within 0.25-mile of the proposed pump station site. To assess the potential impact on special-status species, a list of special-status species previously documented within a 0.25-mile radius of the proposed pump station site was compiled from the California Natural Diversity Database (CNDDB) (CDFW 2021). Three special-status species records were included in the CNDDB: one reptile, the San Francisco gartersnake (Thamnophis sirtalis tetrataenia), and two plants, fragrant fritillary (Fritillaria liliacea) and western leatherwood (Dirca occidentalis). Each of these occurrences was recorded over 80 years ago, and none occurred at the Project site itself. The Project site, which is a roadway right-of-way and the adjacent, developed LLESD property, does not provide suitable habitat for special-status plant species based on lack of suitable soils, inappropriate hydrologic conditions, or absence of appropriate vegetation communities. In addition, the Project site does not provide suitable habitat for specialstatus wildlife species, due to the residential development in the surrounding area, lack of native vegetation, and regular disturbance. Given the lack of appropriate habitat and age of the known records, the Project is not expected to impact special-status species. Further, as discussed in Section 2.6. Construction Best Management Practices, in the unlikely event that protected animal or plant life is discovered, WBSD would require work to stop within 100 feet of the discovery and notify appropriate agencies.

Birds have the potential to nest near the Project site in or on trees, other ornamental vegetation, and buildings. Nesting bird species are protected by California Fish and Game Code (CFGC) sections 3503 and 3503.5, and the Migratory Bird Treaty Act. If initial ground disturbance and vegetation/tree trimming or removal is required during the nesting bird season (typically February 1 to August 31), the Project may impact nesting birds through injury, mortality, or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings. Construction occurring within the vicinity of nesting birds may also indirectly impact individuals with construction noise, dust, and vibration from equipment. WBSD would implement best management practices as described in Section 2.6, Construction Best Management Practices to comply with CFGC 3503, CFGC 3503.5, and the Migratory Bird Treaty Act. These BMPs include a pre-construction survey for nesting birds and measures to avoid and monitor bird nests, if found, until construction is complete. The Project would adhere to standard construction BMPs in order to avoid disturbance to nesting birds, and the Project's impact on special-status species during construction would be less than significant.

After construction is complete, Project operations at the site would involve weekly visits to the site by WBSD staff. There would be no long-term impact on special status species.



### b) No Impact

Land cover at the Project site and surrounding area is entirely developed. According to the California Office of Planning and Research SiteCheck tool (which identifies habitat and natural communities protected by (CDFW) and a USFWS IPaC search, no sensitive plant communities or special habitats are present at the Project site or adjacent areas within 0.25 mile (OPR 2021, USFWS 2021a). According to the CNDDB, there are no sensitive plant communities within 0.25 mile of Project site (CDFW 2021). There is no riparian habitat present within the Project area, and no sensitive plant communities occur within the Project site, which consists of a roadway right-of-way and the adjacent, developed LLESD property. Therefore, there would be no impact on sensitive vegetation communities.

#### c) No Impact

According to the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory, the Project site does not contain any wetlands or other water features (USFWS 2021b). Thus, the Project would not have the potential to result in direct or indirect impacts to jurisdictional areas, wetlands, other waters, or riparian habitats. The Project would have no impact.

#### d) Impact

The Project would be primarily belowground. The aboveground components of the pump station would have an extremely limited footprint which would not impede wildlife movement through the area. In addition, the Project would not create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement, due to its relatively small footprint. Direct impacts to wildlife movement as a result of Project implementation would be less than significant. No lighting is proposed, and no nocturnal noise generating activities are proposed. Therefore, indirect wildlife movement impacts would be less than significant.

#### e) Less than Significant Impact

The Menlo Park Heritage Tree Ordinance (Menlo Park 2019) requires a Tree Protection Plan for work performed within a tree protection zone of a heritage tree. Heritage trees are defined as all trees other than oaks with a diameter of 15 inches or more, and native oaks with a diameter of 10 inches or more at a height of 54 inches up the tree trunk (diameter at breast height). The tree protection zone is defined as an area of 10 times the diameter of a heritage tree outward from its trunk. Per the ordinance, a tree protection plan shall be prepared by a city-approved certified arborist prior to issuance of any permit for grading or construction and shall address issues related to protective fencing and protective techniques to minimize impacts associated with grading, excavation, demolition and construction within the tree protection zone of a heritage tree.



The Project would not directly impact trees, including heritage trees. However, Project construction activities, such as worker and/or equipment access routes, and construction staging areas, may fall within the tree protection zone of one or more trees on LLESD property and adjacent residential lots that are large enough to qualify as heritage trees. During the process of applying for an encroachment permit with the City, WBSD would determine whether work would occur in a tree protection zone of a heritage tree and comply with all provisions of the Ordnance as appropriate. Thus, the Project would not conflict with local policies or ordinances, and the impact would be less than significant.

## f) No Impact

The Project is located in a developed area and is not within the boundaries of a Habitat Conservation Plan, nor is WBSD a signatory to any Habitat Conservation Plan. Thus, the Project would not have the potential to conflict with conservation plans and there would be no impact.

#### 3.5 Cultural Resources

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	uld the Project:				
,	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	[ ]	[ ]	[X]	[ ]
,	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	[ ]	[ ]	[X]	[ ]
,	Disturb any human remains, including those interred outside of dedicated cemeteries?	[ ]	[ ]	[X]	[ ]

#### a-c) Less than Significant Impact

The Project is located entirely within a disturbed area within and adjacent to a paved road. No designated historic resources are located within 0.25 mile of the Project site (Menlo Park 2016b). The site has been previously disturbed by the construction of the road and existing utilities, including existing subsurface sewer and water facilities, as shown in Figure 2-3 Site Plan. The existing storm drain and sewer mains in Avy Avenue, Altschul Avenue, and the easement on LLESD property are installed at depths of 10 to 11 feet, while the other utilities (water, electrical) are installed at depths of 3 to 4 feet. These past disturbances suggest that the Project site is not highly sensitive for buried archaeological resources. Due to the disturbance history of the site, it is unlikely that the Project would impact previously undisturbed soils that may contain resources.



Once construction is complete, all surfaces, including the roadway, would be restored to pre-construction conditions. Although archaeological resources are not anticipated to be encountered, WBSD would adhere to the standards described in *Section 2.6, Construction Best Management Practices* in case of unanticipated discovery of archaeological resources or human remains during construction. The Project's impact on historical and cultural resources would be less than significant.

#### 3.6 Energy

	_	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	[ ]	[ ]	[X]	[ ]
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	[ ]	[ ]	[ ]	[ X ]

#### a) Less than Significant Impact

Construction of the Project would involve construction-related fossil fuel consumption from operation of diesel-powered construction equipment, and from material hauling, delivery, and worker vehicle trips. The Project would include typical construction practices such as excavation and paving. The Project would not require any unusual or excessive construction equipment or practices that would result in wasteful, inefficient, or unnecessary consumption of energy compared to projects of similar type and size. In addition, the construction fleet contracted for the Project would be required to comply with the California Air Resources Board In-Use Off-Road Diesel-Fueled Fleets Regulations, which limit vehicle idling time to 5 minutes, restrict adding vehicles to construction fleets with older-tier engines, and establish a schedule for retiring older, less fuel-efficient engines from the construction fleet.

Once construction is complete, the Project would involve operational energy consumption of approximately 22,400 kWh/year for operation of the pump. So as not to incur unnecessary costs, WBSD would be incentivized to use the most energy efficient equipment possible to minimize operational costs. Additionally, the Project would allow use of recycled water to meet existing demand, thereby offsetting potable water use and reducing the potential need to secure new water supplies which may be more energy intensive. In general, reclaimed water uses about 40% less energy to supply and distribute than potable water (2,100 kWh/mg for reclaimed water compared to an average of 3,500 kWh/mg for potable water in Northern California) (CAPCOA 2010). As



such, construction and operation of the proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy and impacts would be less than significant.

## b) No Impact

Menlo Park published a Climate Action Plan in 2020, which focuses on planned city actions that can help reduce energy use and emissions. These include measures such as building ordinance changes to phase out natural gas use, expanded electric vehicle charging access, changes in zoning to reduce vehicle travel, and reducing fossil fuel emissions from municipal operations. The Project would involve a limited number of new vehicle trips for operations (approximately one per week) and would not involve changes to land use that could result in increased vehicle trips. The Project would consume energy for operation of the pump, which would be negligible in comparison to the WBSD wastewater systems as a whole. As described above in Impact (a), the Project would not result in wasteful or excessive energy use. It would enable the use of reclaimed water and offset potable water use, which is an energy-saving action. Therefore, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and there would be no impact.

#### 3.7 Geology and Soils

	_	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	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.	[ ]	[ ]	[X]	[ ]
	ii) Strong seismic ground shaking?	[ ]	[ ]	[X]	[ ]
	iii) Seismic-related ground failure, including liquefaction?	[ ]	[ ]	[X]	[ ]
	iv) Landslides?	[ ]	[ ]	[X]	[ ]
b)	Result in substantial soil erosion or the loss of top soil?	[ ]	[ ]	[X]	[ ]



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]	[ ]
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	[]	[ ]	[X]	[ ]
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]
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	[ ]	[ ]	[X]	[ ]

## a) Less than Significant Impact

The Project lies outside fault zones and areas at risk of liquefaction (ABAG 2020). It is located on flat land with a low susceptibility to landslides, and adjacent to an area designated as susceptible to few landslides (ABAG 2020). The greater San Francisco Bay Area, including the Project site, is considered a seismically active area, and the Project site could experience violent ground shaking from earthquakes (ABAG 2020).

The Project would not construct habitable structures and would not expose residents or the public to substantial adverse effects of seismic risks. The Project would be designed and constructed in compliance with the California Building Code, Uniform Building Code, and other applicable building codes. Thus, the Project would not cause substantial adverse effects in the event of an earthquake, and the impact would be less than significant.

#### b) No Impact

Ground-disturbing construction activities such as excavation and grading have the potential to result in soil erosion. The Project would disturb a small area, primarily in roadways, and would have a limited potential to cause soil erosion. Implementation of typical stormwater BMPs discussed in *Section 2.6, Construction Best Management Practices* (such as covering stockpiles, use of sediment catchment structures, and covering of trenches), would ensure that soil erosion impacts are less than significant.

#### c) No Impact

The Project site does not contain soils or slopes that are subject to landslides. Grading and excavation required for the Project would be minimal and would not create the potential for collapse or on-site landslide. Thus, the Project would not affect the stability



of the geologic unit or soil, or result in on- or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse, and impacts would be less than significant.

## d) Less than Significant Impact

The potential for soil expansion in Menlo Park is highest along the marshlands of San Francisco Bay, moderate in the center of the city, and low in the western foothills, although expansive soils may also be highly site-specific (Menlo Park 2013, Menlo Park 2016b). Thus, it is possible the Project site may be located on expansive soils. As described under Impact (a), the Project does not include habitable structures and would be constructed in accordance with applicable building codes. Due to the small scale of the Project facilities, there would be no substantial direct or indirect risks to life or property in the event of soil expansion, and the impact would be less than significant.

#### e) No Impact

The Project would not include septic tanks or alternative wastewater disposal systems; thus, there would be no impact.

#### f) Less than Significant Impact

The Project site and surrounding area has been extensively disturbed by previous construction activities including housing and infrastructure (e.g., roads, water and sewer pipelines, and communication conduits). The pipelines would extend into stream terrace deposits of Holocene and Pleistocene age (UGSS 1993). Pleistocene age deposits are old enough that they have the potential to contain paleontological resources (Menlo Park 2016b). However, the pipeline excavation would be up to 12 feet, and would not be deeper than existing pipelines which have disturbed soils previously. Thus, it is unlikely that previously undiscovered paleontological resources would be discovered as a result of pipeline installation. The pump station wet well would require deeper excavation, up to 20 feet, but would be located on younger alluvium of Holocene age, which is considered too young to contain fossilized remains of organisms (UGSS 1993, Menlo Park 2016b). The wet well would also disturb a relatively small area (approximately 6 feet in diameter). Given the soil types, previous disturbance of the soils underlying the Project site, and limited area of disturbance associated with the Project, the potential to encounter paleontological resources is low and the impact would be less than significant.



#### 3.8 Greenhouse Gas Emissions

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	[]	[ ]	[X]	[]
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	[ ]	[ ]	[ ]	[ X ]

#### a) Less than Significant Impact

Air quality modeling has been conducted for the Project and estimates GHG emissions of 26.6 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) per year for construction and 2.2 MTCO<sub>2</sub>e per year for operations. The BAAQMD identifies a threshold of significance for operational emissions of 1,100 MTCO<sub>2</sub>e/year (BAAQMD 2017b) to assess whether a non-stationary source project would emit enough GHG to have a significant impact on the environment. Due to the minimal nature of anticipated GHG emissions, the Project would not have a cumulatively considerable contribution to greenhouse gas accumulation. Once operational, it would cause a net reduction in GHG by offsetting potable water use with recycled water. As such, the Project's GHG emissions would have a less than significant impact.

#### b) No Impact

Menlo Park published a Climate Action Plan in 2020 (amended in 2021), which focuses on planned city actions that can help reduce energy use and emissions (Menlo Park 2021b). These include measures such as building ordinance changes to phase out natural gas use, expanded electric vehicle charging access, changes in zoning to reduce vehicle travel, and reducing fossil fuel emissions from municipal operations. The California 2017 Climate Change Scoping Plan focuses primarily on reducing GHG emissions that result from mobile sources and land use development. The Project would not involve a considerable increase in new vehicle trips or land use changes that would result in an increase in vehicle trips. The 2017 Climate Change Scoping Plan also recognizes that about 2% of the total energy used in the State is related to water conveyance; it calls for, "using and reusing water more efficiently through greater water conservation, drought tolerant landscaping, stormwater capture, water recycling, and reuse to help meet future water demands and adapt to climate change." By replacing potable water with recycled water for irrigation, the Project would lower energy demands and associated GHG. The Project would not, therefore, conflict with an applicable plan,



policy or regulation adopted for the purpose of reducing GHG emissions. There would be no impact.

## 3.9 Hazards and Hazardous Materials

	Potentially	Less Than Significant with	Less than	
	Significant Impact	Mitigation Incorporated	Significant Impact	No Impact
Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	[ ]	[ ]	[ ]	[ X ]
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]	[]
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]	[ ]
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]
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	[ ]	[ ]	[ ]	[X]
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	[ ]	[ ]	[X]	[ ]
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	[ ]	[ ]	[X]	[ ]



## a) No Impact

Long-term operation of the Project would not require hazardous materials to be routinely used or stored on-site. The Project would therefore not create a hazard to the public or environment through routine transport, use or disposal of hazardous materials.

#### b, c) Less than Significant Impact

During construction, machinery (e.g., excavators and trucks) would be used in order to excavate, install the pump station and pipelines, and restore the road surface. This equipment may leak small amounts of petroleum products (i.e., gasoline, diesel) and automotive fluids during transportation, use, and storage. Additionally, other chemicals (e.g., paints, adhesives, solvents) would be required during construction. The potential exists for accidents to occur during construction activities, which would result in the release of hazardous materials into the environment. However, the construction contractor would be required to comply with applicable standards that regulate the transport, use, storage, and disposal of hazardous materials (including California Health and Safety Code Division 20, Chapter 6.5, Article 6.5, Article 6.6, and Article 13, and Title 40 CFR Part 263). Compliance with these regulations would prevent significant hazards to the public or the environment in the event of accidents during construction. These regulations would also prevent significant impacts to schools within 0.25 miles of the Project (the Phillips Brooks School, La Entrada Middle School, and University Heights Montessori School). The risk of accidental hazardous materials release is low. and potential impacts would be less than significant.

#### d) No Impact

According to the SWRCB GeoTracker database and the California Department of Toxic Substances Control (DTSC) EnviroStor database, there are no open hazardous waste sites within 0.25 miles of the Project (SWRCB 2021, DTSC 2021). Given that there are no hazardous materials cleanup sites near the Project site, the Project would have no impact.

## e) No Impact

The Project is not located within 2 miles of an airport. Multiple airports exist in the region (including the San Francisco International Airport, San Jose International Airport, Palo Alto Airport, San Carlos Airport, and Moffett Federal Airfield); however, they are all located at least 5 miles from the Project; thus, there would be no impact.

#### f) Less than Significant Impact

Construction activities for the Project would require temporary lane closures that could slow emergency responses. As discussed in *Section 3.17, Transportation*, the Project's Traffic Management Plan would address potential interference with emergency response and/or evacuation plans, resulting in a less than significant impact.



## g) Less than Significant Impact

According to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone map and Association of Bay Area Governments (ABAG) Fire Hazard map, the Project is not located within a moderate or high fire hazard severity zone (ABAG 2020, CalFire 2007). The construction contractor would comply with WSD standard specifications for fire prevention, described in *Section 2.6*. Use of spark-producing construction machinery at the Project site would thus not present a significant fire risk. Further, the Project does not include habitable structures that could pose a risk of loss, injury, or death in the event of a wildland fire. Thus, the Project's wildland fire impacts are considered less than significant.

## 3.10 Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	[ ]	[ ]	[X]	[ ]
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	[ ]	[ ]	[ ]	[X]
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	<ul> <li>result in substantial erosion or siltation on- or off-site;</li> </ul>	[ ]	[ ]	[X]	[ ]
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	[ ]	[ ]	[X]	[]
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	[ ]	[ ]	[X]	[ ]



	iv) impede or redirect flood flows?	[	]	[	]	[X]	[ ]
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	[	]	]	]	[ ]	[X]
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	[	]	]	]	[ ]	[X]

#### a) Less than Significant Impact

Excavation and construction activities associated with the Project could result in water quality violations from soil disturbance and potential sedimentation and erosion. It could also cause water quality violations in the event of an accidental fuel or hazardous materials leak or spill. Implementation of stormwater BMPs described in *Section 2.6, Construction Best Management Practices* (such as covering stockpiles, use of sediment catchment structures, and covering of trenches), would control sedimentation or pollution concentration in stormwater runoff. The Project would help transport additional wastewater flows to the Sharon Heights WRP for treatment and reuse and would not change the quality of the recycled water or waste effluent produced at the Sharon Heights WRP. Given the small scale of the proposed project and the use of standard BMPs to control runoff, the potential impact due to water quality violations is considered less than significant.

## b) No Impact

The Project would not use groundwater and would not result in a significant change to impervious surface area that could interfere with groundwater recharge. Dewatering during the Project, if needed, would be a negligible quantity and would not have a significant impact on the underlying San Mateo Plain groundwater subbasin. The Project would not impede sustainable groundwater management and there would be no impact.

## c) Less than Significant Impact

The Project would not alter the course of a stream or river. The pump station site is surrounded by impervious surface to the north (sidewalk and Altschul Avenue) and pervious surface to the south (landscaped area at the LLESD property). The pump station would add a limited amount of new impervious surface to the site. The pipelines would be located in the paved roadway and would not alter impervious surface area. Due to the small size of the pump station footprint, the Project would not have the potential to create substantial erosion or siltation, increase the rate or amount of runoff that would create flooding, or alter runoff that would exceed the capacity of storm drainage systems. As discussed under Impact (a) and in Section 3.7, Geology and Soils, BMPs would be implemented to ensure appropriate stormwater management during construction such that the potential for pollutant transport, including erosion, is less than significant. The Project's impact on drainage would be less than significant.



## d) No Impact

The Project is not located in a flood zone (FEMA 2012). There are no large, enclosed water bodies in Project vicinity that would be subject to seiche. Coastal low-lying areas in Menlo Park may be affected by tsunamis, but the Project area is over 4 miles away from the coast and is not located within a tsunami evacuation area (ABAG 2020). Thus, there would be no impact.

#### e) No Impact

The Project would help WBSD meet existing recycled water demands using its current treatment system capacity, thereby offsetting use of potable water supplies. The Project would not discharge pollutants into a surface water body or into groundwater (as discussed under Impact (a) and in *Section 3.7, Geology and Soils*), and thus would not conflict with water quality control plans or groundwater quality. The Project would support sustainable water management by reducing the volume of potable water consumed for irrigation. Thus, the Project would have no impact on water quality control plans or groundwater sustainability plans.

#### 3.11 Land Use and Planning

	_	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
W	ould the Project:				
a)	Physically divide an established community?	[ ]	[ ]	[ ]	[X]
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	[ ]	[ ]	[ ]	[X]

#### a) No Impact

The Project would have a permanent footprint of approximately 210 square feet of fenced area on LLESD property along an existing fence line. As such, it would not have the potential to physically divide an established community, and there would be no impact.

#### b) No Impact

The Project would be located on an easement at the LLESD property (which is zoned as a Public Facilities District), and in the Menlo Park roadway right-of-way. Per the Menlo Park Zoning Code, section 16.49, all facilities of any public utility are allowed on Public Facilities District lands, provided that a use permit is obtained. All necessary



permits and easements would be secured as part of the Project. Therefore, the Project would not conflict with land use plans, policies, or regulations, and there would be no impact.

#### 3.12 Mineral Resources

	_	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	[ ]	[ ]	[ ]	[X]
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	[ ]	[ ]	[ ]	[X]

#### a, b) No Impact

The California Geologic Survey designates the Project site as MRZ-4, indicating that available information is inadequate to determine whether significant mineral resources are or are not present. The Menlo Park General Plan does not identify mineral resources. The Project is located in a built-out area and would not result in a change to the availability of a known mineral resource. The Project would have no impact on mineral resources.

#### **3.13 Noise**

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	[ ]	[ ]	[X]	[ ]
b)	Generation of excessive groundborne vibration or groundborne noise levels?	[ ]	[ ]	[X]	[ ]



[X]

[ ]

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?

#### a) Less than Significant Impact

As summarized in *Section 2.4, Environmental Setting*, the nearest sensitive receptors to the Project are the residences along Altschul Avenue, across the street from the proposed pump station and adjacent to the pipeline installation locations. The Phillips Brooks School and La Entrada Middle School are located on LLSED property; the nearest building is approximately 150 feet from the proposed pump station location.

The Menlo Park municipal code governs noise at the Project site. Menlo Park sets a daytime noise limit of 60 A-weighted decibels (dBA)<sup>1</sup> and a nighttime noise limit of 50 dBA, as measured at a residential property (Menlo Park 1999). Construction activities between the hours of 8 a.m. and 6 p.m. Monday through Friday are exempt from these limits, provided that signage is posted at all entrances to construction sites to inform contractors of requirements, and that no powered equipment generates noise in excess of 85 dBA at a distance of 50 feet (Menlo Park 1999).

Construction of the Project is anticipated to last 30 to 60 days. Construction would occur during daytime hours and include activities such as site preparation, facilities construction and equipping, and paving. Noise-generating equipment used during construction would include a backhoe, excavator, and trucks for materials hauling and deliveries. **Table 3-4** summarizes the typical noise level of each piece of equipment at 50 feet. None of the equipment would exceed 85 dBA at 50 feet. Work would occur during daytime hours (8 a.m. through 6 p.m.). Therefore, construction of the Project would comply with Menlo Park noise regulations. Furthermore, WBSD would require the construction contractor to implement the practices outlined in *Section 2.6, Construction Best Management Practices*, to minimize noise impacts. These include ensuring that equipment is in good working order, locating staging areas as far as practicable from residences, and providing notice to nearby property owners.

<sup>&</sup>lt;sup>1</sup> A decibel (dB) is unit of measure of sound level. dB are calculated by comparing sound pressure to a sound pressure reference (the threshold of human hearing) and are measured using a logarithmic scale. A-weighted decibels are a method used to account for changes in level sensitivity as a function of frequency. A-weighting de-emphasizes the high and low frequencies and emphasizes the middle frequencies, in an effort to simulate the relative response of the human ear.



**Table 3-4: Typical Construction Equipment Noise Levels** 

Equipment	Typical Noise Levels (dBA, at 50 feet)
Backhoe/Loader	80
Excavator	80 <sup>1</sup>
Trucks	84

Source: FTA 2018.

Operation of the Project would involve running a single 10 horsepower pump, which would be located underground and enclosed within the pump station. The location of the pump would provide substantial shielding such that ambient noise levels would not increase above existing levels. Thus, the Project would not exceed the permanent daytime or nighttime noise limits in Menlo Park.

The Project would not exceed local noise standards during construction or operation; therefore, the impact would be less than significant.

#### b) Less than Significant Impact

Construction activities associated with the Project would have the potential to generate low levels of groundborne vibration. Vibrations with a peak particle velocity<sup>2</sup> (PPV) of 0.2 inches/second or greater have the potential to cause damage to non-engineered timber and masonry buildings (FTA 2018). The Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual provides average vibration levels for typical construction equipment that may generate groundborne vibrations; vibration source levels for construction equipment associated with the Project are summarized in **Table 3-5**. None of the construction equipment to be used would exceed the PPV threshold at a distance of 25 feet, and construction activities would not occur within 25 feet of existing structures. Thus, vibration would not cause structural damage to buildings.

<sup>1.</sup> Excavator noise was assumed to be comparable to a backhoe.

<sup>&</sup>lt;sup>2</sup> Peak particle velocity, or PPV, is the peak signal value (maximum positive or negative peak) of the vibration signal. PPV is often used in monitoring of construction vibration (such as blasting) because it is related to the stresses that are experienced by buildings and is not used to evaluate human response. PPV is usually expressed in inches/second in the United States.



**Table 3-5: Vibration Source Levels for Construction Equipment** 

Equipment	PPV at 25 feet (inches/second)	Approximate VdB at 25 feet
Backhoe/Loader	N/A	N/A
Excavator	N/A	N/A
Loaded Trucks	0.076	86

Source: FTA 2018

Most construction equipment is not expected to generate vibration; these are denoted with "N/A."

According to the Transit Noise and Vibration Impact Assessment Manual, 80 vibration decibels<sup>3</sup> (VdB) is the threshold for human annoyance from groundborne vibration noise when events are infrequent. Typical VdB levels for construction equipment are summarized in **Table 3-5**. The Project would not involve use of high-impact activities, such as piledriving or blasting, that typically generate high levels of groundborne vibration. However, loaded trucks would produce levels of vibration noise that would cause annoyance at a distance of 25 feet. Groundborne vibration noise from loaded trucks would attenuate to below 80 VdB at a distance of 40 feet (VdB<sub>distance</sub> = VdB<sub>reference</sub> - 30log(distance/25)) (FTA 2018). Thus, loaded trucks used for materials delivery and soil export may generate vibration that would cause annoyance at residences near the construction site and along haul routes. These truck visits would occur only intermittently during the 30-to-60-day construction period. Construction would occur during daytime hours consistent with Menlo Park noise regulations. Operation of the Project would not include vibration-generating activities or equipment and thus would not have potential to generate vibration. Due to the infrequent, brief, and temporary nature of vibration-generating activities, the Project's vibration impacts would be less than significant.

#### c) No Impact

The Project is not located within 2 miles of an airport. Therefore, the Project would not expose residences or workers to excessive aircraft noise and there would be no impact.

<sup>&</sup>lt;sup>3</sup> A vibration decibel (vdB) represents the vibration velocity level on a decibel scale.



## 3.14 Population and Housing

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wc	ould the Project:				
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	[ ]	[ ]	[ ]	[X]
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	[ ]	[ ]	[ ]	[X]

#### a, b) No Impact

The Project does not propose to build new homes or businesses, or to extend infrastructure that could induce growth. The Project would route additional wastewater flows from existing sewer lines to the Sharon Heights WRP via the existing force main. The Project would allow WBSD to sustain planned levels of recycled water production; it would not expand WBSD's service area or indirectly induce growth. The Project would have a limited footprint and would not displace people or housing. Thus, the Project would have no impact on population and housing.

#### 3.15 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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 following public services:	[ ]	[ ]	[ ]	[X]
i) Fire protection?	[ ]	[ ]	[ ]	[X]
ii) Police protection?	[ ]	[ ]	[ ]	[X]



iii) Schools?	[ ]	[ ]	[ ]	[X]
iv) Parks?	[ ]	[ ]	[ ]	[X]
v) Other public facilities?	[ ]	[ ]	[ ]	[X]

#### a) No Impact

The Project would serve existing recycled water demand. The Project would not change existing demand on other public facilities (e.g., fire and police protection, schools, parks, libraries, or health clinics) because it does not propose new housing units, nor would it directly or indirectly induce population or employment within the area. Construction and operation of the Project would not require expansion of existing public facilities or construction of new public facilities. Therefore, no impact to public facilities would occur.

#### 3.16 Recreation

<b>18</b> /-	ould the Drain of	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VVC	ould the Project:				
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]
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]

## a, b) No Impact

The Project would not include recreational facilities. The pump station would be located on LLESD property and would have a limited footprint. The pump station would not be located on a portion of the property used for recreation; thus, the Project would not reduce available recreational area, and would not require construction of new or replacement recreational facilities. The Project would not increase population or otherwise indirectly increase use of existing parks. Thus, the Project would not impact recreational facilities and there would be no impact.



#### 3.17 Transportation

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the Project:				
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	[ ]	[ ]	[X]	[ ]
b)	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	[ ]	[ ]	[X]	[ ]
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	[ ]	[ ]	[X]	[ ]
d)	Result in inadequate emergency access?	[ ]	[ ]	[X]	[ ]

#### a) Less than Significant Impact

The Circulation element of the Menlo Park General Plan includes goals and policies that govern transportation planning in the city, including provision and maintenance of a safe, efficient, attractive, user-friendly circulation system. Other goals and policies in the General Plan relate to issues such as facility improvements, design of new development, reducing GHG emissions, and improving transit service. The General Plan also identifies emergency response routes, which include Avy Avenue.

Menlo Park also maintains a Transportation Master Plan, which identifies and prioritizes key projects and programs to improve transportation in the city (Menlo Park 2020b). Priority projects primarily include pedestrian and bicycle facility improvements.

Regional transportation planning is undertaken by the Metropolitan Transportation Commission, which encompasses the nine Bay Area counties, including San Mateo County. In 2021, Metropolitan Transportation Commission and ABAG adopted Plan Bay Area 2050, which includes the Regional Transportation Plan and Sustainable Communities Strategy (MTC 2021). This document contains strategies to improve transportation as well as housing, the economy, and the environment. Transportation strategies include improving transit, enhancing streets to promote walking and biking, and improving highway bottlenecks. The City/County Association of Governments (C/CAG) of San Mateo County maintains the Congestion Management Plan for the county. The Congestion Management Plan is intended to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion,



and promote countywide solutions. The Congestion Management Plan generally establishes the minimum level of service for roadways in San Mateo County as level of service E (C/CAG of San Mateo County 2020).

Transportation facilities surrounding the Project are summarized in *Section 2.4.4*, *Transportation*. Additionally, school traffic for the Phillips Brooks School and La Entrada Middle School utilizes Altschul Avenue and Avy Avenue, with increased traffic volumes during school drop-off and pick-up times.

During construction of the Project, lane and sidewalk closures would be required in Altschul Avenue and the intersection of Altschul Avenue and Avy Avenue. If possible, construction would be scheduled during the summer months when the adjacent schools are not in session, which would avoid construction impacts at times when traffic volumes are highest. However, it is possible that construction would occur during the school year. Regardless of construction timing, lane and sidewalk closures would be conducted in accordance with a Traffic Management Plan (see Section 2.6, Construction Best Management Practices), which requires appropriate signage identifying closures and alternative safe routes to maintain bicycle and pedestrian safety. The Traffic Management Plan also requires coordination with emergency services (police, fire, and others) about the Project construction schedule and closures. Due to the limited construction duration and standard traffic management practices, Project construction would not conflict with applicable planning documents or impede emergency response.

Upon completion of construction, the road and sidewalks would be restored to their original condition. The Project would not cause any permanent changes to surrounding transportation facilities, and as such would not conflict with General Plan goals or policies or affect implementation of Menlo Park's planned transportation improvements identified in the Transportation Master Plan. Neither construction nor operation of the Project would conflict with transportation planning, and the impact would be less than significant.

## b) Less than Significant Impact

CEQA Guidelines Section 15064.3, subdivision (b) stipulates criteria for analyzing transportation impacts in terms of "vehicle miles traveled" (VMT) for land use projects and transportation projects. VMT refers to the amount and distance of automobile travel attributable to a project. Menlo Park's Transportation Impact Analysis Guidelines govern CEQA review for development or capital projects related to transportation on local streets, pedestrian, bicycle, and transit circulation (Menlo Park 2020a). Projects generating less than 100 vehicle trips per day are exempt from Menlo Park's transportation impact analysis requirements.

The Project does not include new development or changes to the transportation system. Additionally, it would not generate more than 100 vehicle trips per day. Construction of the Project would involve temporary trips associated with workers, delivery of construction supplies and equipment, and hauling materials to and from the site.



Approximately one vehicle trip per week would be required for long-term operation and maintenance of the Project. Therefore, the Project would not conflict with Menlo Park's guidelines or CEQA Guidelines Section 15064.3, subdivision (b) and the impact would be less than significant.

## c) Less than Significant Impact

Project construction may require some incompatible uses on roadways in the Project area, such as transportation of construction equipment and haul trips. These uses could temporarily increase hazards near the Project site but would not permanently alter the roadway and safety conditions. The road and sidewalks would be restored to their original condition following Project construction. Additionally, as described in *Section 2.6, Construction Best Management Practices*, the Project would include a Traffic Control Plan, including measures to ensure that vehicle ingress and egress from the Project site occurs safely. Therefore, the Project impact would be less than significant.

### d) Less than Significant Impact

Lane closures and other potential traffic impacts caused by construction activities associated with the Project would have the potential to impede emergency response to surrounding areas, or to areas accessed via impacted routes. Menlo Park Fire Station #4 is located at the corner of Valpraiso Avenue and Alameda de Las Pulgas, approximately 1,000 feet northwest of the Project. WBSD's standard construction BMPs (see Section 2.6, Construction Best Management Practices) include a Traffic Management Plan, which includes notifying emergency responders (fire, police, and others) of construction locations and alternate routes, if needed. Thus, the impact to emergency access would be less than significant.

#### 3.18 Tribal Cultural Resources

	Potentially			
	Significant Impact	Mitigation Incorporated	Significant Impact	No Impact
Would the Project:				
a) 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:				
<ul> <li>i) Listed or eligible for listing in the California Register of Historical</li> </ul>	[ ]	[ ]	[X]	[ ]



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

## a) Less Than Significant Impact

The Project site has been previously disturbed by roadway development, housing, and subsurface utilities. As described in *Section 3.7, Cultural Resources*, much of the site is underlain by artificial fill from prior development. Therefore, the possibility of encountering intact surface tribal cultural resources is considered low. With construction projects involving excavation there is potential for ground-disturbing activities to expose previously unrecorded tribal cultural resources; however, this potential is considered low based on the previously disturbed site characteristics. The past disturbances at the site suggest that the Project area is not highly sensitive for buried archaeological remains. Nonetheless, WBSD would adhere to the standards described in *Section 2.6, Construction Best Management Practices* in case of unanticipated discovery of archaeological resources or human remains during construction. Therefore, the impact to tribal cultural resources would be less than significant.

## 3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	[ ]	[ ]	[X]	[ ]
<ul> <li>Have sufficient water supplies available to serve the Project and reasonably foreseeable future</li> </ul>	[ ]	[ ]	[ ]	[X]



	development during normal, dry and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	[]	[]	[ ]	[X]
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	[]	[]	[X]	[ ]
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	[ ]	[ ]	[X]	[ ]

## a) Less than Significant

The Project would construct a new influent pump station and connections to existing sewer and force main facilities, as well as a new PG&E utility service consisting of a motor control center connected to a pole mounted power supply. The Project does not include expanded water service, stormwater drainage, natural gas, or telecommunications facilities. As discussed in *Section 0*,



Population and Housing, the Project would serve existing recycled water demands and would not induce population or employment growth that would require or result in the construction of new or expanded water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities. The Project would use approximately 22,400 kWh/year of electricity. The environmental effects of the new wastewater and electrical facilities have been evaluated throughout this environmental checklist and have been determined to be less than significant. Therefore, the Project's impact related to utility construction would be less than significant.

## b) No Impact

The Project would not require a water supply and would not directly or indirectly induce population growth or development that could impact the water supply. Thus, the Project would have no impact on water supplies.

## c) No Impact

The Project would consist of new wastewater facilities to convey existing wastewater flows for recycling and reuse. The Project would help the Sharon Heights WRP operate at its planned capacity and would not exceed the capacity of existing infrastructure. The Project would not generate additional wastewater, and thus would not impact WBSD's collection and treatment capacity. The Project would not generate additional demand for wastewater services, and therefore would be no impact.

## d, e) Less than Significant Impact

The Project would generate solid waste in the form of soil and asphalt waste during construction. It is estimated that approximately 300 cy of material would need to be disposed of at a permitted landfill. Solid waste generated by the Project would likely be hauled to the Corinda Los Trancos Landfill, which can accept up to 3,598 tons per day. It has a remaining capacity of 22 million cy and an anticipated closure date of 2034 (CalRecycle 2019). Assuming a truck capacity of 16 cy, off haul of exported materials would require approximately 19 truck trips over the 30-to-60-day construction timeframe, resulting in an average of less than one 16 cy truck trip per day. The landfill would have sufficient permitted capacity to accommodate the Project's solid waste disposal needs. Solid waste would be disposed of in accordance with all applicable federal, State, and local statutes and regulations. Project operation and maintenance activities would generate negligible solid waste. Implementation of the Project would not exceed permitted capacity at local landfills or conflict with regulations, and the impact would be less than significant.



#### 3.20 Wildfire

		Signi	ntially ficant pact	Less i Signifi wit Mitiga Incorpo	icant h ation	Less than Significant Impact	No Impact
or I	ocated in or near state responsibility areas ands classified as very high fire hazard rerity zones, would the Project:						
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	[	]	]	]	[ X ]	[ ]
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	]	1	]	]	[ X ]	[]
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	]	]	]	1	[ X ]	[]
d)	Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	]	]	]	]	[ ]	[X]

#### a) Less than Significant Impact

As discussed in *Section 3.17, Transportation*, the Project's Traffic Management Plan would address potential interference with emergency response and/or evacuation plans, resulting in a less than significant impact.

#### b) Less than Significant Impact

The Project is not located in a Very High Fire Hazard Severity Zone or a State Responsibility Area (CalFire 2007). The nearest State Responsibility Area is approximately 0.5 miles south of the Project site, south of Sand Hill Road. The construction contractor would comply with WBSD standard specifications for fire prevention, described in *Section 2.6 Construction Best Management Practices*. Use of spark-producing construction machinery at the Project site would thus not present a significant fire risk. Therefore, the Project would not create new or increased risks related to wildfire, and impacts would be less than significant.



## c) Less than Significant Impact

The Project would construct a new influent pump station and connections to existing sewer and force main facilities, as well as a new PG&E utility service consisting of a motor control center connected to a pole mounted power supply. Although failure of the power supply could potentially result in an accidental fire, the Project would be designed in conformance with engineering standards and stamped by a licensed professional engineer certifying that the design is sufficient to meet the current code. Furthermore, this type of work is a routine undertaking for power utilities and would not create an unusual fire risk. Existing power lines are located along Altschul Avenue, and the Project would not significantly change the surrounding electrical facilities or increase fire hazard beyond existing conditions. Thus, the Project would not exacerbate fire risk, and the impact would be less than significant.

#### d) No Impact

The Project would be located within an existing public right-of-way and adjacent LLESD property. As discussed in *Section 3.10, Hydrology and Water Quality,* the pump station would not significantly alter the drainage of the site. The sidewalk and roadway would be restored to original their original conditions following Project construction. Thus, the permanent impact on site drainage would be negligible. Additionally, the Project is not located on a steep slope susceptible to landslides, or a downward slope that would result in increased drainage or runoff that could contribute to post-fire slope instability, landslides, or flooding. The proposed Project would have a less than significant impact related to increasing runoff, post-fire slope instability, or drainage changes, and no impact would occur.

## 3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the Project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	[ ]	[ ]	[X]	[ ]
b) Have impacts that are individually limited, but cumulatively considerable?	[ ]	[ ]	[X]	[ ]



[ ]

("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

## [ ] [ X]

#### a) Less than Significant Impact

The potential biological impacts of the Project, including impacts on special-status fish and wildlife species, and protected habitat and natural communities, are discussed in *Section 3.4, Biological Resources*. The potential impacts to historical and cultural resources from the Proposed Project are addressed in *Section 3.5, Cultural Resources*. Biological and cultural impacts would be less than significant.

### b) Less than Significant Impact

Most of the potential impacts from the Project would be limited to the construction period, and all potential impacts of the Project have been found to be less than significant. Therefore, the Project would not have the potential to cause cumulatively considerable impacts, and its impact would be less than significant.

#### c) Less than Significant Impact

As described in the preceding sections, all Project impacts would be considered less than significant, including those that related to humans and human health (including aesthetics, air quality, cultural resources, hazardous materials, noise, and traffic). Therefore, the Project would not have environmental effects that could cause substantial adverse effects on humans, and the impact would be less than significant.



# 4. FEDERAL CROSS-CUTTING ENVIRONMENTAL REGULATION EVALUATION

WBSD intends to apply for funding from the SWRCB's Clean Water State Revolving Fund, which requires that federal environmental review requirements must be met. Although CEQA was modeled after the National Environmental Policy Act (NEPA), where there are differences between the State's process under CEQA and the applicable federal statutes and regulations, the federal statutes and regulations must be followed for a federal entity to fulfill its NEPA review requirements before releasing federal funds. Compliance is set out in the CFR at 40 CFR Section 35.3575 (Application of Federal cross-cutting authorities) and 7 CFR Section 1970 (Environmental Policies and Procedures).

This section describes the Project's status of compliance with the federal cross-cutting regulations (also referred to as CEQA-Plus) and the consultation that has or will occur. These policies and procedures are based on the SWRCB's Appendix I: State Environmental Review Process, which addresses the EPA review requirements that build upon the State environmental review requirements under CEQA (SWRCB 2017).

## 4.1 Archaeological and Historic Preservation Act

The Archaeological and Historic Preservation Act provides for the preservation of significant scientific, prehistoric, historic and archaeological materials and data that might be lost or destroyed as a result of flooding, the construction of access roads, relocation of railroads and highways, or any other federally funded activity that is associated with the construction of a dam or reservoir.

The Project is not associated with construction of a dam or reservoir or relocation of a railroad or highway. Thus, the Project would not conflict with the Archaeological and Historic Preservation Act.

#### 4.2 Clean Air Act

The U.S. Congress adopted general conformity requirements as part of the Clean Air Act Amendments in 1990 and the EPA implemented those requirements in 1993 (Sec. 176 of the Clean Air Act (42 United States Code [U.S.C.] Section 7506) and 40 CFR Part 93, Subpart B). General Conformity requires that all federal actions "conform" with the State Implementation Plan as approved or promulgated by USEPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine State or local efforts to achieve and maintain the national ambient air quality standards. Before a federal action is taken, it must be evaluated for conformity with the State Implementation Plan. All "reasonably foreseeable" emissions predicted to result from the action are taken into consideration. These include direct and indirect emissions and must be identified as to location and quantity. If it is found that the action would create emissions above de minimis threshold (minimum threshold for which a conformity determination must be performed) levels specified in USEPA



regulations (40 CFR Section 93.153(b)), or if the activity is considered "regionally significant" because its emissions exceed 10 percent of an area's total emissions, the action cannot proceed unless mitigation measures are specified that would bring the Project into conformity.

For CWSRF funded projects, a Clean Air Act General Conformity analysis applies only to projects in a nonattainment area or an attainment area subject to a maintenance plan. It is only required for criteria pollutants for which an area has been designated nonattainment or maintenance. As noted above, the SFBAAB does not meet the federal PM<sub>2.5</sub> or 8-hour ozone standards. Based on the federal attainment statuses for the SFBAAB, the applicable de minimis levels are listed in **Table 4-1**. These levels apply to all direct and indirect annual emissions generated during construction and operation of the Project. If the Project's annual emissions from construction and/or operation are below the applicable de minimis levels, the Project is not subject to a General Conformity determination.

Table 4-1: General Conformity De Minimis Emission Rates for the SFBAAB

Pollutant	SFBAAB NAAQS Attainment Status Designation	De Minimis Emission Rate (tons/year)	
Ozone (VOCs or NOx)	Nonattainment	100	
PM <sub>2.5</sub>	Nonattainment	100	

Note:  $NO_x$  and ROG/VOCs are ozone precursors, which chemically react in the presence of sunlight to form ground-level ozone. For the purposes of this analysis, the terms ROG and VOC are used interchangeably.

Sources: USEPA 2021b; BAAQMD 2017b.

**Table 4-2** summarizes the Project's total annual construction emissions and compares those to the applicable de minimis threshold for the SFBAAB. The Project's criteria air pollutant emissions would not exceed the applicable de minimis thresholds. Therefore, the general conformity requirements do not apply to the Project's emissions, it is exempt from a conformity determination, and the Project would comply with the Clean Air Act.

Table 4-2: Annual Project Emissions Compared to De Minimis Thresholds

	ROG	NO <sub>x</sub>	PM <sub>2.5</sub>
Project Annual Emissions, Construction (tons/year)	<1	<1	<1
Project Annual Emissions, Operation (tons/year)	<1	<1	<1
De Minimis Thresholds (tons/year)	100	100	100
Threshold exceeded?	No	No	No

#### 4.3 Coastal Barriers Resource Act

The Coastal Barriers Resource Act encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting federal expenditures that encourage development in these areas (such as federal flood insurance). The Coastal Barriers



Resource Act does not apply to any portion of California and thus the Project would not conflict with this act.

## 4.4 Coastal Zone Management Act

The Coastal Zone Management Act (16 U.S.C. Section 1451 *et seq.*) is managed by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management and designed to balance land and water issues in coastal zones. It also aims to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." Within California, the Coastal Zone Management Act is administered by the San Francisco Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

The Project site is located approximately 11 miles from the Pacific Ocean. Therefore, it is not within the coastal zone and the Coastal Zone Management Act does not apply.

#### 4.5 Endangered Species Act, Section 7

The federal Endangered Species Act (FESA) establishes a program for the conservation of threatened and endangered plants and animals and the habitats in which they depend. Section 7 (16 U.S.C. Section 1531 *et seq.*) requires federal agencies to ensure their actions are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. If a project could result in an incidental (unintentional but not unexpected) take of a threatened or endangered (listed) species, federal agencies must undergo consultation with the USFWS and/or National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) to obtain a Biological Opinion. If the federal agency finds that the project is not likely to adversely affect listed species, the federal agency can consult informally, and if USFWS and NFMS agree with that finding, a concurrence letter can be issued. If the Biological Opinion finds that the project could jeopardize the existence or habitat of a listed species ("jeopardy" opinion), the agency cannot authorize the project until it is modified to obtain a "non-jeopardy" opinion.

As described in *Section 3.4, Biological Resources*, the Project site does not contain suitable habitat for special-status plant or wildlife species. Due to the lack of specific habitats or suitable substrates, as well as the high levels of historic and existing disturbance, special-status species are not anticipated to occur. Therefore, the Project is expected to have no effect, either directly or indirectly, on special-status plant or wildlife species or jeopardize any listed species, and WBSD would be in compliance with the FESA.



#### 4.6 Environmental Justice

This section describes the existing socioeconomic resources in the Project area and the regulatory setting pertaining to environmental justice-related issues. This section also evaluates the potential for the Project to disproportionately affect minority or low-income groups. The EPA defines environmental justice as:

"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies." (USEPA 2021a)

According to EPA guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50 percent or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

The Project would be located in Menlo Park in southern San Mateo County. According to the EPA's Environmental Screening and Mapping Tool (EJScreen), the Project site at the LLESD property has a 46% minority population, which is in the 30<sup>th</sup> percentile for minority population compared to California as a whole (USEPA 2020). Therefore, the Project area is not composed of a minority population exceeding 50 percent.

EPA guidelines recommend that analyses of low-income communities consider the U.S. Census Bureau's poverty level definitions, as well as applicable State and regional definitions of low-income and poverty communities. The California Department of Water Resources (DWR) defines a Disadvantaged Community (DAC) as a community with a median household income (MHI) less than 80 percent of the California MHI. To identify the location of DAC communities for its mapping tool, DWR relies on 2014-2018 American Community Survey data, which defines the California statewide MHI as \$71,228. A DAC would therefore be a community with an MHI of \$56,982 or less. According to the DWR DAC Mapping Tool, the Project is not located within a DAC (DWR n.d.).

## Impact Analysis

For the purposes of this analysis, an environmental justice impact would be significant if the Project would directly, indirectly, or cumulatively cause disproportionately high and adverse impacts to minority or low-income populations.

The Project is not located in a minority or low-income population. Although construction of the Project has the potential for short-term environmental impacts related to air quality, noise, hazardous materials, and transportation, these impacts would be less



than applicable thresholds and would not be disproportionately felt by minority or low-income populations. Thus, no adverse environmental justice impacts would occur.

#### 4.7 Farmland Protection Policy Act

The Farmland Protection Policy Act (7 U.S.C. Section 4201 *et seq.*) requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The Farmland Protection Policy Act is intended to minimize the impacts of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with State, local, and private programs and policies to protect farmland.

As described in *Section 3.2, Agriculture and Forestry Resources*, the Project site is not classified as important farmland. Therefore, the Project would not conflict with the Farmland Protection Policy Act.

#### 4.8 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act as amended (16 U.S.C. Section 661 *et seq.*) is intended to promote conservation of fish and wildlife resources by preventing their loss or damage, and to provide for development and improvement of fish and wildlife resources in connection with water projects. Federal agencies undertaking water projects are required to fully consider recommendations made by USFWS, NMFS, and State wildlife agencies when any waterbody is impounded, diverted, controlled, or modified for any purpose. Compliance with Fish and Wildlife Coordination Act is to be coordinated with FESA consultation.

The Project would not impound, divert, control or modify any surface water or groundwater body. Thus, the Project would not conflict with the Fish and Wildlife Coordination Act.

#### 4.9 Floodplain Management - Executive Order 11988

Executive Order (EO) 11988, as amended by EO 12148 and EO 13690, requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

As described in *Section 3.10*, *Hydrology and Water Quality*, the Project is not located within a 100- or 500-year flood zone. The Project would not permanently alter existing flood channels, rivers, or floodplains. Because there would be no facilities located within the floodplain, the Project would not increase flood hazards or interfere with floodplain management. The Project would be in compliance with EO 11988.

#### 4.10 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act as amended (16 U.S.C. Section 1801 *et seq.*) is the primary act governing federal management of fisheries in federal waters, from the 3-nautical-mile state territorial sea limit to the outer



limit of the U.S. Exclusive Economic Zone (EEZ). It establishes exclusive U.S. management authority over all fishing within the EEZ, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans to achieve the optimum yield from U.S. fisheries in their regions. The act also requires federal agencies to consult with the NMFS on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297). EFH includes those habitats that support the different life stages of each managed species. A single species may use different habitats that consist of both the water column and underlying surface (e.g., streambed) throughout its life to support breeding, spawning, nursery, feeding, and protection functions.

As described in *Section 3.4, Biological Resources*, the Project would not be located in or impact any U.S. federal waters regulated under the Magnuson-Stevens Act. Therefore, the Project would have no effect on resident or migratory fish or fish habitat in the Project area and WBSD would be in compliance with the Magnuson-Stevens Act.

## 4.11 Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The Migratory Bird Treaty Act (16 U.S.C. Sections 703–712) and the Bald and Golden Eagle Protection Act (16 U.S.C. Section 668-668c) prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 requires that any project with federal involvement address impacts of federal actions on migratory birds.

As described in *Section 3.4, Biological Resources*, the Project would implement standard BMPs to minimize impacts on nesting birds, including those required under the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168. Thus, WBSD would be in compliance with these regulations.

#### 4.12 National Historic Preservation Act, Section 106

The National Historic Preservation Act (NHPA) (16 U.S.C. Section 470) establishes a program to protect, preserve, rehabilitate, and restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to take into account effects on historic properties and involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800).

As described in *Section 3.5 Cultural Resources*, the Project is wholly located within and adjacent to a road, within a developed area. The site has undergone previous disturbance associated with housing development and existing subsurface utilities. Thus, the potential for the Project to disturb previously undiscovered historic, archaeological, or cultural resources is considered to be low. WBSD would comply with applicable regulations and implement best management practices as discussed in *Section 3.5 Cultural Resources*. The Project is expected to have no effect on historical



and archaeological resources and no historic properties are affected under Section 106 of the NHPA.

#### 4.13 Protection of Wetlands - Executive Order 11990

Under EO 11990, as amended by EO 12608, federal agencies must avoid affecting wetlands unless it is determined that no practicable alternative is available. The EO directs federal agencies to provide leadership and act to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in implementing civil works.

As described in *Section 3.4, Biological Resources*, no waters or wetlands potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE), RWQCB, or California Department of Fish and Wildlife are located within the Project area. Therefore, WBSD would be in compliance with EO 11990.

#### 4.14 Rivers and Harbors Act, Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires that regulated activities conducted below the ordinary high water elevation of navigable waters of the United States be permitted by USACE. Regulated activities include the placement/removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway.

The Project would construct a wastewater pump station in a developed area. Therefore, the Project would not require a Section 10 permit.

## 4.15 Safe Drinking Water Act

Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. Section 300f *et seq.*) established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally funded projects.

Within EPA's Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located within the Project area (EPA 2020). Therefore, the Sole Source Aquifer Program does not apply to the Project and the Project would be in compliance with Section 1424(e) of the Safe Drinking Water Act.

#### 4.16 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (6 U.S.C. Section 1271 *et seq.*) was passed to preserve and protect designated rivers for their natural, cultural, and recreational value.

There are no designated Wild and Scenic Rivers in the Bay Area, nor would any designated rivers be adversely affected by the Project. As a result, the Project would not conflict with the Wild and Scenic Rivers Act.



#### 4.17 Wilderness Act

The Wilderness Act prohibits commercial enterprise and permanent roads within any wilderness area designated by this Act. It also prohibits temporary roads, use of motor vehicles, motorized equipment, or motorboats, landing of aircraft, other forms of mechanical transport, and structure or installation within wilderness areas unless necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving health and safety of persons within the area).

The proposed project is not located within a designated wilderness area and thus would not conflict with the Wilderness Act.



#### 5. REFERENCES

- Association of Bay Area Governments (ABAG). 2020. ABAG GIS Hazard WebViewer. Accessed November 18, 2021. Available online at:

  <a href="https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42e">https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42e</a>
  ab29b35dfcd086fc8
- Association of Bay Area Governments (ABAG). 2015. Priority Conservation Areas Map.
- Bay Area Air Quality Management District (BAAQMD). 2017a. Final Clean Air Plan.
  Adopted April 19, 2017. Accessed on November 17, 2021. Available online at:
  <a href="https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a-proposed-final-cap-vol-1-pdf.pdf?la=en">https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a-proposed-final-cap-vol-1-pdf.pdf?la=en</a>
- Bay Area Air Quality Management District (BAAQMD). 2017b. California Environmental Quality Act Air Quality Guidelines. May 2017. Accessed on November 17, 2021. Available online at: <a href="https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa\_guidelines\_may2017-pdf.pdf?la=en">https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa\_guidelines\_may2017-pdf.pdf?la=en</a>
- California Air Pollution Control Officers Association (CAPCOA). 2010. Quantifying Greenhouse Gas Mitigation Measures. Accessed on December 8, 2021. Available online at: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
- California Department of Conservation (CDOC). 2016. Important Farmland Finder Interactive Map. Accessed on November 5, 2021. Available online at: <a href="https://maps.conservation.ca.gov/dlrp/ciff/">https://maps.conservation.ca.gov/dlrp/ciff/</a>
- California Department of Fish and Wildlife (CDFW). 2021. California Natural Diversity Database, Rarefind 5. Commercial Version. Accessed December 6, 2021.
- California Department of Forestry and Fire Protection Fire and Resource Assessment Program (FRAP). 2007. San Mateo County: Fire Hazard Severity Zones in State Responsibility Areas. Accessed on November 9, 2021. Available online at: <a href="https://osfm.fire.ca.gov/media/6802/fhszs\_map41.pdf">https://osfm.fire.ca.gov/media/6802/fhszs\_map41.pdf</a>
- California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Activity Details, Corinda Los Trancos Landfill (Ox Mtn) (41-AA-0002). Accessed on November 9, 2021. Available online at: <a href="https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223">https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223</a>
- California Department of Transportation (Caltrans). 2019. *California State Scenic Highway System Map.* Accessed on November 5, 2021. Available online at: <a href="https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa">https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa</a>.
- California Department of Toxic Substances Control (DTSC). 2021. EnviroStor Databse. Accessed November 19, 2021. Available online at:

  <a href="https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=1011+altschul+aven\_ue%2C+menlo+park+ca">https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=1011+altschul+aven\_ue%2C+menlo+park+ca</a>



- California Department of Water Resources (DWR). N.d. DAC Mapping Tool. Accessed November 9, 2021. Available online at: <a href="https://gis.water.ca.gov/app/dacs/">https://gis.water.ca.gov/app/dacs/</a>
- California State Water Resources Control Board (SWRCB). 2017. Appendix I: State Environmental Review Process, State Water Resources Control Board Clean Water State Revolving Fund Program. Accessed on November 23, 2021. Available online at:

  <a href="https://www.waterboards.ca.gov/water">https://www.waterboards.ca.gov/water</a> issues/programs/grants loans/srf/docs/po

licy0513/appendix i envguide.pdf

- California State Water Resources Control Board (SWRCB). 2021. Geotracker Database. Accessed November 19, 2021. Available online at:

  <a href="https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=1011+altschul+avenue%2C+menlo+park#">https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=1011+altschul+avenue%2C+menlo+park#</a>
- California Office of Planning and Research (OPR). 2021. Site Check (Interactive Online Tool). Accessed December 3, 2021. Available online at: <a href="https://sitecheck.opr.ca.gov/">https://sitecheck.opr.ca.gov/</a>
- City/County Association of Governments of San Mateo County. 2020. Congestion Management Program 2019. Accessed on December 8, 2021. Available online at: <a href="https://ccag.ca.gov/wp-content/uploads/2020/04/2019-CMP-Final-040920.pdf">https://ccag.ca.gov/wp-content/uploads/2020/04/2019-CMP-Final-040920.pdf</a>
- Federal Emergency Management Agency (FEMA). 2012. National Flood Insurance Program Flood Insurance Rate Map Number 06081C0312E.
- Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September 2018. Accessed on December November 10, 2021. Available online at:

  <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf">https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf</a>
- Google Maps. 2021. Bicycling map data. Accessed on November 5, 2021. Available online at: <a href="https://www.google.com/maps/@37.4283545,-122.203141,15.3z/data=!5m1!1e3">https://www.google.com/maps/@37.4283545,-122.203141,15.3z/data=!5m1!1e3</a>.
- Menlo Park, City of. 1999. City of Menlo Park Municipal Code, Title 8, Chapter 8.06 Noise.
- Menlo Park, City of. 2009. City of Menlo Park Sidewalk Master Plan. Accessed on November 9, 2021. Available online at: <a href="https://www.menlopark.org/ArchiveCenter/ViewFile/Item/12159">https://www.menlopark.org/ArchiveCenter/ViewFile/Item/12159</a>
- Menlo Park, City of. 2013. City of Menlo Park General Plan Open Space, Conservation, Noise, and Safety Elements.
- Menlo Park, City of. 2016a. City of Menlo Park General Plan Land Use and Circulation Elements.



- Menlo Park, City of. 2016b. Final EIR for ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update for the City of Menlo Park. SCH # 2015062054.
- Menlo Park, City of. 2019. Menlo Park Municipal Code Chapter 13.24, Heritage Trees.
- Menlo Park, City of. 2020a. Transportation Impact Analysis Guidelines. City Council Procedure #CC-20-012.
- Menlo Park, City of. 2020b. Transportation Master Plan.
- Menlo Park, City of. 2021a. City of Menlo Park Municipal Code Title 16: Zoning.
- Menlo Park, City of. 2021b. 2030 Climate Action Plan. Adopted July 2020, Amended April 20, 2021. Accessed on December 8, 2021. Available online at: <a href="https://www.menlopark.org/ArchiveCenter/ViewFile/Item/12230">https://www.menlopark.org/ArchiveCenter/ViewFile/Item/12230</a>
- Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2021. Plan Bay Area 2050. Accessed on December 8, 2021. Available online at: https://mtc.ca.gov/planning/long-range-planning/planbay-area-2050
- San Mateo County Transit District (SamTrans). 2021. Bus Route Timetables, Route 87 and Route 286. Accessed on November 5, 2021. Available online at: https://www.samtrans.com/schedulesandmaps/timetables.html
- U.S. Environmental Protection Agency (USEPA). 2021a. Learn About Environmental Justice (web page). Accessed on November 32, 2021. Available online at: <a href="https://www.epa.gov/environmentaljustice/learn-about-environmental-justice">https://www.epa.gov/environmentaljustice/learn-about-environmental-justice</a>
- U.S. Environmental Protection Agency (USEPA). 2021b. "General Conformity De Minimis Tables." Accessed on November 17, 2021. Available online at: https://www.epa.gov/general-conformity/de-minimis-tables
- U.S. Environmental Protection Agency (USEPA). 2020. Sole Source Aquifer Interactive Map. Accessed on November 9, 2021. Available online at: <a href="https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b">https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b</a>
- U.S. Environmental Protection Agency. 2020. EJScreen, Version 2020. Accessed on November 9, 2021. Available online at: <a href="https://ejscreen.epa.gov/mapper/">https://ejscreen.epa.gov/mapper/</a>
- U.S. Fish and Wildlife Service. 2021a. IPaC Resource List (unofficial), San Mateo County, CA. Generated on December 3, 2021. Available online at: <a href="https://ecos.fws.gov/ipac/">https://ecos.fws.gov/ipac/</a>
- U.S. Fish and Wildlife Service. 2021b. National Wetland Inventory Mapper. Accessed on November 9, 2021. Available online at: https://www.fws.gov/wetlands/data/mapper.html
- U.S. Geologic Survey. 1993. Geologic Map of the Palo Alto and Part of the Redwood Point 7-1/2' Quadrangles, San Mateo and Santa Clara Counties, California.



West Bay Sanitary District. 2011. West Bay Sanitary District Wastewater Collection System Master Plan. Accessed on November 9, 2021. Available online at: <a href="https://westbaysanitary.org/wsbd-prod/resources/824/WBSD">https://westbaysanitary.org/wsbd-prod/resources/824/WBSD</a> Master Plan 2011.pdf



APPENDIX A: CALEEMOD OUTPUT



CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

#### **Avy Altschul Pump Station**

San Mateo County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	0.21	1000sqft	0.00	210.00	0
Other Asphalt Surfaces	1.20	1000sqft	0.03	1,200.00	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

Project Characteristics -

Land Use -

Construction Phase - Per project description.

Off-road Equipment -

Off-road Equipment - This phase captures electrical/startup, no off-road vehicles.

Off-road Equipment - Per project description.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Per project description.

Grading - Per project description

Architectural Coating - Architectural Coating phase captures electrical and startup/testing.

Date: 11/17/2021 12:06 PM

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

Vehicle Trips - Per project description.

Landscape Equipment -

Energy Use - Per project description.

Water And Wastewater - No water consumption.

Solid Waste - No solid waste generation.

Construction Off-road Equipment Mitigation - Required BMPs.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	105.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	315.00	0.00
tblArchitecturalCoating	ConstArea_Parking	72.00	0.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	100.00	10.00
tblConstructionPhase	NumDays	2.00	15.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	11/8/2023	8/4/2023
tblConstructionPhase	PhaseEndDate	10/25/2023	7/14/2023
tblConstructionPhase	PhaseEndDate	6/7/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	11/1/2023	7/21/2023
tblConstructionPhase	PhaseEndDate	6/5/2023	6/9/2023
tblConstructionPhase	PhaseStartDate	11/2/2023	7/24/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	7/3/2023
tblConstructionPhase	PhaseStartDate	6/6/2023	6/12/2023
tblConstructionPhase	PhaseStartDate	10/26/2023	7/17/2023
tblEnergyUse	LightingElect	2.34	0.00
tblEnergyUse	NT24E	20.65	106.67
tblEnergyUse	NT24NG	12.77	0.00

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

tblEnergyUse	T24E	0.75	0.00
tblEnergyUse	T24NG	4.87	0.00
tblGrading	MaterialExported	0.00	571.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.20	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	1.00	12.00
tblTripsAndVMT	WorkerTripNumber	18.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	2.12	1.00
tblWater	IndoorWaterUseRate	48,562.50	0.00

# 2.0 Emissions Summary

#### 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					ton	s/yr							MT	/yr		
	0.0150	0.1550	0.1335	2.9000e- 004	0.0441	6.5300e- 003	0.0506	0.0202	6.0200e- 003	0.0262						26.6384
Maximum	0.0150	0.1550	0.1335	2.9000e- 004	0.0441	6.5300e- 003	0.0506	0.0202	6.0200e- 003	0.0262						26.6384

#### **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					ton	s/yr							MT	/yr		
	0.0150	0.1550	0.1335	2.9000e- 004	0.0213	6.5300e- 003	0.0278	9.4800e- 003	6.0200e- 003	0.0155						26.6384
Maximum	0.0150	0.1550	0.1335	2.9000e- 004	0.0213	6.5300e- 003	0.0278	9.4800e- 003	6.0200e- 003	0.0155						26.6384

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.68	0.00	44.99	53.05	0.00	40.86	0.00	0.00	0.00	0.00	0.00	0.00

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-5-2023	9-4-2023	0.1457	0.1457
		Highest	0.1457	0.1457

#### 2.2 Overall Operational

**Unmitigated Operational** 

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Area	1.0300e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000		! !				3.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		<del></del>		<del></del>		2.0931
Mobile	6.0000e- 005	6.0000e- 005	6.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005					, ! ! !	0.1346
Waste			,			0.0000	0.0000		0.0000	0.0000					, ! ! !	0.0000
Water	N		,			0.0000	0.0000		0.0000	0.0000		1 <del></del> 1 1 1		<del></del>	,	0.0000
Total	1.0900e- 003	6.0000e- 005	6.7000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005						2.2277

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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	СО	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					ton	s/yr							MT	/yr		
Area	1.0300e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000						3.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000	i i	0.0000	0.0000		0.0000	0.0000						2.0931
Mobile	6.0000e- 005	6.0000e- 005	6.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005						0.1346
Waste	1					0.0000	0.0000		0.0000	0.0000						0.0000
Water	1		,			0.0000	0.0000		0.0000	0.0000		,			<del></del>	0.0000
Total	1.0900e- 003	6.0000e- 005	6.7000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005						2.2277

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

#### 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/5/2023	6/9/2023	5	5	
2	Grading	Grading	6/12/2023	6/30/2023	5	15	
3	Building Construction	Building Construction	7/3/2023	7/14/2023	5	10	

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

4	Paving	Paving	7/17/2023	7/21/2023	5	5	
5	Electrical, Startup	Architectural Coating	•	8/4/2023	5	10	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 11.25

Acres of Paving: 0.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural

Coating - sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	7.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Electrical, Startup	Air Compressors	0	6.00	78	0.48

**Trips and VMT** 

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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	2	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	12.00	2.00	71.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	12.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Electrical, Startup	0	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

#### 3.2 Site Preparation - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					1.3300e- 003	0.0000	1.3300e- 003	1.4000e- 004	0.0000	1.4000e- 004						0.0000
0	1.3400e- 003	0.0155	9.8100e- 003	2.0000e- 005		5.7000e- 004	5.7000e- 004		5.2000e- 004	5.2000e- 004						2.1547
Total	1.3400e- 003	0.0155	9.8100e- 003	2.0000e- 005	1.3300e- 003	5.7000e- 004	1.9000e- 003	1.4000e- 004	5.2000e- 004	6.6000e- 004						2.1547

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

### 3.2 Site Preparation - 2023

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	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					ton	s/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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005		1 1 1				0.1770
Total	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.1770

#### **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					ton	s/yr							MT	/yr		
Fugitive Dust					6.0000e- 004	0.0000	6.0000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.0000
On Roda	1.3400e- 003	0.0155	9.8100e- 003	2.0000e- 005		5.7000e- 004	5.7000e- 004		5.2000e- 004	5.2000e- 004						2.1547
Total	1.3400e- 003	0.0155	9.8100e- 003	2.0000e- 005	6.0000e- 004	5.7000e- 004	1.1700e- 003	6.0000e- 005	5.2000e- 004	5.8000e- 004						2.1547

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

### 3.2 Site Preparation - 2023

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	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
Worker	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.3000e- 004	0.0000	2.3000e- 004	6.0000e- 005	0.0000	6.0000e- 005		i				0.1770
Total	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.3000e- 004	0.0000	2.3000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.1770

#### 3.3 Grading - 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					ton	s/yr							MT	/yr		
Fugitive Dust			i i i		0.0399	0.0000	0.0399	0.0193	0.0000	0.0193						0.0000
	8.2500e- 003	0.0866	0.0631	1.4000e- 004		3.6500e- 003	3.6500e- 003		3.3600e- 003	3.3600e- 003						12.3772
Total	8.2500e- 003	0.0866	0.0631	1.4000e- 004	0.0399	3.6500e- 003	0.0435	0.0193	3.3600e- 003	0.0226						12.3772

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

3.3 Grading - 2023

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	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					ton	s/yr							МТ	-/yr		
,	8.0000e- 005	5.5800e- 003	1.8200e- 003	2.0000e- 005	6.0000e- 004	4.0000e- 005	6.3000e- 004	1.6000e- 004	3.0000e- 005	2.0000e- 004						2.5408
	2.0000e- 005	7.1000e- 004	2.5000e- 004	0.0000	1.0000e- 004	0.0000	1.0000e- 004	3.0000e- 005	0.0000	3.0000e- 005		, , ,				0.3332
I Worker	1.9000e- 004	1.3000e- 004	1.7400e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.1000e- 004	1.9000e- 004	0.0000	1.9000e- 004						0.5309
Total	2.9000e- 004	6.4200e- 003	3.8100e- 003	3.0000e- 005	1.4100e- 003	4.0000e- 005	1.4400e- 003	3.8000e- 004	3.0000e- 005	4.2000e- 004						3.4048

#### **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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0179	0.0000	0.0179	8.6700e- 003	0.0000	8.6700e- 003						0.0000
	8.2500e- 003	0.0866	0.0631	1.4000e- 004		3.6500e- 003	3.6500e- 003		3.3600e- 003	3.3600e- 003		i				12.3772
Total	8.2500e- 003	0.0866	0.0631	1.4000e- 004	0.0179	3.6500e- 003	0.0216	8.6700e- 003	3.3600e- 003	0.0120						12.3772

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

3.3 Grading - 2023

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
ı	8.0000e- 005	5.5800e- 003	1.8200e- 003	2.0000e- 005	5.7000e- 004	4.0000e- 005	6.1000e- 004	1.6000e- 004	3.0000e- 005	1.9000e- 004						2.5408
Vendor	2.0000e- 005	7.1000e- 004	2.5000e- 004	0.0000	9.0000e- 005	0.0000	1.0000e- 004	3.0000e- 005	0.0000	3.0000e- 005						0.3332
I Worker	1.9000e- 004	1.3000e- 004	1.7400e- 003	1.0000e- 005	6.8000e- 004	0.0000	6.8000e- 004	1.8000e- 004	0.0000	1.8000e- 004						0.5309
Total	2.9000e- 004	6.4200e- 003	3.8100e- 003	3.0000e- 005	1.3400e- 003	4.0000e- 005	1.3900e- 003	3.7000e- 004	3.0000e- 005	4.0000e- 004						3.4048

#### 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					ton	s/yr							MT	/yr		
-	3.1600e- 003	0.0321	0.0355	6.0000e- 005		1.6000e- 003	1.6000e- 003		1.4700e- 003	1.4700e- 003						5.0509
Total	3.1600e- 003	0.0321	0.0355	6.0000e- 005		1.6000e- 003	1.6000e- 003		1.4700e- 003	1.4700e- 003						5.0509

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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	СО	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					ton	s/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
Vendor	1.0000e- 005	4.7000e- 004	1.7000e- 004	0.0000	7.0000e- 005	0.0000	7.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005						0.2221
Worker	1.3000e- 004	8.0000e- 005	1.1600e- 003	0.0000	4.7000e- 004	0.0000	4.7000e- 004	1.3000e- 004	0.0000	1.3000e- 004						0.3539
Total	1.4000e- 004	5.5000e- 004	1.3300e- 003	0.0000	5.4000e- 004	0.0000	5.4000e- 004	1.5000e- 004	0.0000	1.5000e- 004						0.5760

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
- 1	3.1600e- 003	0.0321	0.0355	6.0000e- 005		1.6000e- 003	1.6000e- 003		1.4700e- 003	1.4700e- 003						5.0509
Total	3.1600e- 003	0.0321	0.0355	6.0000e- 005		1.6000e- 003	1.6000e- 003		1.4700e- 003	1.4700e- 003						5.0509

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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	СО	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					ton	s/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
Vendor	1.0000e- 005	4.7000e- 004	1.7000e- 004	0.0000	6.0000e- 005	0.0000	7.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005					, ! ! !	0.2221
Worker	1.3000e- 004	8.0000e- 005	1.1600e- 003	0.0000	4.5000e- 004	0.0000	4.5000e- 004	1.2000e- 004	0.0000	1.2000e- 004					, ! ! !	0.3539
Total	1.4000e- 004	5.5000e- 004	1.3300e- 003	0.0000	5.1000e- 004	0.0000	5.2000e- 004	1.4000e- 004	0.0000	1.4000e- 004						0.5760

#### 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					ton	s/yr							MT	/yr		
- Oil Roda	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004						2.3669
	4.0000e- 005					0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.5700e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004						2.3669

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

3.5 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	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
	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.1770
Total	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.1770

#### **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					ton	s/yr							MT	/yr		
Oii Nodu	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004						2.3669
Paving	4.0000e- 005					0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.5700e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004						2.3669

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

3.5 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	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		1				0.0000
Worker	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.3000e- 004	0.0000	2.3000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.1770
Total	6.0000e- 005	4.0000e- 005	5.8000e- 004	0.0000	2.3000e- 004	0.0000	2.3000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.1770

# 3.6 Electrical, Startup - 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					ton	s/yr							МТ	/yr		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		<del></del>			       	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

# 3.6 Electrical, Startup - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3000e- 004	8.0000e- 005	1.1600e- 003	0.0000	4.7000e- 004	0.0000	4.7000e- 004	1.3000e- 004	0.0000	1.3000e- 004						0.3539
Total	1.3000e- 004	8.0000e- 005	1.1600e- 003	0.0000	4.7000e- 004	0.0000	4.7000e- 004	1.3000e- 004	0.0000	1.3000e- 004						0.3539

#### **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					ton	s/yr							МТ	/yr		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	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

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

# 3.6 Electrical, Startup - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	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
	1.3000e- 004	8.0000e- 005	1.1600e- 003	0.0000	4.5000e- 004	0.0000	4.5000e- 004	1.2000e- 004	0.0000	1.2000e- 004						0.3539
Total	1.3000e- 004	8.0000e- 005	1.1600e- 003	0.0000	4.5000e- 004	0.0000	4.5000e- 004	1.2000e- 004	0.0000	1.2000e- 004						0.3539

#### 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

CalEEMod Version: CalEEMod.2020.4.0 Page 19 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

	ROG	NOx	СО	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	s/yr							MT	/yr		
Mitigated		6.0000e- 005	6.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005						0.1346
,	6.0000e- 005	6.0000e- 005	6.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005						0.1346

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.21	0.00	0.00	438	438
Total	0.21	0.00	0.00	438	438

#### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601
Refrigerated Warehouse-No Rail	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601

#### 5.0 Energy Detail

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

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						2.0931
Electricity Unmitigated	,					0.0000	0.0000		0.0000	0.0000					,	2.0931
NaturalGas Mitigated	, 0.0000 , ,	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		,			, : : : :	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	     	0.0000	0.0000					r	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 21 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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**

	NaturalGa s Use	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000					i i	0.0000
Refrigerated Warehouse-No Rail	0	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

#### **Mitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000		i i			i i	0.0000
Refrigerated Warehouse-No Rail	0	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

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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	
Other Asphalt Surfaces	0				0.0000
Refrigerated Warehouse-No Rail	22400.7				2.0931
Total					2.0931

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Other Asphalt Surfaces	0				0.0000
Refrigerated Warehouse-No Rail	22400.7				2.0931
Total					2.0931

#### 6.0 Area Detail

CalEEMod Version: CalEEMod.2020.4.0 Page 23 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

#### **6.1 Mitigation Measures Area**

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
ı	1.0300e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000						3.0000e- 005
- Crimingatea	1.0300e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000						3.0000e- 005

#### 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Architectural Coating	1.3000e- 004					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	9.0000e- 004		1 1 1			0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000						3.0000e- 005
Total	1.0300e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000						3.0000e- 005

CalEEMod Version: CalEEMod.2020.4.0 Page 24 of 28 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, 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	СО	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			
Coating	1.3000e- 004					0.0000	0.0000		0.0000	0.0000						0.0000
Dan divista	9.0000e- 004				 	0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000	 	0.0000	0.0000		0.0000	0.0000						3.0000e- 005
Total	1.0300e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000						3.0000e- 005

#### 7.0 Water Detail

# 7.1 Mitigation Measures Water

#### 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		МТ	-/yr	
Winigated				0.0000
Unmitigated				0.0000

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Other Asphalt Surfaces	0/0	i i			0.0000
Refrigerated Warehouse-No Rail	0/0				0.0000
Total					0.0000

#### 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/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Other Asphalt Surfaces	0/0				0.0000
Refrigerated Warehouse-No Rail	0/0				0.0000
Total					0.0000

#### 8.0 Waste Detail

#### **8.1 Mitigation Measures Waste**

#### Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	-/yr	
Mitigated				0.0000
Unmitigated			 	0.0000

#### 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

#### **Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Other Asphalt Surfaces	0				0.0000
Refrigerated Warehouse-No Rail	0				0.0000
Total					0.0000

#### <u>Mitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
Other Asphalt Surfaces	0				0.0000
Refrigerated Warehouse-No Rail	0				0.0000
Total					0.0000

#### 9.0 Operational Offroad

Page 28 of 28 CalEEMod Version: CalEEMod.2020.4.0 Date: 11/17/2021 12:06 PM

#### Avy Altschul Pump Station - San Mateo County, Annual

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

Equipment Type	Number	Hours/Day	Doya/Voor	Horse Power	Fuel Type						
Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type					
10.0 Stationary Equipment											
Fire Pumps and Emergency Generators											
Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type					
<u>Boilers</u>											
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type						
User Defined Equipment						-					

Equipment Type Number

## 11.0 Vegetation

CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

#### **Avy Altschul Pump Station**

San Mateo County, Summer

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	0.21	1000sqft	0.00	210.00	0
Other Asphalt Surfaces	1.20	1000sqft	0.03	1,200.00	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

Project Characteristics -

Land Use -

Construction Phase - Per project description.

Off-road Equipment -

Off-road Equipment - This phase captures electrical/startup, no off-road vehicles.

Off-road Equipment - Per project description.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Per project description.

Grading - Per project description

Architectural Coating - Architectural Coating phase captures electrical and startup/testing.

Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

Vehicle Trips - Per project description.

Landscape Equipment -

Energy Use - Per project description.

Water And Wastewater - No water consumption.

Solid Waste - No solid waste generation.

Construction Off-road Equipment Mitigation - Required BMPs.

Table Name	Column Name	Default Value	New Value	
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	105.00	0.00	
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	315.00	0.00	
tblArchitecturalCoating	ConstArea_Parking	72.00	0.00	
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	5	
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15	
tblConstructionPhase	NumDays	5.00	10.00	
tblConstructionPhase	NumDays	100.00	10.00	
tblConstructionPhase	NumDays	2.00	15.00	
tblConstructionPhase	NumDays	1.00	5.00	
tblConstructionPhase	PhaseEndDate	11/8/2023	8/4/2023	
tblConstructionPhase	PhaseEndDate	10/25/2023	7/14/2023	
tblConstructionPhase	PhaseEndDate	6/7/2023	6/30/2023	
tblConstructionPhase	PhaseEndDate	11/1/2023	7/21/2023	
tblConstructionPhase	PhaseEndDate	6/5/2023	6/9/2023	
tblConstructionPhase	PhaseStartDate	11/2/2023	7/24/2023	
tblConstructionPhase	PhaseStartDate	6/8/2023	7/3/2023	
tblConstructionPhase	PhaseStartDate	6/6/2023	6/12/2023	
tblConstructionPhase	PhaseStartDate	10/26/2023	7/17/2023	
tblEnergyUse	LightingElect	2.34	0.00	
tblEnergyUse	NT24E	20.65	106.67	
tblEnergyUse	NT24NG	12.77	0.00	

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

tblEnergyUse	T24E	0.75	0.00
tblEnergyUse	T24NG	4.87	0.00
tblGrading	MaterialExported	0.00	571.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.20	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	1.00	12.00
tblTripsAndVMT	WorkerTripNumber	18.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	2.12	1.00
tblWater	IndoorWaterUseRate	48,562.50	0.00

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, 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							
	1.1390	12.3646	8.9351	0.0229	5.5108	0.4926	6.0033	2.6218	0.4533	3.0751						2,323.669 4
Maximum	1.1390	12.3646	8.9351	0.0229	5.5108	0.4926	6.0033	2.6218	0.4533	3.0751						2,323.669 4

#### **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/d	day				
2023	1.1390	12.3646	8.9351	0.0229	2.5789	0.4926	3.0715	1.2068	0.4533	1.6601						2,323.669 4
Maximum	1.1390	12.3646	8.9351	0.0229	2.5789	0.4926	3.0715	1.2068	0.4533	1.6601						2,323.669 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.20	0.00	48.84	53.97	0.00	46.01	0.00	0.00	0.00	0.00	0.00	0.00

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

## 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	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/d	day							lb/d	lay		
1	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
Lilotgy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
1	5.3000e- 004	4.5000e- 004	4.9700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1888
Total	6.2000e- 003	4.5000e- 004	5.1100e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1891

#### **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/e	day							lb/d	day		
Area	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	5.3000e- 004	4.5000e- 004	4.9700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1888
Total	6.2000e- 003	4.5000e- 004	5.1100e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1891

Date: 11/17/2021 12:09 PM

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

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

## 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/5/2023	6/9/2023	5	5	
2	Grading	Grading	6/12/2023	6/30/2023	5	15	
3	Building Construction	Building Construction	7/3/2023	7/14/2023	5	10	
4	Paving	Paving	7/17/2023	7/21/2023	5	5	
5	Electrical, Startup	Architectural Coating	7/24/2023	8/4/2023	5	10	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 11.25

Acres of Paving: 0.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	7.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Electrical, Startup	Air Compressors	0	6.00	78	0.48

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	12.00	2.00	71.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	12.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Electrical, Startup	0	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

## 3.2 Site Preparation - 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/d	day							lb/d	day		
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		I I			i i	950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657			-			950.0517

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	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
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						82.1912
Total	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						82.1912

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

## 3.2 Site Preparation - 2023

#### **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/d	day							lb/d	day		
Fugitive Dust	1 1 1 1 1				0.2386	0.0000	0.2386	0.0258	0.0000	0.0258		i i				0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		! ! !				950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.2386	0.2266	0.4652	0.0258	0.2084	0.2342						950.0517

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	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
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						82.1912
Total	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						82.1912

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

3.3 Grading - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	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/d	day							lb/c	day		
Fugitive Dust					5.3162	0.0000	5.3162	2.5692	0.0000	2.5692						0.0000
Off-Road	1.0995	11.5407	8.4164	0.0186		0.4868	0.4868		0.4478	0.4478					       	1,819.142 4
Total	1.0995	11.5407	8.4164	0.0186	5.3162	0.4868	5.8030	2.5692	0.4478	3.0170			-			1,819.142 4

	ROG	NOx	СО	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/d	lay		
Hauling	0.0112	0.7180	0.2430	3.0400e- 003	0.0824	4.8600e- 003	0.0873	0.0226	4.6500e- 003	0.0272						373.3785
Vendor	2.1500e- 003	0.0910	0.0333	4.2000e- 004	0.0135	4.8000e- 004	0.0140	3.8900e- 003	4.6000e- 004	4.3500e- 003		, , ,				48.9572
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266		     	i i			82.1912
Total	0.0395	0.8239	0.5187	4.2700e- 003	0.1945	5.8000e- 003	0.2003	0.0526	5.5300e- 003	0.0581						504.5270

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

3.3 Grading - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	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/d	day							lb/c	day		
Fugitive Dust					2.3923	0.0000	2.3923	1.1561	0.0000	1.1561						0.0000
Off-Road	1.0995	11.5407	8.4164	0.0186		0.4868	0.4868		0.4478	0.4478		! !				1,819.142 4
Total	1.0995	11.5407	8.4164	0.0186	2.3923	0.4868	2.8791	1.1561	0.4478	1.6040						1,819.142 4

	ROG	NOx	СО	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/d	lay		
Hauling	0.0112	0.7180	0.2430	3.0400e- 003	0.0793	4.8600e- 003	0.0842	0.0218	4.6500e- 003	0.0264						373.3785
Vendor	2.1500e- 003	0.0910	0.0333	4.2000e- 004	0.0130	4.8000e- 004	0.0135	3.7700e- 003	4.6000e- 004	4.2300e- 003		, , ,	i i			48.9572
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		     	i i			82.1912
Total	0.0395	0.8239	0.5187	4.2700e- 003	0.1866	5.8000e- 003	0.1924	0.0507	5.5300e- 003	0.0562						504.5270

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, 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 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/d	day							lb/d	day		
	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946						1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946						1,113.540 2

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.1500e- 003	0.0910	0.0333	4.2000e- 004	0.0135	4.8000e- 004	0.0140	3.8900e- 003	4.6000e- 004	4.3500e- 003		1 1 1				48.9572
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266		1 1 1				82.1912
Total	0.0283	0.1059	0.2757	1.2300e- 003	0.1121	9.4000e- 004	0.1130	0.0300	8.8000e- 004	0.0309						131.1484

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, 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 On-Site**

	ROG	NOx	СО	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/d	day							lb/d	day		
0	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946						1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946						1,113.540 2

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.1500e- 003	0.0910	0.0333	4.2000e- 004	0.0130	4.8000e- 004	0.0135	3.7700e- 003	4.6000e- 004	4.2300e- 003		<del></del>       				48.9572
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		<del></del>       				82.1912
Total	0.0283	0.1059	0.2757	1.2300e- 003	0.1073	9.4000e- 004	0.1083	0.0289	8.8000e- 004	0.0298						131.1484

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

3.5 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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/d	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1
	0.0157	     				0.0000	0.0000		0.0000	0.0000						0.0000
Total	0.6269	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	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
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						82.1912
Total	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						82.1912

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

3.5 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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/d	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1
Paving	0.0157					0.0000	0.0000	       	0.0000	0.0000					       	0.0000
Total	0.6269	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	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		1				0.0000
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		1 1 1				82.1912
Total	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						82.1912

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

# 3.6 Electrical, Startup - 2023 Unmitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/d	day		
Archit. Coating	0.0000					0.0000	0.0000		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

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Volidor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						82.1912
Total	0.0261	0.0149	0.2423	8.1000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						82.1912

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

## 3.6 Electrical, Startup - 2023 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/d	day							lb/d	day		
Archit. Coating	0.0000					0.0000	0.0000		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

	ROG	NOx	СО	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/d	day							lb/c	lay		
Hauling	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
Worker	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		I I				82.1912
Total	0.0261	0.0149	0.2423	8.1000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						82.1912

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

## 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	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/c	day		
	5.3000e- 004	4.5000e- 004	4.9700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1888
l	5.3000e- 004	4.5000e- 004	4.9700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004					, , , , , , , , , , , , , , , , , , ,	1.1888

#### **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.21	0.00	0.00	438	438
Total	0.21	0.00	0.00	438	438

#### **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

#### 4.4 Fleet Mix

Date: 11/17/2021 12:09 PM

#### 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
Other Asphalt Surfaces	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601
Refrigerated Warehouse-No Rail	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601

## 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	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/d	day							lb/c	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 20 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, 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**

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/c	lay		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	0	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

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		i i			! !	0.0000
Refrigerated Warehouse-No Rail	0	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

#### 6.0 Area Detail

CalEEMod Version: CalEEMod.2020.4.0 Page 21 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	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/d	day							lb/c	lay		
Mitigated		0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004

## 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/d	day							lb/c	lay		
Coating	7.4000e- 004					0.0000	0.0000		0.0000	0.0000	1 1 1					0.0000
Products	4.9200e- 003		 			0.0000	0.0000		0.0000	0.0000		1 1 1				0.0000
Landscaping	1.0000e- 005	0.0000	1.4000e- 004	0.0000		0.0000	0.0000	       	0.0000	0.0000						3.3000e- 004
Total	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, 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	7.4000e- 004					0.0000	0.0000		0.0000	0.0000						0.0000	
Consumer Products	4.9200e- 003					0.0000	0.0000		0.0000	0.0000						0.0000	
Landscaping	1.0000e- 005	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004	
Total	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004	

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 23 of 23 Date: 11/17/2021 12:09 PM

#### Avy Altschul Pump Station - San Mateo County, Summer

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

#### 8.0 Waste Detail

#### **8.1 Mitigation Measures Waste**

## 9.0 Operational Offroad

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

#### **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

#### **User Defined Equipment**

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

## 11.0 Vegetation

CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

#### **Avy Altschul Pump Station**

San Mateo County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	0.21	1000sqft	0.00	210.00	0
Other Asphalt Surfaces	1.20	1000sqft	0.03	1,200.00	0

Precipitation Freq (Davs)

70

#### 1.2 Other Project Characteristics

Urban

	• • • •	, , , , ,	
Climate Zone	5	Operational Year	2024
Utility Company	Pacific Gas and Electric Company		

Wind Speed (m/s)

2.2

**CO2 Intensity** 203.98 **CH4 Intensity** 0.033 **N2O Intensity** 0.004 (lb/MWhr) (lb/MWhr) (lb/MWhr)

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

Project Characteristics -

Land Use -

Construction Phase - Per project description.

Off-road Equipment -

Off-road Equipment - This phase captures electrical/startup, no off-road vehicles.

Off-road Equipment - Per project description.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Per project description.

Grading - Per project description

Architectural Coating - Architectural Coating phase captures electrical and startup/testing.

Date: 11/17/2021 12:10 PM

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

Vehicle Trips - Per project description.

Landscape Equipment -

Energy Use - Per project description.

Water And Wastewater - No water consumption.

Solid Waste - No solid waste generation.

Construction Off-road Equipment Mitigation - Required BMPs.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	105.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	315.00	0.00
tblArchitecturalCoating	ConstArea_Parking	72.00	0.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	100.00	10.00
tblConstructionPhase	NumDays	2.00	15.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	11/8/2023	8/4/2023
tblConstructionPhase	PhaseEndDate	10/25/2023	7/14/2023
tblConstructionPhase	PhaseEndDate	6/7/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	11/1/2023	7/21/2023
tblConstructionPhase	PhaseEndDate	6/5/2023	6/9/2023
tblConstructionPhase	PhaseStartDate	11/2/2023	7/24/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	7/3/2023
tblConstructionPhase	PhaseStartDate	6/6/2023	6/12/2023
tblConstructionPhase	PhaseStartDate	10/26/2023	7/17/2023
tblEnergyUse	LightingElect	2.34	0.00
tblEnergyUse	NT24E	20.65	106.67
tblEnergyUse	NT24NG	12.77	0.00

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

tblEnergyUse	T24E	0.75	0.00
tblEnergyUse	T24NG	4.87	0.00
tblGrading	MaterialExported	0.00	571.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.20	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	1.00	12.00
tblTripsAndVMT	WorkerTripNumber	18.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	2.12	1.00
tblWater	IndoorWaterUseRate	48,562.50	0.00

## 2.0 Emissions Summary

#### 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					
	1.1408	12.4118	8.9367	0.0229	5.5108	0.4926	6.0033	2.6218	0.4534	3.0752						2,319.436 3
Maximum	1.1408	12.4118	8.9367	0.0229	5.5108	0.4926	6.0033	2.6218	0.4534	3.0752						2,319.436 3

#### **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					
2023	1.1408	12.4118	8.9367	0.0229	2.5789	0.4926	3.0715	1.2068	0.4534	1.6602						2,319.436 3
Maximum	1.1408	12.4118	8.9367	0.0229	2.5789	0.4926	3.0715	1.2068	0.4534	1.6602						2,319.436 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.20	0.00	48.84	53.97	0.00	46.01	0.00	0.00	0.00	0.00	0.00	0.00

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

## 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	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/d	day							lb/d	day		
Area	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		<del></del>       			1 1 1	0.0000
Mobile	5.0000e- 004	5.2000e- 004	5.3700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004		<del></del>			1	1.1404
Total	6.1700e- 003	5.2000e- 004	5.5100e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1408

#### **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/e	day							lb/d	day		
Area	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	5.0000e- 004	5.2000e- 004	5.3700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1404
Total	6.1700e- 003	5.2000e- 004	5.5100e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1408

Date: 11/17/2021 12:10 PM

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

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

## 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/5/2023	6/9/2023	5	5	
2	Grading	Grading	6/12/2023	6/30/2023	5	15	
3	Building Construction	Building Construction	7/3/2023	7/14/2023	5	10	
4	Paving	Paving	7/17/2023	7/21/2023	5	5	
5	Electrical, Startup	Architectural Coating	7/24/2023	8/4/2023	5	10	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 11.25

Acres of Paving: 0.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	7.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Electrical, Startup	Air Compressors	0	6.00	78	0.48

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	12.00	2.00	71.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	12.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Electrical, Startup	0	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

## 3.2 Site Preparation - 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/d	day							lb/d	day		
Fugitive Dust	 				0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		i i				950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657						950.0517

	ROG	NOx	СО	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/d	day							lb/d	lay		
Hauling	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
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266		i				77.8186
Total	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						77.8186

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

## 3.2 Site Preparation - 2023

#### **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/d	day							lb/d	day		
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258						0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084			 		 	950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.2386	0.2266	0.4652	0.0258	0.2084	0.2342						950.0517

	ROG	NOx	СО	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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		i i				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
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		 				77.8186
Total	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						77.8186

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

3.3 Grading - 2023

### **Unmitigated Construction On-Site**

	ROG	NOx	СО	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/d	day							lb/d	day		
Fugitive Dust	 				5.3162	0.0000	5.3162	2.5692	0.0000	2.5692						0.0000
Off-Road	1.0995	11.5407	8.4164	0.0186		0.4868	0.4868		0.4478	0.4478						1,819.142 4
Total	1.0995	11.5407	8.4164	0.0186	5.3162	0.4868	5.8030	2.5692	0.4478	3.0170						1,819.142 4

	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/d	lay		
Hauling	0.0108	0.7569	0.2442	3.0400e- 003	0.0824	4.8700e- 003	0.0873	0.0226	4.6600e- 003	0.0272						373.4921
Vendor	2.1200e- 003	0.0959	0.0343	4.2000e- 004	0.0135	4.9000e- 004	0.0140	3.8900e- 003	4.7000e- 004	4.3500e- 003		<del></del>			       	48.9832
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266		<del></del>			       	77.8186
Total	0.0414	0.8711	0.5203	4.2200e- 003	0.1945	5.8200e- 003	0.2003	0.0526	5.5500e- 003	0.0582						500.2939

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

3.3 Grading - 2023

#### **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/d	day							lb/d	day		
Fugitive Dust					2.3923	0.0000	2.3923	1.1561	0.0000	1.1561						0.0000
Off-Road	1.0995	11.5407	8.4164	0.0186		0.4868	0.4868		0.4478	0.4478						1,819.142 4
Total	1.0995	11.5407	8.4164	0.0186	2.3923	0.4868	2.8791	1.1561	0.4478	1.6040						1,819.142 4

	ROG	NOx	СО	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/c	lay		
Hauling	0.0108	0.7569	0.2442	3.0400e- 003	0.0793	4.8700e- 003	0.0842	0.0218	4.6600e- 003	0.0265		i i				373.4921
	2.1200e- 003	0.0959	0.0343	4.2000e- 004	0.0130	4.9000e- 004	0.0135	3.7700e- 003	4.7000e- 004	4.2400e- 003		! ! !				48.9832
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		! ! !				77.8186
Total	0.0414	0.8711	0.5203	4.2200e- 003	0.1866	5.8200e- 003	0.1924	0.0507	5.5500e- 003	0.0562						500.2939

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

#### 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 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/d	day							lb/d	day		
	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946						1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946						1,113.540 2

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.1200e- 003	0.0959	0.0343	4.2000e- 004	0.0135	4.9000e- 004	0.0140	3.8900e- 003	4.7000e- 004	4.3500e- 003		<del></del>				48.9832
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						77.8186
Total	0.0306	0.1142	0.2760	1.1800e- 003	0.1121	9.5000e- 004	0.1130	0.0300	8.9000e- 004	0.0309						126.8018

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

#### 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 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/d	day							lb/d	day		
	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946						1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946						1,113.540 2

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.1200e- 003	0.0959	0.0343	4.2000e- 004	0.0130	4.9000e- 004	0.0135	3.7700e- 003	4.7000e- 004	4.2400e- 003		<del></del>     				48.9832
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		<del></del>       			       	77.8186
Total	0.0306	0.1142	0.2760	1.1800e- 003	0.1073	9.5000e- 004	0.1083	0.0289	8.9000e- 004	0.0298						126.8018

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

3.5 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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/d	day							lb/c	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1
Paving	0.0157					0.0000	0.0000	       	0.0000	0.0000		! !			       	0.0000
Total	0.6269	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	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
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266					       	77.8186
Total	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						77.8186

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

3.5 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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/d	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1
	0.0157					0.0000	0.0000		0.0000	0.0000						0.0000
Total	0.6269	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466						1,043.633 1

	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/d	day							lb/d	lay		
Hauling	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		1				0.0000
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255		1				77.8186
Total	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						77.8186

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

# 3.6 Electrical, Startup - 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/d	day							lb/d	day		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road		0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		1 1 1				0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	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		1				0.0000
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266		1 1 1				77.8186
Total	0.0285	0.0183	0.2417	7.6000e- 004	0.0986	4.6000e- 004	0.0990	0.0262	4.2000e- 004	0.0266						77.8186

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

## 3.6 Electrical, Startup - 2023 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/d	day							lb/d	day		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		<del></del>       				0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000

	ROG	NOx	СО	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/d	day							lb/d	lay		
Hauling	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
Worker	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						77.8186
Total	0.0285	0.0183	0.2417	7.6000e- 004	0.0943	4.6000e- 004	0.0948	0.0251	4.2000e- 004	0.0255						77.8186

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

## 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
	5.0000e- 004	5.2000e- 004	5.3700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1404
" :	5.0000e- 004	5.2000e- 004	5.3700e- 003	1.0000e- 005	1.2900e- 003	1.0000e- 005	1.3000e- 003	3.4000e- 004	1.0000e- 005	3.5000e- 004						1.1404

#### **4.2 Trip Summary Information**

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.21	0.00	0.00	438	438
Total	0.21	0.00	0.00	438	438

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

#### 4.4 Fleet Mix

Date: 11/17/2021 12:10 PM

#### 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
Other Asphalt Surfaces	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601
Refrigerated Warehouse-No Rail	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601

## 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	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/d	day							lb/c	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 20 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

#### 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**

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/d	lay		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		 			i i	0.0000
Refrigerated Warehouse-No Rail	0	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

## <u>Mitigated</u>

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		i i	 		i i i	0.0000
Refrigerated Warehouse-No Rail	0	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

#### 6.0 Area Detail

CalEEMod Version: CalEEMod.2020.4.0 Page 21 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	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/d	day							lb/c	lay		
Mitigated		0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004

## 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	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/d	day							lb/c	lay		
Architectural Coating	7.4000e- 004					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	4.9200e- 003					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.0000e- 005	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
Total	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

#### 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										
Coating	7.4000e- 004					0.0000	0.0000		0.0000	0.0000						0.0000
Products	4.9200e- 003		 			0.0000	0.0000		0.0000	0.0000						0.0000
Landocaping	1.0000e- 005	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004
Total	5.6700e- 003	0.0000	1.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000						3.3000e- 004

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 23 of 23 Date: 11/17/2021 12:10 PM

#### Avy Altschul Pump Station - San Mateo County, Winter

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

#### 8.0 Waste Detail

#### **8.1 Mitigation Measures Waste**

## 9.0 Operational Offroad

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

#### **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number

## 11.0 Vegetation