



# Vasco Road Landfill Refuse Volume Increase Project

## Initial Study – Negative Declaration

*prepared by*

**County of Alameda**

Community Development Agency

224 West Winton Avenue, Room 111

Hayward, California 94544

Contact: Albert Lopez, Planning Director

*prepared with the assistance of*

**Rincon Consultants, Inc.**

449 15th Street, Suite 303

Oakland, California 94612

**March 2022**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)

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Appendix A Mitigation Measures from the 2003 VRL CUP IS-MND  
Appendix B Noise Measurement Data Sheets

# Initial Study

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## 1. Project Title

Vasco Road Landfill Refuse Volume Increase Project (PLN#2021-00231)

## 2. Lead Agency and Contact

County of Alameda  
Community Development Agency  
224 West Winton Avenue, Room 111  
Hayward, California 94544

**Contact:** Albert Lopez, Planning Director, [albert.lopez@acgov.org](mailto:albert.lopez@acgov.org), (510) 670-5426

## 3. Project Proponent and Contact

Republic Services Vasco Road, LLC  
4001 North Vasco Road  
Livermore, California 94551

**Contact:** Matt Ketchem, General Manager, [mketchem@republicservices.com](mailto:mketchem@republicservices.com)

## 4. Project Location

The project site is within the Vasco Road Landfill (VRL) in unincorporated Alameda County, with a street address of 4001 North Vasco Road, Livermore, California 94551. The landfill is located east of North Vasco Road and approximately three miles north of Interstate 580 (I-580). Access to the site is from North Vasco Road and is gate controlled. The landfill property occupies several parcels totaling approximately 535 acres (of which 323 acres is permitted for landfill disposal), including the following Assessor's Parcel Numbers (APNs): 99B-4901-2-13, 99B-4901-6-5, 99B-4926-1-1, 99B-4926-2-4, 99B-4926-3-3, 99B-4926-1-2, 99B-4926-2-5, 99B-4926-2-6, 902-6-2-2, 99B-4901-2-14, and 99B-4926-2-10.

Figure 1 shows the regional location of the landfill, Figure 2 shows an aerial view of the landfill location and surrounding uses, and Figure 3 shows photographs of the landfill refuse area.

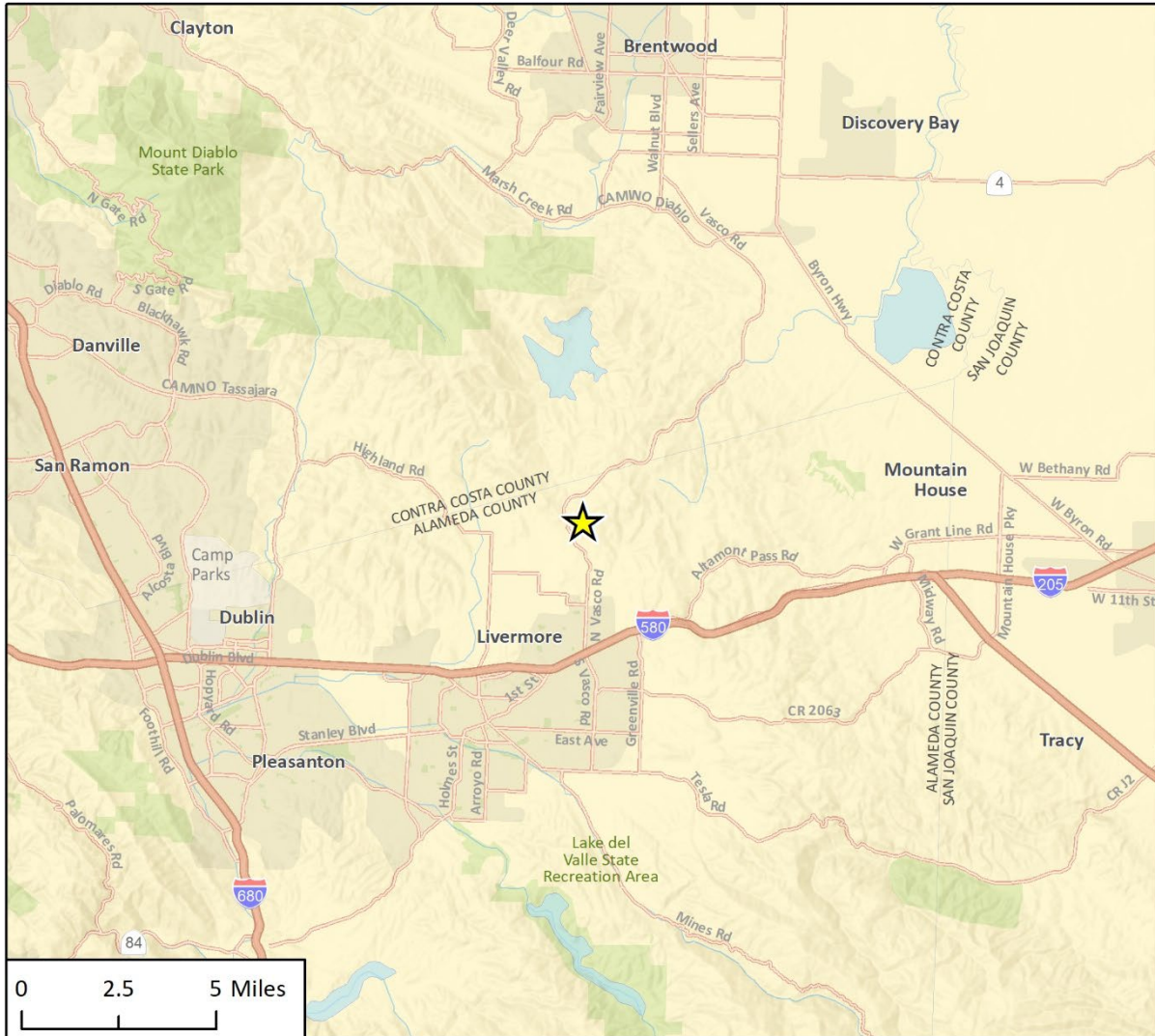
## 5. General Plan Designation/Zoning

The project site is designated as Large Parcel Agriculture in the Alameda County General Plan. Solid waste landfills and related waste management facilities are a permitted use under this land use designation.

The project site is zoned Agriculture (A). In this zoning district, landfill operations are permitted as a conditional use (Alameda County Municipal Code Section 17.06.035).

County of Alameda  
Vasco Road Landfill Refuse Volume Increase Project

Figure 1 Regional Location



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★ Project Location

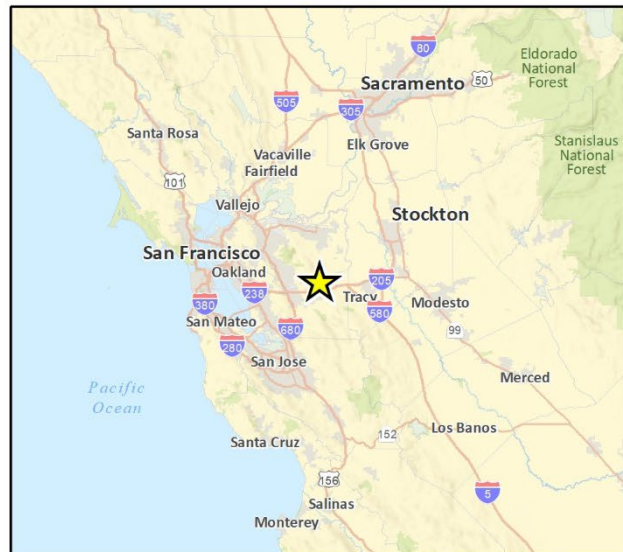
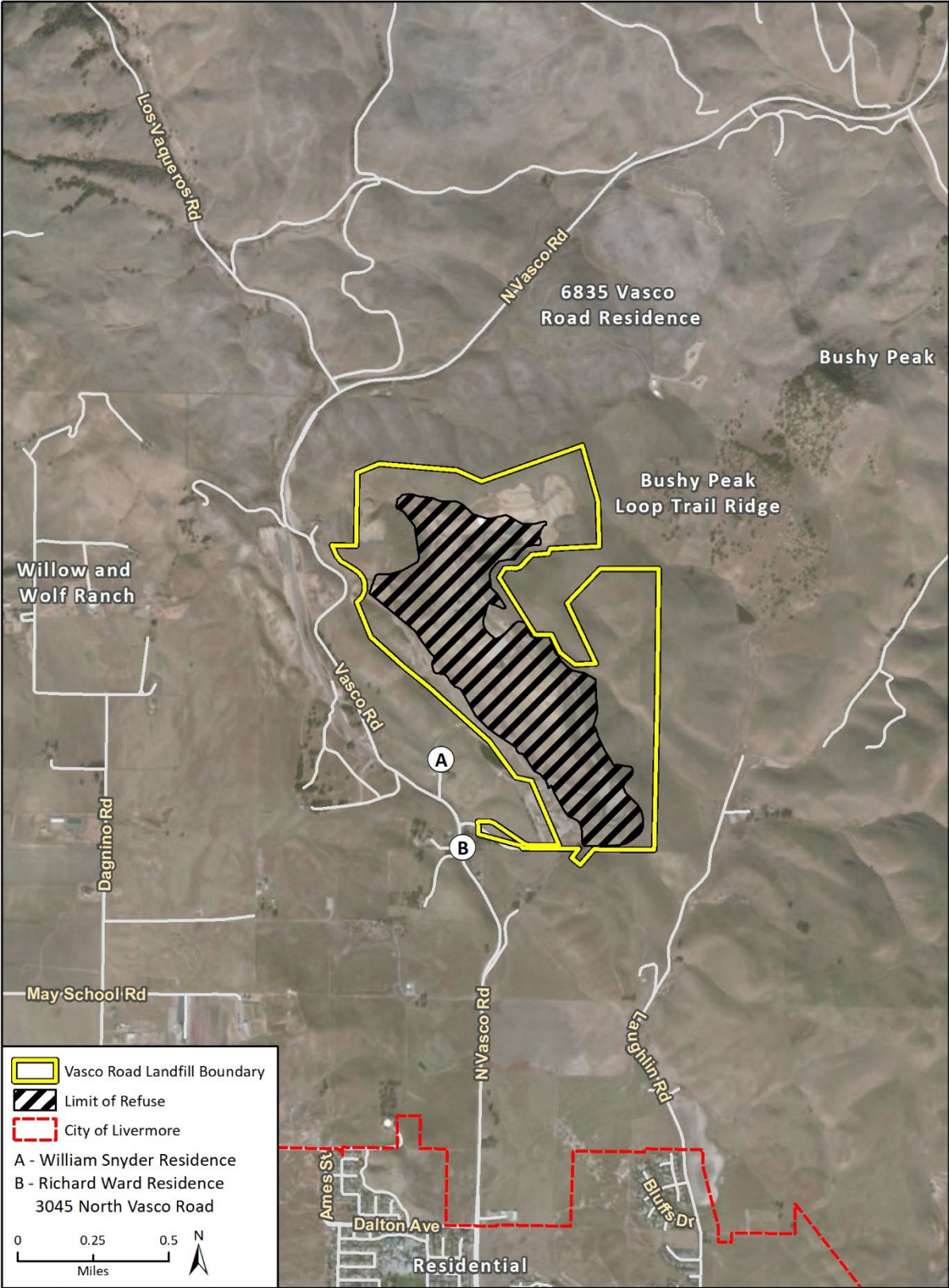


Fig 1 Regional Location

Figure 2 Vasco Road Landfill Location and Nearby Uses



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Fig. 2 Project Site



**Figure 3 Representative Views of Landfill Refuse Area**



**Photograph 1.** 75 feet from VRL entrance, 100 feet from operations, facing away from project area



**Photograph 2.** 75 feet from VRL entrance, 100 feet from operations, facing towards project area

## 6. Surrounding Land Uses and Setting

The project site is bordered by open space to the north, Brushy Peak Regional Preserve to the east, the Valley Family Child Care Association (VFCCA) to the south, the Willow and Wolf Ranch horse boarding stables to the west and northwest, and the Valley View Trail further northwest. Rural residences are widely scattered around the site, with the nearest residences approximately 0.15 miles (800 feet) west and 0.2 miles (900 feet) southwest of VRL boundary (see points A and B in Figure 2, respectively). Other residences are more than one mile away from the project site.

The areas surrounding the project site are primarily zoned Agriculture (A) with two parcels zoned Single Family Residential, Limited Agricultural, 5 Acre Minimum Lot (R1-L-BE) south of the site bordering the City of Livermore.

## 7. Project Site Existing Characteristics and Operations

### Project Site Description

The project site encompasses several parcels totaling 535 acres (see “Vasco Road Landfill Boundary” on Figure 2). The permitted total landfill area consists of approximately 323 acres, of which approximately 263 acres is permitted Class III facility.<sup>1</sup> Only approximately 246 of the 263 acres currently receive waste due to a required 200-foot-wide buffer zone between the Eastern Strand of the Greenville Fault and future waste disposal areas. The permitted 246-acre disposal area is comprised of a 153-acre active disposal area and an approximately 92.6-acre area that has been closed under current regulations. The remaining acreage onsite is reserved for agricultural and open space purposes.

The VRL uses an area-fill method of waste disposal, where the landfill is divided into disposal units (DUs) with a capacity lifespan of about two to three years per DU. Disposal of refuse is currently occurring primarily on DU-13A and portions of DU-9, DU-10, DU-11A, DU-12A, and DU-12B. Table 1 summarizes the characteristics of the disposal units within the VRL and Figure 4 shows the locations of the DUs.

**Table 1 Disposal Unit Characteristics**

Disposal Unit	Active or Inactive	Approximate Acreage (ac)	Characteristics	Type of Waste Accepted <sup>1</sup>
Original Site	Inactive	64.4	<ul style="list-style-type: none"> <li>▪ Unlined cell</li> <li>▪ Leachate barrier constructed in 1989</li> </ul>	Class III
DU-1	Inactive	3.5	<ul style="list-style-type: none"> <li>▪ Unlined cell</li> </ul>	Class III
DU-2	Inactive	9.5	<ul style="list-style-type: none"> <li>▪ Unlined cell</li> <li>▪ Containment system installed during construction of DU-6*</li> </ul>	Class III
DU-3	Inactive	6.5	<ul style="list-style-type: none"> <li>▪ Unlined cell</li> <li>▪ Containment system installed during construction of DU-6*</li> </ul>	Class III
DU-4	Inactive	4.3	<ul style="list-style-type: none"> <li>▪ Partially lined cell with clay</li> <li>▪ Containment system installed during construction of DU-6*</li> </ul>	Class III

<sup>1</sup> VRL is a Class III facility, or a landfill for nonhazardous wastes, with Class II waste management units for disposal of designated waste.

**Vasco Road Landfill Refuse Volume Increase Project**

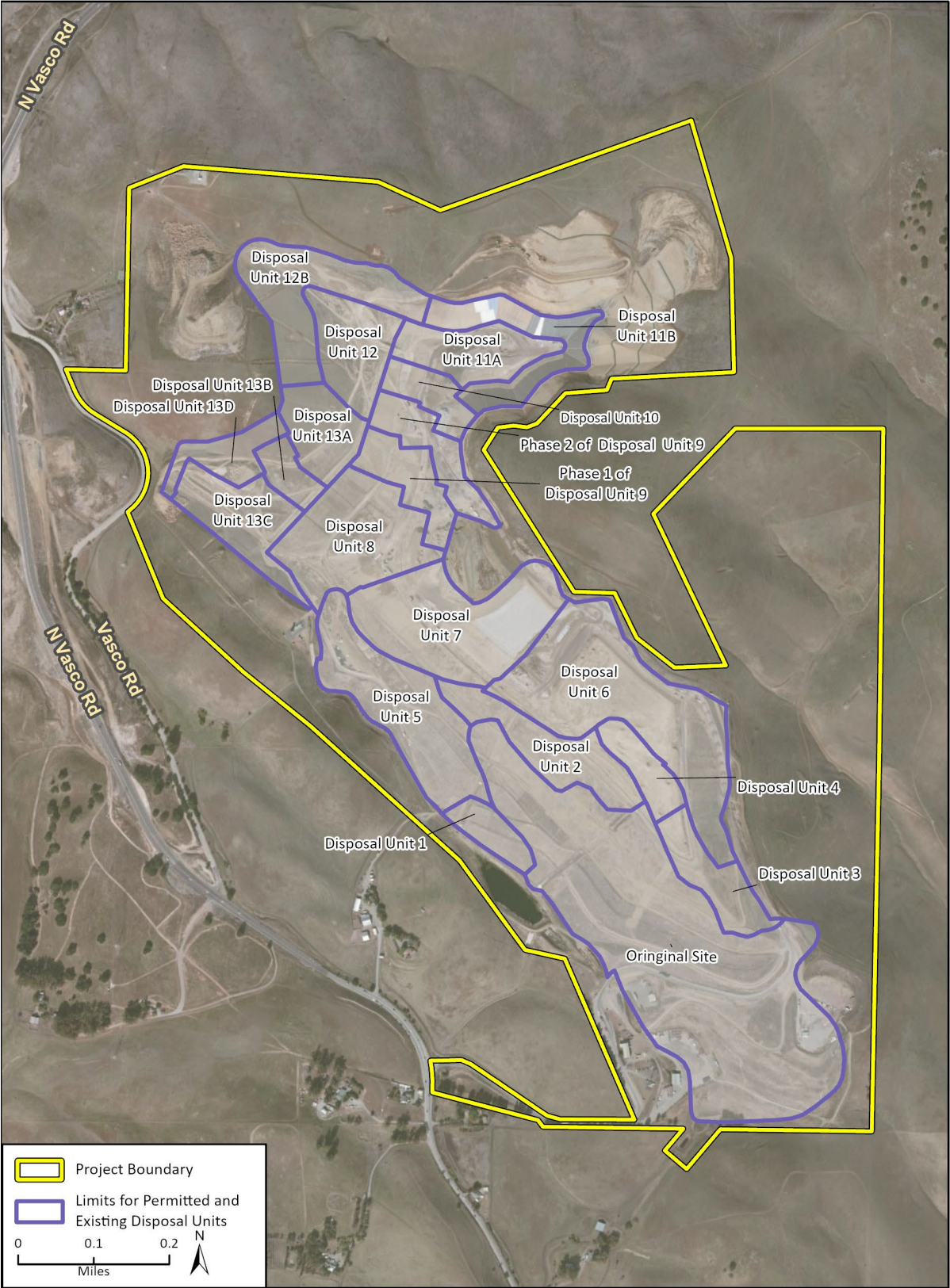
<b>Disposal Unit</b>	<b>Active or Inactive</b>	<b>Approximate Acreage (ac)</b>	<b>Characteristics</b>	<b>Type of Waste Accepted<sup>1</sup></b>
DU-5	Inactive	16.7	<ul style="list-style-type: none"> <li>▪ Composite-lined cell</li> </ul>	Class III and Class II
DU-6	Inactive	28.9	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> </ul>	Class III and Class II
DU-7	Inactive	17.2	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> </ul>	Class III and Class II
DU-8	Active	17.8	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> </ul>	Class III and Class II
DU-9	Active	11.9	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> </ul>	Class III and Class II
DU-10	Active	4.2	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> </ul>	Class III and Class II
DU-11	Active	29.8	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> <li>▪ Continuous Leachate Collection and Removal System (LCRS)</li> </ul>	Class III and Class II
DU-12 and DU-12B	Active	22.2	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> <li>▪ Continuous Leachate Collection and Removal System (LCRS)</li> </ul>	Class III and Class II
DU-13A	Active	7.8	<ul style="list-style-type: none"> <li>▪ Composite-lined cell with a containment system*</li> <li>▪ Continuous Leachate Collection and Removal System (LCRS)</li> </ul>	Class III and Class II
DU-13B	N/A	3.86	<ul style="list-style-type: none"> <li>▪ Will handle subsequent refuse disposal</li> <li>▪ Construction in 2022</li> <li>▪ Composite-lined cell with a containment system*</li> <li>▪ Continuous Leachate Collection and Removal System (LCRS)</li> </ul>	Class III and Class II
DU-13C	N/A	14.4	<ul style="list-style-type: none"> <li>▪ Will handle subsequent refuse disposal</li> <li>▪ Construction in 2023</li> <li>▪ Composite-lined cell with a containment system*</li> <li>▪ Continuous Leachate Collection and Removal System (LCRS)</li> </ul>	Class III and Class II
DU-13D	N/A	4.7	<ul style="list-style-type: none"> <li>▪ Will handle subsequent refuse disposal</li> <li>▪ Construction in 2024</li> <li>▪ Composite-lined cell with a containment system*</li> <li>▪ Continuous Leachate Collection and Removal System (LCRS)</li> </ul>	Class III and Class II

<sup>1</sup> Class II may accept “designated” and nonhazardous wastes and Class III may accept nonhazardous municipal wastes.

\* Containment systems constructed in compliance with Federal Subtitle D and State Title 27 CCR requirements.

N/A - will be built in the future.

Figure 4 Vasco Road Landfill Disposal Units



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## **Current Landfill Operations**

Disposal operations in the VRL began in 1963. The landfill is owned and operated by Republic Services Vasco Road, LLC (“Republic”). The VRL operates in accordance with State Minimum Standards as both a Class II (accepts “designated” and non-hazardous wastes) and Class III (accepts non-hazardous municipal wastes) disposal facility, as defined by the SWRCB and CalRecycle.<sup>2</sup> The landfill is permitted to accept a variety of waste types, including non-hazardous municipal solid waste (MSW) generated by residential and commercial uses, construction and demolition (C&D) wastes, non-hazardous industrial wastes, designated wastes as defined by 27 CCR Section 20210, high-liquid-content wastes containing less than 50 percent water by weight, small dead animals, residential recyclable materials, universal and electronic wastes, and treated medical waste as allowed under 27 CCR Section 20880. Wastes requiring special handling are identified on a case-by-case basis and must undergo special waste approval procedures outlined in the Special Waste Management Plan. Hazardous wastes such as chemicals, poisons, syringes, pesticides, and paint are prohibited from disposal at the VRL.

In addition, the VRL is a recycling facility that operates the following recycling programs:

- Wood waste and green waste;
- Green waste with food waste;
- Appliance/white goods and metal;
- Concrete rubble (including drywall, stucco, bricks);
- Asphalt rubble;
- Residential recyclables (including paper, cardboard, glass, mattresses, and box springs);
- Scrap tires;
- C&D waste and materials; and
- Universal and electronic wastes.

Waste accepted at the landfill generally originates throughout the San Francisco Bay Area and Northern California. The 2020 average inflow rate to the VRL was approximately 1,636 tons per day (tpd). In accordance with the current Solid Waste Facility Permit (SWFP) No. 01-AA-0010, the maximum permitted daily inflow rate of disposed tons is 2,518 tpd. Using a 2020 average projected waste inflow estimate of approximately 461,000 tons (buried), VRL would have an average annual inflow rate of approximately 1,500 tpd (buried). On average, waste received is comprised of approximately 35 percent MSW, 8 percent C&D waste, 8 percent recyclable materials, and 49 percent average daily cover (ADC) and beneficial reuse materials.

Access to the site is provided via North Vasco Road. In general, traffic flow to the landfill is maintained and enforced by the VRL to minimize interference into, on, and out of the site, and is mainly comprised of private vehicles, refuse trucks, and commercial waste disposal trucks. Although the average number of trucks has ranged from approximately 189 to 235 roundtrips per day over the past 7 years between 2015 and 2021, the SWFP allows up to a maximum of 625 inbound and outbound vehicles per day. Peak traffic volumes occur generally between 11:00 a.m. and 2:00 p.m. and include approximately 30-50 vehicles per hour.

The site includes sign placements with Local Enforcement Agency (LEA) contact information in the event of complaints or emergencies. To minimize public nuisance, operational policies include

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<sup>2</sup> Class I landfills accept hazardous and non-hazardous wastes. The VRL is not a Class I landfill.

procedures to control for noise, litter, dust, odor, fire, disease vectors (i.e., flies and rodents), and birds. Environmental control programs include landfill gas control and monitoring; leachate collection and monitoring; groundwater monitoring; and drainage and erosion control.

The landfill is open nearly 365 days a year, except for the New Year's Day, Easter Sunday, Thanksgiving, and Christmas holidays. The hours of operation open to the public and commercial clients are 6:00 a.m. to 5:00 p.m. from Monday to Friday and 6:00 a.m. to 4:30 p.m. on Saturdays. The landfill is open on Sundays to commercial haulers only with management approval.

There are currently 21 staff who oversee landfill operations, including an Operations Manager, Operations Supervisor, Equipment Operators, Site Laborers, Business Development/Sales staff, Weigh Master, Maintenance personnel, and Administration Office Assistant. Maintenance contractors for heavy equipment and environmental control systems (landfill gas and groundwater) are permitted entry to the site during regular operating hours.

A landfill gas-to-energy (LFGTE) facility is located in the southwest portion of the project site, next to the flare station facility. The LFGTE operates in accordance with Bay Area Air Quality Management District (BAAQMD) Rule 34, which requires landfills to collect, limit, and manage landfill gas.

### **Prior Permitting and Environmental Review**

Disposal operations in the VRL commenced in 1963. In 1983, an Environmental Impact Report (EIR) was completed for the Conditional Use Permit (CUP) 4158 issued by the County of Alameda. CUP-4158 allows continuous operation and expansion of the landfill within the approved disposal area and subject to the 23 conditions of approval adopted with the CUP. The EIR was certified and the CUP was issued in August 1983.

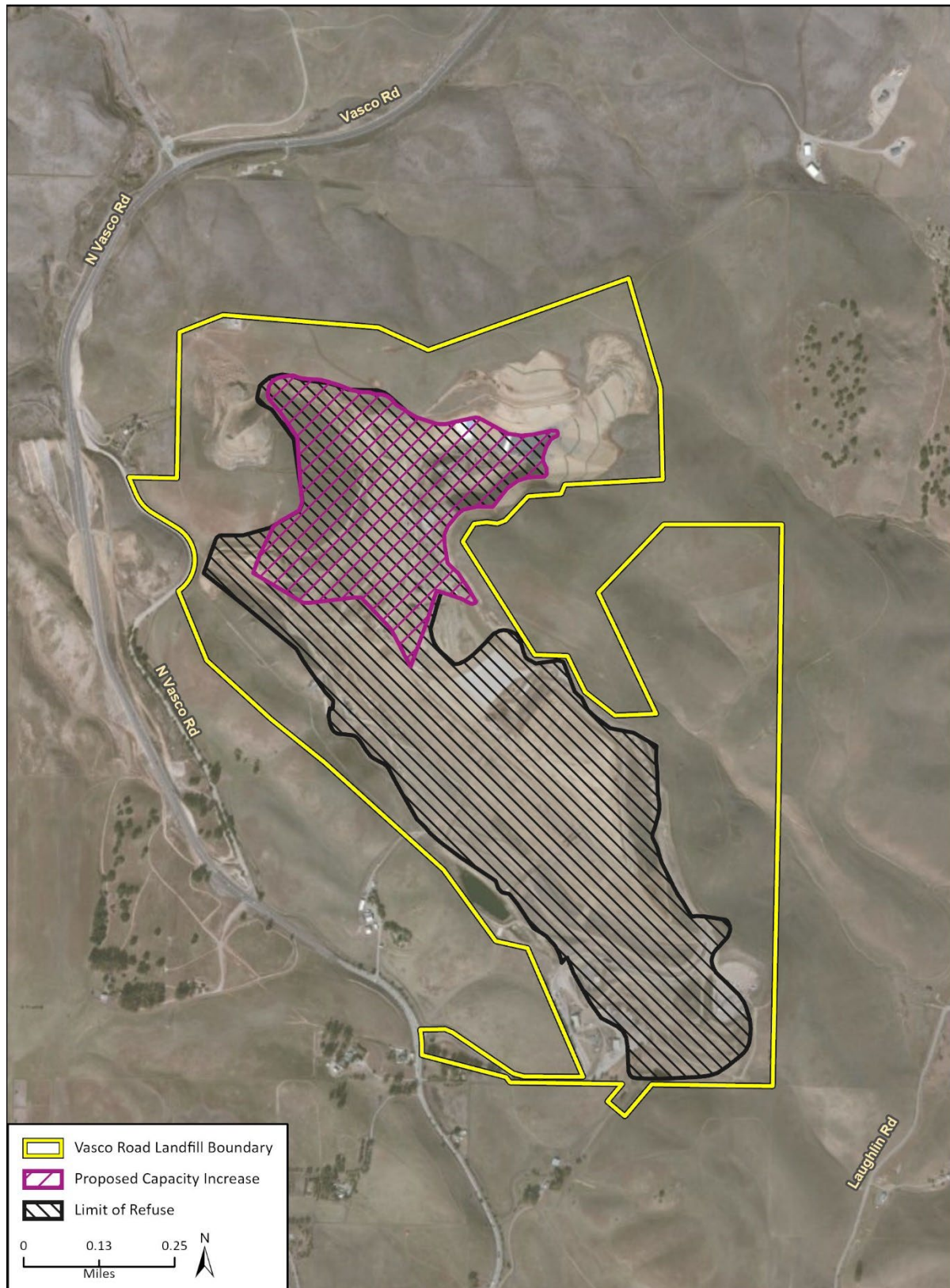
The County of Alameda conducted Periodic Reviews of the CUP in 2003 and 2005 to analyze operations at the time and to consider future operations relative to CUP-4158. As part of the 2003 review, an Initial Study/Mitigated Negative Declaration (IS-MND) was prepared which analyzed future traffic conditions, geology and seismicity of the site, impacts on water quality, and other environmental considerations. In May 2006, the County approved a CUP term extension until the year 2022, when it was expected that the currently permitted landfill capacity would be exhausted. As part of the approval, the County adopted a new set of 116 conditions of approval with revised CUP-4158. The 2006 conditions of approval also incorporated 67 mitigation measures identified in the 2003 IS-MND for the Periodic Review. The mitigation measures addressed issues pertaining to geology, seismicity, and geotechnical matters; hydrology and water quality; hazardous materials and hazards; air quality; noise and vibration; visual quality; biological resources; and cultural resources.

In 2011, operation of a LFGTE facility at the VRL was proposed and an Addendum to the 2003 IS-MND was completed to analyze impacts associated with construction and operation of the LFGTE. The Addendum and LFGTE were approved in 2011. Since last analyzed in the Addendum, the permitted conditions for project site have not changed, with a continued permitted estimated closure year of 2022.

## **8. Project Description**

The proposed project would increase the permitted height and refuse volumes of the landfill, over existing composite-lined cells, in order to extend the estimated closure year to 2051. The expansion would occur entirely within the footprint of the currently permitted fill area. The area proposed for the increase in permitted height is shown in Figure 5.

Figure 5 Area Proposed for an Increase in the Permitted Height



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The proposed project would involve a Refuse Volume Increase to vertically expand the maximum elevation of the landfill by 145 feet, from 1,025 feet above mean sea level (amsl) to 1,170 feet amsl. As noted above, there would be no expansion of the horizontal footprint of the landfill. The proposed increase would add approximately 7,237,100 cubic yards (cy) of airspace capacity, increasing the permitted total design capacity from 32,970,000 cy to approximately 40,207,100 cy. As of December 1, 2021, the existing (gross) remaining capacity was at approximately 4.71 mcy and with the proposed increase would be approximately 11.95 mcy.

The proposed increase would occur over approximately 77 acres of deck area in the northern portion of the landfill on top of primarily DU-8 through DU-13, as well as a small portion of DU-7. These DUs have composite-lined containment systems built with a leachate collection and removal system (LCRS) to meet Federal Subtitle D and State Title 27 CCR requirements. The DUs that meet Subtitle D and Title 27 CCR requirements are engineered to handle the disposal of both Class III and Class II designated wastes requiring special handling.

Increasing the maximum permitted height of the landfill would include revisions to Alameda County's SWFP and Joint Technical Document (JTD) relating to the County's Landfill in order to include changes in operations and update the terms and conditions of the permit.<sup>3</sup>

The project would not result in changes to the permitted maximum daily tonnage, which would remain at 2,518 tons per day; permitted traffic volume, which would remain at 625 vehicles per day; permitted disposal acres, which would remain at 246 acres; or hours of operation, which would remain at 6:00 a.m. to 5:00 p.m. Monday through Friday, 6:00 a.m. to 4:30 p.m. on Saturdays, and open on Sundays by special arrangements with management approval for commercial haulers only.

Per the existing SWFP, the permitted landfill closure year is 2022, and the estimated effective closure year based on the landfill's existing remaining capacity is 2031. The project would extend the permitted closure year by 29 years from 2022 to December 31, 2051.

## 9. Project Objectives

The applicant's objectives for the project are to meet both local and regional needs, including the following specific objectives:

- Provide cost-effective, stable disposal capacity for MSW for existing and anticipated users of the VRL facility for that portion of the waste stream that cannot be recycled or diverted from landfilling, by the continued design, construction, and operation of a centrally located and accessible, state-of-the-art, environmentally safe sanitary landfill which meets or exceeds local, State, and Federal standards.
- Support industrial and commercial growth in the County and surrounding communities by providing a centrally located and accessible Class II disposal capacity in the County. Class II disposal facilities provide for the environmentally safe containment of items such as contaminated soils, various types of construction and demolition wastes, ashes, and other materials that are critical to continued industrial and commercial growth and development in the County and surrounding regions.
- Assist the County and surrounding regions in meeting the current California state legislative mandate for recycling or beneficially reusing the non-hazardous waste stream and thus diverting materials from landfilling, and also assist these communities in meeting increased

<sup>3</sup> The SWFP and JTD are available for review on the CalRecycle Solid Waste Information System (SWIS) website: <https://www2.calrecycle.ca.gov/SolidWaste/SiteDocument/Index/8>.



**Vasco Road Landfill Refuse Volume Increase Project**

State recycling and beneficial reuse goals, by providing for the recycling and beneficial reuse of several categories of waste materials received at the facility, such as green waste, wood waste, construction and demolition debris, shredder wastes, shredded tires, and other consumer recyclables.

- Minimize adverse environmental impacts associated with MSW disposal by providing VRL facilities for an efficient, combined resource recovery and disposal operation to reduce or eliminate the need for solid waste to be delivered to multiple locations to achieve processing, beneficial reuse, and residuals disposal and thereby reduce greenhouse gas impacts and capital expenditures for improvements to roadways and associated infrastructure, such as transfer stations.
- Provide disposal capacity for disaster-related debris, such as from fires, floods, and earthquakes.
- Contribute to meeting the mandate of the California Integrated Waste Management Act of 1989 (CIWMA), which requires all California counties, including County of Alameda, to demonstrate a minimum of 15 years of assured disposal capacity in its Integrated Waste Management Plan.
- Maintain efficient, cost-effective, and high-quality VRL operations. Increase the efficiency of landfill site operations by achieving additional settlement of existing waste.
- Extend and increase the implementation of advanced waste recovery technologies, including the use of renewable landfill gas-generated electrical energy.
- Provide continued employment of VRL staff in a safe and humane work environment.

## 10. Required Approvals

### **County of Alameda Conditional Use Permit**

The proposed project would require modifications to the current Conditional Use Permit (CUP-4158) from the County of Alameda to allow for the refuse volume increase and extend the CUP to December 31, 2051, to allow for utilization of the proposed capacity expansion. This IS-ND provides environmental information and analysis in compliance with the California Environmental Quality Act (CEQA), which is necessary for County of Alameda decision makers to be able to adequately consider the effects of the proposed project. The 2006 conditions of approval (including the 67 mitigation measures identified in the 2003 VRL CUP IS-MND for the Periodic Review) would continue to apply for the proposed project under the modified CUP. The list of mitigation measures identified in the 2003 VRL CUP IS-MND can be found in Appendix A.

### **CalRecycle Solid Waste Facility Permit**

The Local Enforcement Agency (LEA) is responsible for inspecting all solid waste facilities and operations and for taking enforcement action when appropriate on sites violating state minimum standards within its jurisdiction. CalRecycle is responsible for certifying LEAs and for ensuring that waste management programs are primarily carried out through LEAs. The Alameda County Department of Environmental Health is certified by CalRecycle as the LEA for Alameda County.

Class III solid waste facilities are required to have a SWFP issued by the LEA and concurred with by CalRecycle. The SWFP conditions general design parameters, operations, and closure of the solid waste facility, including monitoring requirements.

VRL operates under SWFP No. 01-AA-0010 (included in JTD Appendix A-1). The proposed project would require a revision to the landfill's current SWFP issued by the LEA with concurrence from

CalRecycle. CalRecycle, as responsible agency, has approval authority and responsibility for reviewing potential environmental effects of the project as a whole. This IS-ND will be used for the approval of a revised SWFP by the LEA with concurrence from CalRecycle.

### **Alameda County Countywide Integrated Waste Management Plan**

The Alameda County Waste Management Authority (WMA) has also adopted the *Alameda County Countywide Integrated Waste Management Plan* (ColWMP) which analyzes the current and desired state of waste and materials management in the County. The ColWMP contains a set of goals, objectives and policies that address disposal capacity, responsible infrastructure, materials management, public engagement, regional collaboration, and funding. The proposed project would also require a determination on the ColWMP from the WMA.

### **Other Approvals**

Additional regulatory agencies whose review/concurrence may be required includes the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region. BAAQMD permits will be updated, as necessary.

## **11. California Native American Tribal Consultation**

On January 11, 2022, the County of Alameda sent the Ohlone Indian Tribe an Assembly Bill (AB) 52 notification letter via email. Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. The County did not receive a request for formal consultation under AB 52. Therefore, no California Native American Tribes traditionally or culturally affiliated with the project area have requested consultation pursuant to Public Resources Code Section 21080.3.1.

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## Environmental Factors Potentially Affected

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

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

## Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

**Vasco Road Landfill Refuse Volume Increase Project**

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



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Signature

---

Albert Lopez

Printed Name

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February 23, 2022

Date

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Planning Director

Title

# Environmental Checklist

## 1 Aesthetics

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

### Setting

The project site is located in unincorporated Alameda County north of City of Livermore limits. The site's surroundings are characterized primarily by agricultural land, open space, and scattered residences. The project site is bordered by open space to the north, Brushy Peak Regional Preserve to the east, the Valley Family Child Care Association (VFCCA) to the south, and Willow and Wolf Ranch to the west and northwest. The site is visible from public viewpoints along North Vaso Road as well as from residential properties in the vicinity. Very limited, distant views of the project site are available from the I-580 freeway.

The visual character of the site and its surroundings includes landscapes of grass-covered rolling hills similar to the natural topography of the landfill's surroundings. For the areas where active landfill operations are occurring the visual character includes exposed dirt with limited vegetation and scattered equipment such as haul trucks, bulldozers, and compactors as depicted on Figure 3. No scenic resources are present on-site.

## Impact Analysis

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

The VRL is located within a rural area with extensive grass covered landscape, widely scattered rural residences, and power lines. Visual simulations were prepared for the project by SWT Civil & Environmental Engineering that show three-dimensional renderings of the permitted disposal height and proposed refuse height increases. Figure 6 shows locations of the five viewpoints for visual renderings where the proposed height increase would be visible and Figure 7 through Figure 11 show the visual renderings. The renderings depict the current landfill conditions (top left photographs), conditions assuming fill would occur under the permitted fill plan (top right photographs), and the conditions under the proposed project with a refuse volume increase (bottom left photographs). The renderings also show a simulation of the permitted and proposed fill with outlines for both (bottom right photographs).

Figure 7 shows simulations from the Valley View Trail northwest of the VRL. As shown in the simulation, views of the active landfill areas are minimal compared to the overall viewshed, because the neutral color of the landfill slopes blends in with the hillsides and the background. Under the proposed project, which involves increased height of the landfill areas, the extent of the views of the landfill slopes would not increase substantially and mountainous topography behind the landfill would still be visible. The proposed refuse volume, and thus height increase, would be visible for 2.7 miles along the trail, compared to 1.5 miles under current permitted conditions. However, the proposed project would be in lower elevations compared to the Valley View Trail, and therefore would not block the view or substantially change the view of natural scenery from the trail.

Figure 8 shows simulations from a residence approximately 1 mile northwest of the project site. At this location, the view of the landfill is more visible than from the Valley View Trail due to the proximity. However, because of the similar colors and topography of the hillside areas adjacent to the landfill, the proposed project would blend in with its natural surroundings and would not substantially stand out. Condition 92 in the CUP requires berms and landscaping with trees and shrubs to block the view corridor northwest of the site and provide visual screening of landfill operations. Furthermore, the proposed height increase would not block the views of hilltops and ridges in the distance.

From the Vasco Road West vantage point located approximately 0.5 miles west of the site (see Figure 9), the view of the landfill would be more visible compared to that from the northwest residence. However, the proposed refuse volume increase would blend in with the view of the skyline and cover a small portion of a hilltop in the distance behind the landfill. Since no other structure or topographic feature can be seen beyond the capacity increase shown in orange, no scenic vista or public view would be blocked or affected.

Figure 6 Map of Visual Simulation Locations

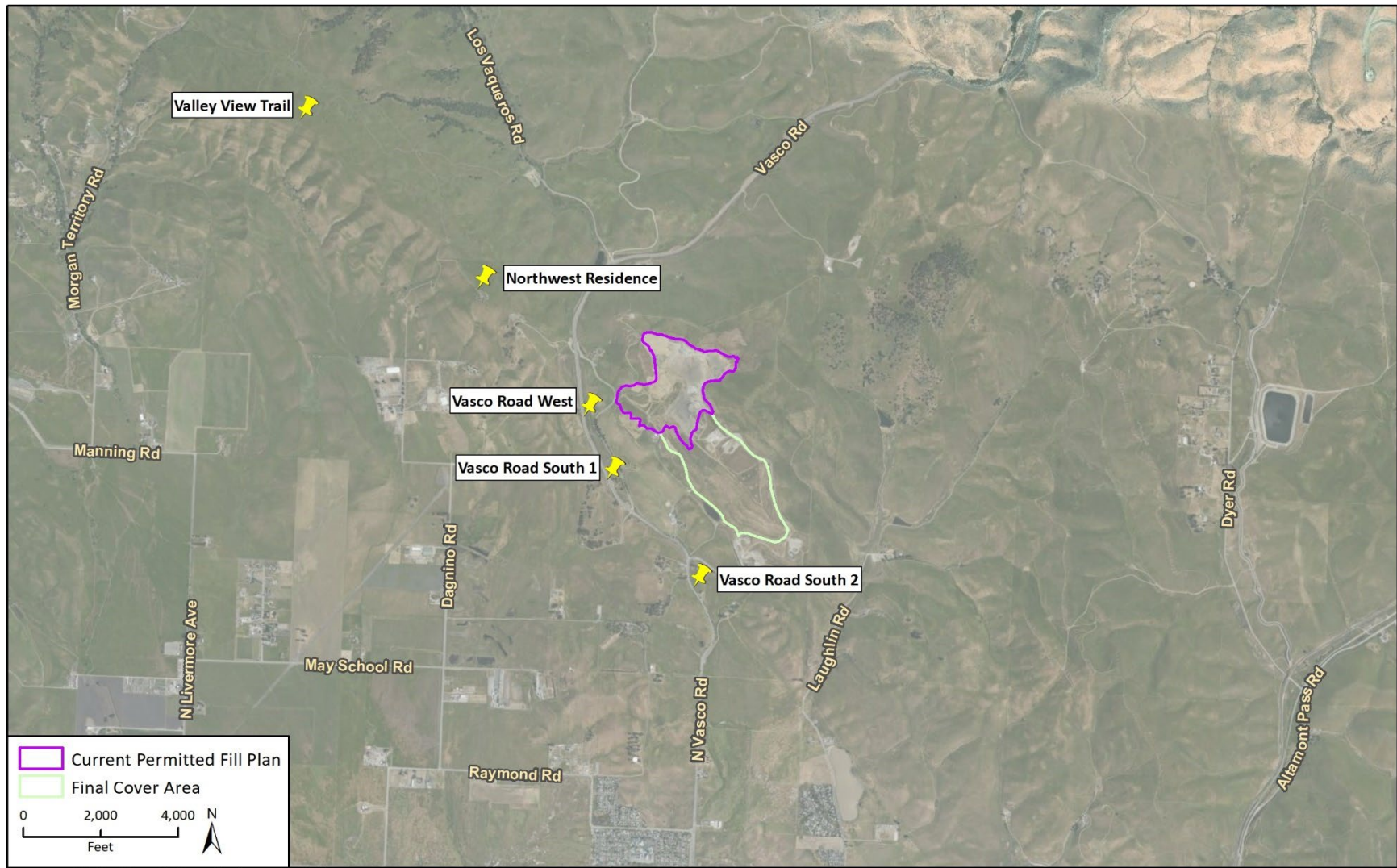
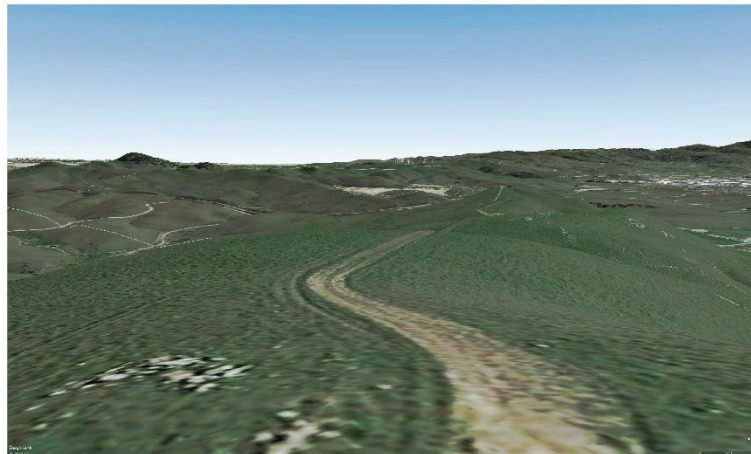


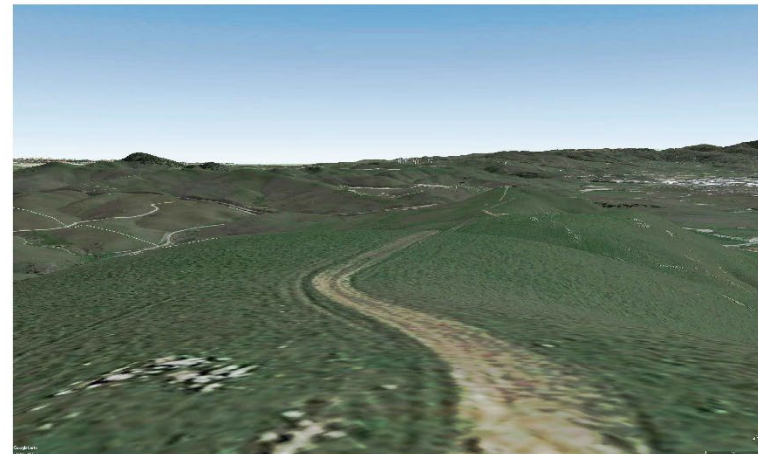
Fig 10 Visual Simulation Locations



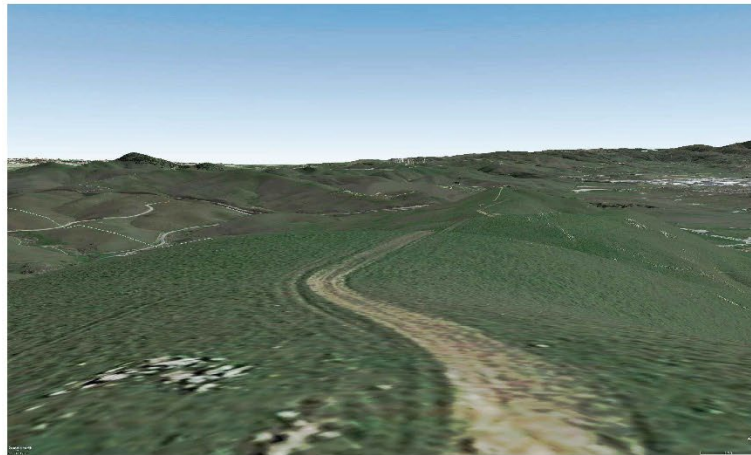
Figure 7 Visual Simulation from Valley View Trail



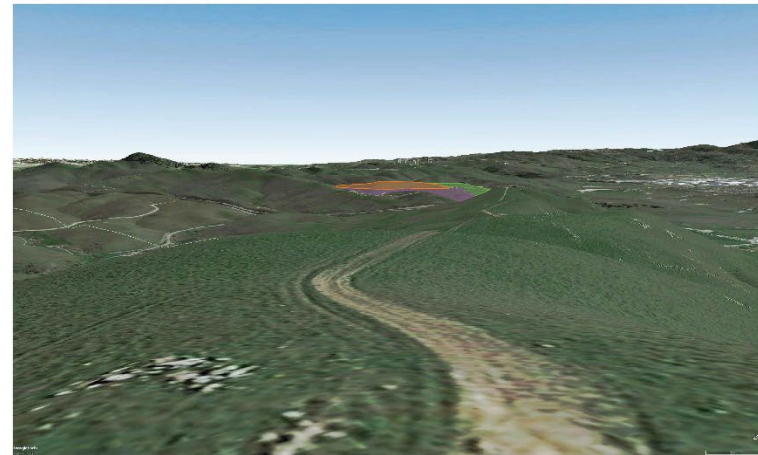
VIEW 1: CURRENT CONDITION (FEBRUARY 2021)



VIEW 2: CURRENT PERMITTED FINAL GRADING PLAN






VIEW 3: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN



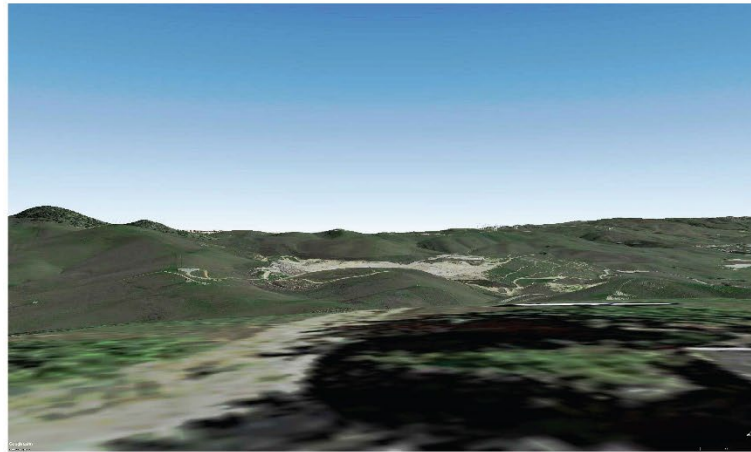
VIEW 4: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN -- OUTLINED

**LEGEND**

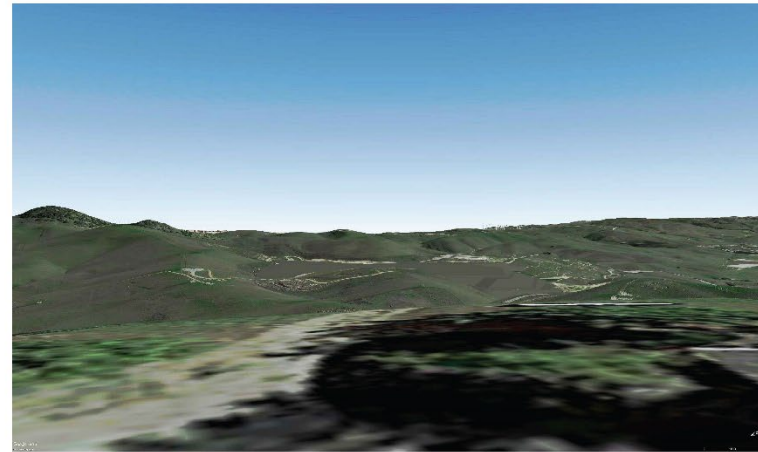
	PROPOSED CAPACITY INCREASE FINAL GRADING PLAN
	CURRENT PERMITTED FINAL GRADING PLAN
	EXISTING FINAL COVER AREA

Source: SWT Civil and Environmental Engineering, 2021.

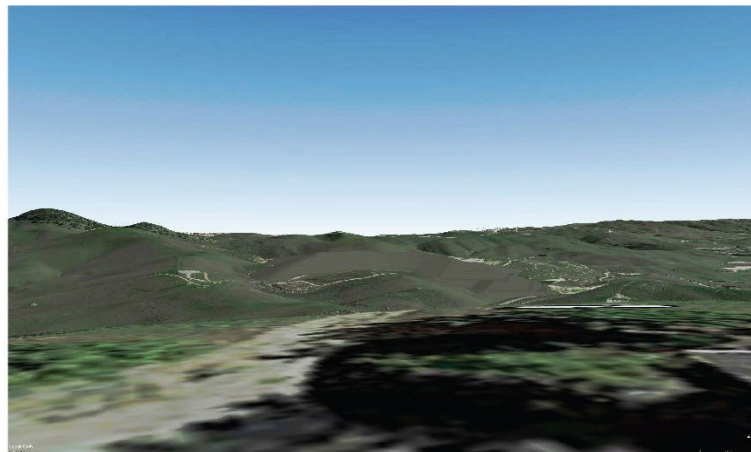
**Figure 8 Visual Simulation from Northwest Residence**



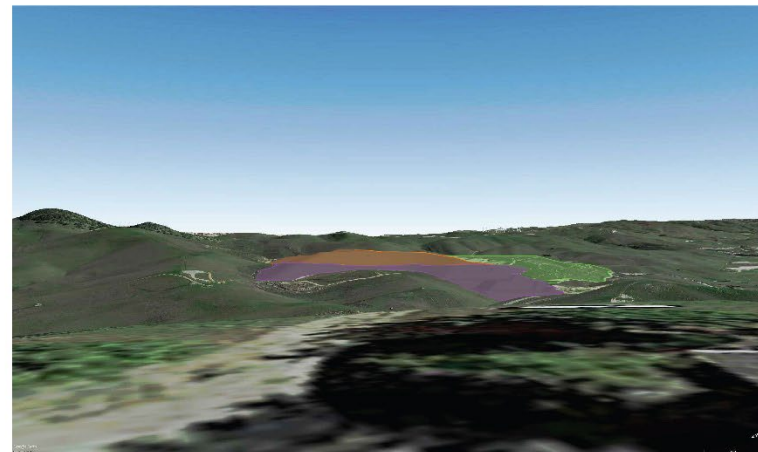
VIEW 1: CURRENT CONDITION (FEBRUARY 2021)



VIEW 2: CURRENT PERMITTED FINAL GRADING PLAN






VIEW 3: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN



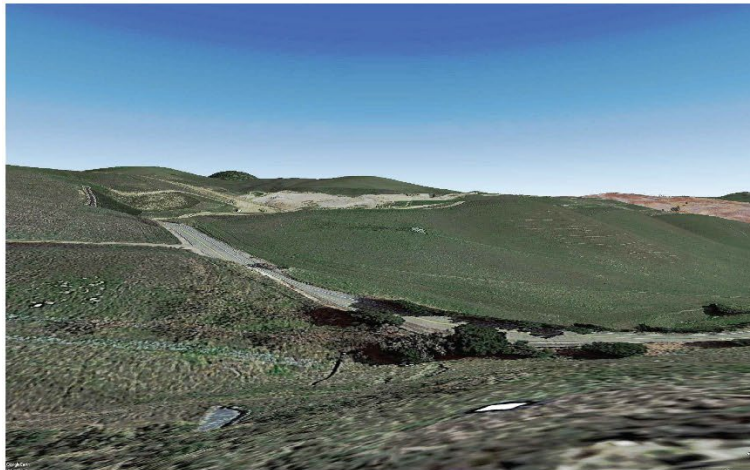
VIEW 4: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN — OUTLINED

**LEGEND**

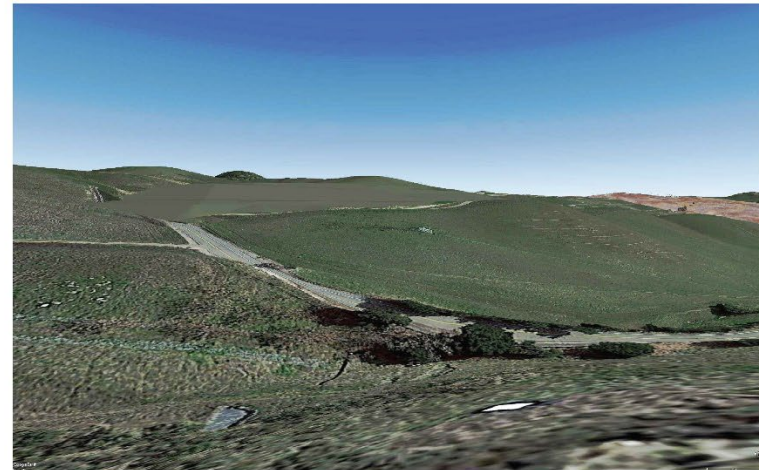
-  PROPOSED CAPACITY INCREASE FINAL GRADING PLAN
-  CURRENT PERMITTED FINAL GRADING PLAN
-  EXISTING FINAL COVER AREA

Source: SWT Civil and Environmental Engineering, 2021.

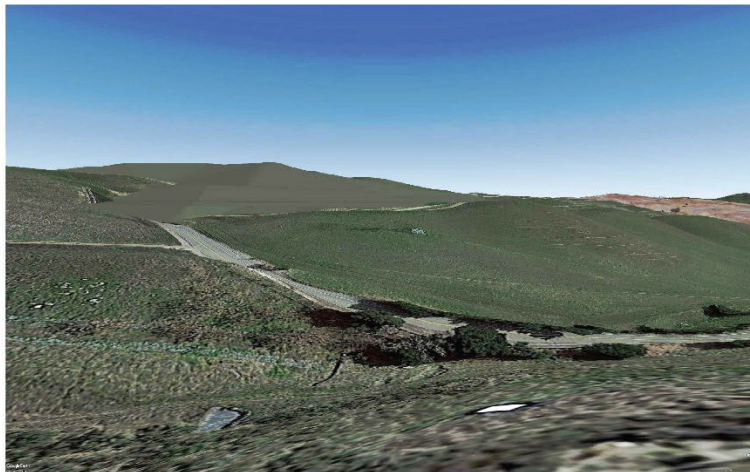
Figure 9 Visual Simulation from Vasco Road West



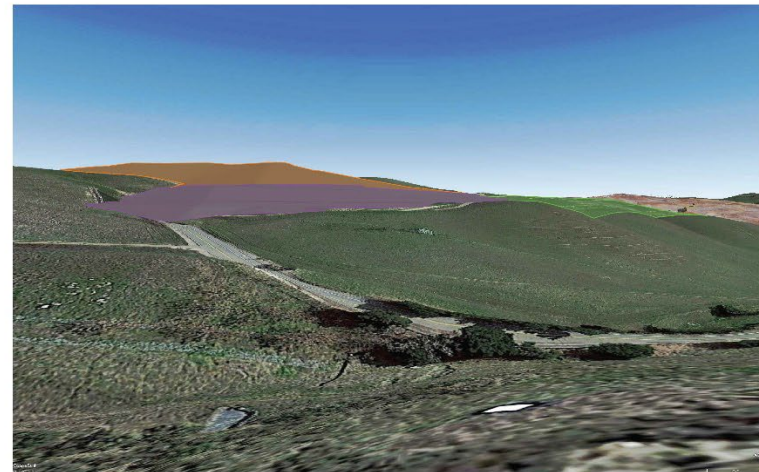
VIEW 1: CURRENT CONDITION (FEBRUARY 2021)



VIEW 2: CURRENT PERMITTED FINAL GRADING PLAN






VIEW 3: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN



VIEW 4: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN – OUTLINED

**LEGEND**

-  PROPOSED CAPACITY INCREASE FINAL GRADING PLAN
-  CURRENT PERMITTED FINAL GRADING PLAN
-  EXISTING FINAL COVER AREA

Source: SWT Civil and Environmental Engineering, 2021.

**Figure 10 Visual Simulation from Vasco Road South 1**



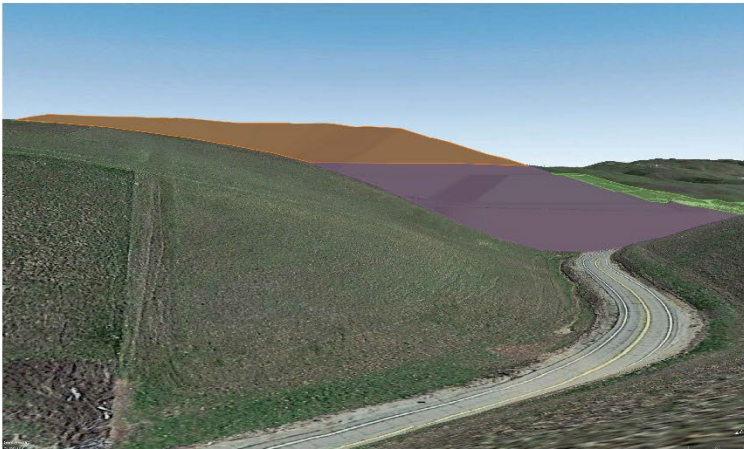
*VIEW 1: CURRENT CONDITION (FEBRUARY 2021)*



*VIEW 2: CURRENT PERMITTED FINAL GRADING PLAN*






*VIEW 3: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN*



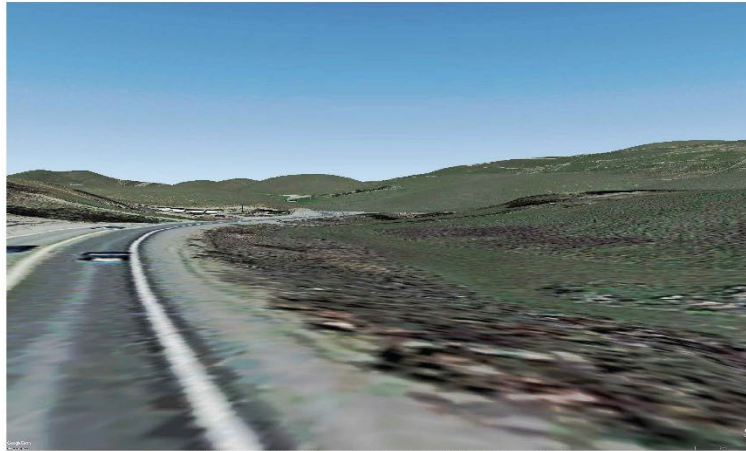
*VIEW 4: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN – OUTLINED*

**LEGEND**

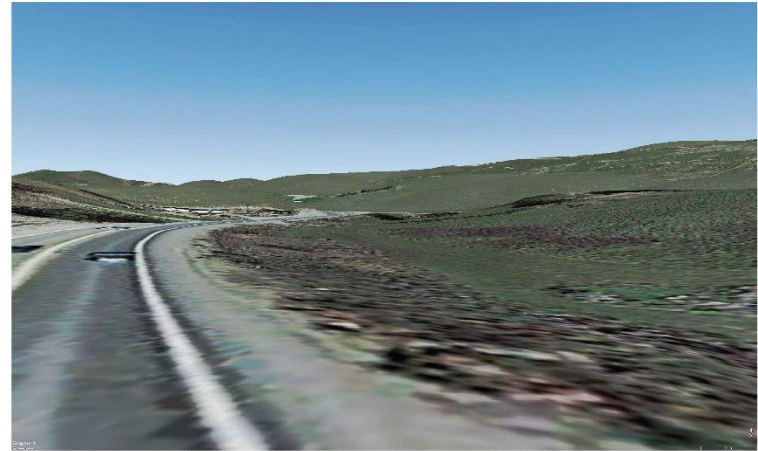
-  PROPOSED CAPACITY INCREASE FINAL GRADING PLAN
-  CURRENT PERMITTED FINAL GRADING PLAN
-  EXISTING FINAL COVER AREA

Source: SWT Civil and Environmental Engineering, 2021.

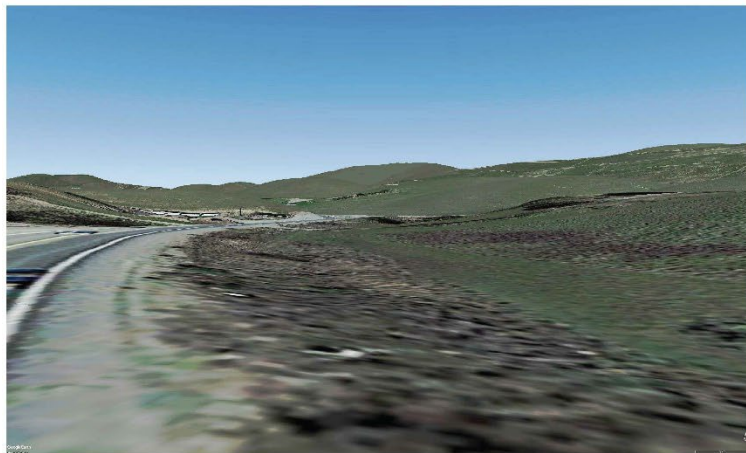
Figure 11 Visual Simulation from Vasco Road South 2



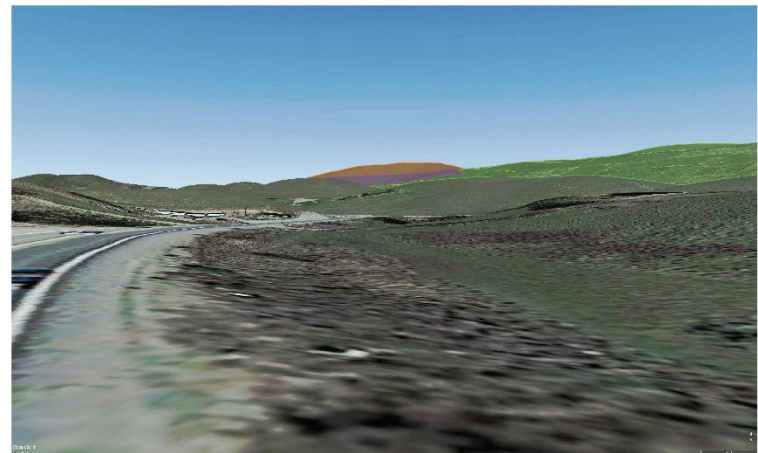
VIEW 1: CURRENT CONDITION (FEBRUARY 2021)



VIEW 2: CURRENT PERMITTED FINAL GRADING PLAN






VIEW 3: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN



VIEW 4: PROPOSED CAPACITY INCREASE FINAL GRADING PLAN - OUTLINED

**LEGEND**

-  PROPOSED CAPACITY INCREASE FINAL GRADING PLAN
-  CURRENT PERMITTED FINAL GRADING PLAN
-  EXISTING FINAL COVER AREA

Source: SWT Civil and Environmental Engineering, 2021.

From the Vasco Road South 1 vantage point located approximately 0.5 miles southwest of the site (see Figure 10), current permitted conditions would already block most of the views, and the proposed refuse volume increase would only cover a small portion of a hilltop in the distance. The proposed project would not substantially affect the views from this viewpoint more than current permitted conditions.

From the Vasco Road South 2 vantage point located approximately 0.5 miles south of the site (see Figure 11), current permitted conditions would already blend in with the skyline, with the proposed project slightly increasing the height perceived. Similar to the Vasco Road West vantage point, since no other structure or topographic feature can be seen beyond the capacity increase outlined in orange, no scenic vista or public views would be blocked or affected.

The proposed refuse volume increase would not obscure scenic elements in the project vicinity, or substantially degrade the existing visual character or quality of public views of the site and its surroundings. Landfill slopes would continue to blend in with the natural topography of the background hillsides and with the outline of the skyline. No changes to the ridgeline profile or major topographic features or vegetated areas would occur. Therefore, impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

The closest designated State scenic highway is a portion of I-580, approximately 12 miles southeast of the project site (California Department of Transportation [Caltrans] 2018). The project site is not visible from this portion of the I-580. There are no scenic resources, such as scenic trees, rock outcroppings, or historic buildings that would be damaged by the project. The proposed project would not damage scenic resources within a scenic highway. No impact would occur.

#### **NO IMPACT**

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

The project would not result in changes to landfill operations, such as the daily acceptance rate, environmental controls, nuisance controls, or traffic volumes. Therefore, no changes would occur to light or glare generated by landfill operations, structures, equipment or traffic on-site. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Impact Analysis

- Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*



**Vasco Road Landfill Refuse Volume Increase Project**

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

The project site has an Alameda County General Plan designation of Large Parcel Agriculture and a zoning of Agriculture (A), where landfill operations are permitted as a conditional use. Therefore, the project would not conflict with existing zoning for agricultural use. According to the California Department of Conservation (DOC), there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on or adjacent to the site (DOC 2017). Furthermore, the site is not enrolled in a current Williamson Act Contract, and there is no timberland or forest land on the site. In addition, since the project would only involve vertical expansion with no horizontal expansion, no agricultural land would be impacted. Therefore, the project would result in less than significant impacts on agriculture, forest land, or forestry resources.

**LESS THAN SIGNIFICANT IMPACT**

### 3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting

#### Overview of Air Pollution

The Federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic gases (ROG),<sup>4</sup> nitrogen oxides (NO<sub>x</sub>), particulate matter with diameters of 10 microns or less (PM<sub>10</sub>) and 2.5 microns or less (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO<sub>x</sub>. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

<sup>4</sup> CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this IS-ND.

**Vasco Road Landfill Refuse Volume Increase Project**

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

*Air Quality Standards and Attainment*

The project site is located in the San Francisco Bay Area Air Basin, which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD has jurisdiction over much of the nine-county Bay Area, including Alameda County. As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the San Francisco Bay Area Air Basin is classified as being in “attainment” or “nonattainment.” In areas designated as nonattainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 2, are already occurring in that area as part of the environmental baseline condition. Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The San Francisco Bay Area Air Basin is designated a nonattainment area for the federal 8-hour ozone standard, federal PM<sub>2.5</sub> 24-hour standard, State 8-hour and 1-hour ozone standards, State PM<sub>10</sub> annual and 24-hour standards, and the State PM<sub>2.5</sub> 24-hour standard. (BAAQMD 2017a). The nonattainment status of the San Francisco Bay Area Air Basin is a result of several factors, such as mobile sources, wood burning, industrial combustion, and dust.

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

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM <sub>10</sub> )	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). <sup>1</sup>
Suspended particulate matter (PM <sub>2.5</sub> )	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.

Source: U.S. Environmental Protection Agency 2016

### *Air Quality Management*

Because the San Francisco Bay Area Air Basin currently exceeds the federal ozone and PM<sub>2.5</sub> standards and the State ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> standards, the BAAQMD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS. BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) as an update to the 2010 Clean Air Plan. The 2017 Plan provides a regional strategy to protect public health and the climate. Consistent with the greenhouse gas (GHG) reduction targets adopted by the State, the 2017 Plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. To fulfill State ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors (ROG and NO<sub>x</sub>) and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants (TAC). The 2017 Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes control measures related to stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants (BAAQMD 2017b).

### **Impact Analysis**

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

A project would conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process. The 2017 Clean Air Plan assumes that development associated with general plans, specific plans, residential projects, and public facilities will be constructed in accordance with population growth projections identified by the BAAQMD. In effect, if a project is proposed in a city or county with a general plan that is consistent with the Clean Air Plan (i.e., if the project would not require a General Plan Amendment), then the project would be consistent with the Clean Air Plan.

The proposed project would not involve new residential uses that would increase population directly. The project would be consistent with the site's existing land use designation and would not require a General Plan Amendment. Furthermore, the proposed project would not cause additional earthwork or earth moving activities beyond what is currently needed for landfill operations, but would instead continue current earthwork and earth moving activities in the same area for a longer period of time and at a greater elevation.

The proposed project would also extend the permitted closure year of the VRL to 2051 to allow for continued landfill operations until the site reaches capacity. According to the 2017 Clean Air Plan, in order to be consistent with the Plan, earthmoving activities must implement the BAAQMD standard dust control measures. In accordance with and pursuant to Mitigation Measures 1 and 2 from the 2003 VRL CUP IS-MND, which are conditions of approval to the project under the current CUP, the landfill operator must control fugitive dust in accordance with BAAQMD regulations and must implement a dust mitigation plan/program (Appendix A).

Several measures are implemented to minimize dust generation as part of the current landfill operations. These include proper maintenance and paving of access roads, limiting the speed of on-site vehicles, frequent application of water spray on active soil-covered work areas and stockpile areas, potential stockpiles, erosion control measures, and use of dust inhibitors and aerial sprinklers for incoming materials. These dust control measures would continue to be implemented with the proposed project in accordance with the current and proposed CUP revisions. Therefore, the project

would not conflict with or obstruct implementation of the 2017 Clean Air Plan. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The proposed project would increase the height of the landfill from 1,025 feet amsl to 1,170 feet amsl. The proposed increase would add approximately 7,237,100 cy of airspace capacity, increasing the permitted total design capacity from 32,970,000 cy to approximately 40,207,100 cy. The proposed project would not include construction of new facilities or operational emissions sources, but would extend the operational timeframe of VRL. Extension of the operational timeframe by 29 years could potentially result in emissions over a longer period of time than originally anticipated. However, as described in Section 17, *Transportation*, the proposed project would not result in a substantial increase in trips or vehicle miles traveled (VMT). In addition, types of emissions from landfills are not considered toxic air contaminants (TACs) and would not substantially increase health and cancer risk for sensitive receptors. Examples of TACs are benzene, perchloroethylene, and methylene chloride, which are mostly found in sources such as gas stations and dry cleaning facilities. Furthermore, since existing conditions do not contain sources of TACs, operation of the project would remain the same and would not create new siting of TAC sources. In addition, the continued implementation of existing landfill environmental controls (e.g., leachate collection and removal system, landfill gas management, etc.) and nuisance controls (fire controls, dust controls, vector controls, etc.) in accordance with the proposed CUP revisions would ensure that the proposed project would not increase overall emissions associated with landfill operations. Therefore, the project would not violate air quality standards, contribute substantially to existing or projected violations, result in a net increase of a criteria pollutant for which the region is in non-attainment, or expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The BAAQMD *CEQA Air Quality Guidelines* state that the analysis of potential odor impacts should be conducted for both of the following situations: 1) sources of odorous emissions locating near existing receptors and 2) receptors locating near existing odor sources (BAAQMD 2017c). The closest odor-sensitive receptors are the residences located approximately 0.15 miles west and 0.2 miles southwest of the project site. The BAAQMD has established a project screening distance of two miles for sanitary landfills. However, the proposed project would not result in changes at the landfill that would result in new odors that could affect people at nearby residences. Additionally, the VRL implements odor control methods such as the landfill gas collection and treatment system which treats landfill gas and converts the gas into energy. As a result, the VRL has not received odor complaints or Notices of Violation from the BAAQMD or Local Enforcement Agency (LEA). Furthermore, as required by Mitigation Measures 5 to 7 from the 2003 VRL CUP IS-MND, which are conditions of approval under the VRL's current CUP, the operator would continue to conduct a BAAQMD Permit required monitoring program to ensure the absence of major odor leaks, and to

bury excessively odorous wastes immediately. Finally, although there are residences within 2 miles, there is not a substantial number of residences or people close enough to detect landfill odors. Impacts related to odors would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



## Setting

The permitted 246-acre disposal area of the landfill is comprised of a 153-acre active disposal area and an approximate 92.6-acre area that has been closed under current regulations. A biological analysis was performed during construction of the permitted 246-acre landfill area in 1983. According to the 2003 VRL CUP IS-MND, several new threatened or endangered species had been observed in or surrounding the permitted landfill disposal area since 1983, such as the San Joaquin kit fox (*Vulpes macrotis mutica*), the California tiger salamander (*Ambystoma tigrinum Californiense*), California red-legged frog (*Rana aurora draytonii*), San Joaquin pocket mouse (*Perognathus inornatus inornatus*), the burrowing owl (*Athene cunicularia*), and several other raptors. Several endangered, threatened, Species of Special Concern or California Native Plant Society (CNPS) rare plant species have also received listings since 1983. A Mitigation Agreement was signed by VRL and the California Department of Fish and Game in 1998 which included conditions requiring surveys for rare plants and the California tiger salamander, a site assessment for the California red-legged frog, and preservation of land at a 3:1 ratio for the San Joaquin kit fox. In December 2001, Republic and East Bay Regional Park District (EBRPD) entered into a Memorandum of Understanding (MOU) where Republic contributed funding for the purchase of approximately 290 acres of the Bosley Property in order to use as an offsite mitigation preserve (Alameda County 2003).

## Impact Analysis

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

The landfill site is used for waste disposal or to extract soil for daily cover in the active area of the landfill. No native or otherwise undisturbed habitats are present on the project site where the proposed refuse volume and height increase would occur. The proposed project would involve increasing the permitted height of the landfill. The proposed project would not alter the existing disturbance footprint of the landfill or involve new development or activity that would have the potential to remove riparian or other sensitive habitat or disrupt nesting or foraging sites for raptors or other birds protected by the Migratory Bird Treaty Act. The proposed project would not result in impacts to sensitive plant and animal species or communities. Impacts would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

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

Two man-made ponds exist on the project site (Pond #2 and Pond #3) that are used as sedimentation basins, collecting sediment from stormwater runoff and clarifying the water before it discharges into collecting drainages in the Livermore-Amador Valley (Alameda County 2003). However, due to the highly disturbed nature of the ponds, it is unlikely for aquatic species to exist and habituate.

As discussed above, Republic contributed funding for the purchase of approximately 290-acres of the Bosley Property to use as an offsite mitigation preserve and provided new fencing and road infrastructure to protect, monitor, and maintain new wetland vegetation, which has reduced the VRL's impacts on protected wetlands. In addition, the proposed project would not involve new disturbance or construction that would substantially affect State or federally protected wetlands. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project would not result in changes to day-to-day operations and would not involve construction activity. The proposed refuse volume increase would not interfere with the movement of fish or wildlife species. Impacts to wildlife movement and wildlife nursery sites would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The proposed project would increase the permitted height of the landfill in an already disturbed area with ongoing landfill operations where there are no protected biological resources. In addition, no trees would be removed as part of the project. Therefore, the proposed project would not conflict with local policies or ordinances protecting biological resources.

**LESS THAN SIGNIFICANT IMPACT**

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

The landfill is not subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable approved plan with provisions for protecting biological resources. The proposed project would not result in impacts associated with such conflicts.

**NO IMPACT**

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# 5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Setting

Cultural resources are defined as buildings, sites, structures, or objects that may have historic, architectural, archaeological, cultural, or scientific importance. Under CEQA, public agencies must consider the effects of their actions on historical resources, which are defined as any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR includes resources listed in or formally determined to be eligible for listing in the National Register of Historic Places. Pursuant to California Public Resources Code (PRC) §21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Demolition, replacement, substantial alteration, and relocation of historic properties are actions that would change the significance of an historic resource (California Code of Regulations, Title 14, 15064.5).

## Impact Analysis

- Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*
- Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The proposed project would increase the permitted height of the landfill and would not involve ground-disturbing activities such as demolition or construction. The 2003 VRL CUP IS-MND determined that the project site does not contain prehistoric or historic resources. Conditions at the site related to prehistoric or historic resources have not changed since preparation of the 2003 IS-MND. Since the proposed project would not include excavation or ground-disturbing activities below or beyond the current extent of landfill activity, no undiscovered archaeological resources or human remains would be disturbed, damaged, or destroyed. No impacts would occur.

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# 6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Impact Analysis

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*
- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The proposed volume increase at the VRL would not involve an increase in the permitted daily tonnage of waste accepted at the landfill. As a result, the proposed project would not involve the use of additional equipment, construction activities, or additional operational activities that would result in an increase in energy use from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. The extension of the permitted closure year from 2022 to 2051 would result in a prolonged usage of energy as well as earthmoving equipment. However, future refuse or earthmoving activities would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. In addition, equipment would be subject to the U.S. Environmental Protection Agency (USEPA) Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Therefore, the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with plans for renewable energy or energy efficiency. This impact would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

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# 7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



## **Setting**

### *Geology and Soils*

Alameda County is located in the East Bay of the San Francisco Bay Region of Central Coastal California and lies within the boundaries of the Coast Ranges geomorphic province. The Bay plain and valley areas are composed of Quaternary unconsolidated deposits consisting primarily of alluvial and estuarine sediments. Soils in the county are underlain by alluvial and estuarine sediments. Alluvial soils range from stream deposited sands, gravel, silts, clays, and intermixtures to fine windblown sand; estuarine sediments include silty clays and some sand and shell layers in the Bay and marshlands. Younger alluvial deposits adjacent to the San Francisco Bay include younger Bay Mud, which is a semi-fluid to firm silty clay with lenses of water-saturated fine sand. Various types of bedrocks underlie the Diablo Range area, and almost all hills are composed of a mantle of topsoil and weathered bedrock (Alameda County 2014).

### *Earthquakes*

Earthquakes are the most pervasive safety hazard in Alameda County. Ground shaking is the source of the most widespread earthquake damage, resulting in variable levels of damage and destruction of structures, depending on the location of the epicenter, the magnitude of the earthquake, the directivity, and the composition of underlying geologic materials (Alameda County 2014).

There are three known active faults within unincorporated Alameda County: Hayward-Rogers Creek fault, Calaveras fault, and Greenville Las Positas fault. The Working Group of California Earthquake Probabilities estimated that there is a 31-percent chance that an earthquake with a magnitude of 6.7 or higher caused by the Hayward-Rogers Creek fault would strike the Bay Area in the next 30 years. The nearest fault to the project site is the Greenville Fault, which crosses the landfill on the western corner (Alameda County 2003).

### *Liquefaction*

Liquefaction is a phenomenon where loose, saturated, fine-grained soils, such as silts, sands, and gravels, undergo a sudden loss of strength during earthquake shaking and change into a fluidlike state. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may suddenly subside and suffer major structural damage and result in loss of life or injury. According to the California Department of Conservation (DOC), the project site is located in a liquefaction zone (DOC 2018).

### *Landslides and Erosion*

Landslides are generally caused by earthquakes, erosion, and heavy rainfall. Most landslides occur naturally, but can be induced by excessive grading, poor drainage or groundwater withdrawal, or improper construction methods. Furthermore, soil that varies in depth can pose a slope instability hazard (Alameda County 2014). According to the DOC, the project site is located in a landslide zone (DOC 2018).

## **Impact Analysis**

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

According to the DOC, the project site is located in an Alquist-Priolo Earthquake Fault Zone, a liquefaction zone, and a landslide zone (DOC 2018). A small portion of the Greenville Fault Zone crosses the project site on the western corner. No new development would occur with the proposed project and landfill operations would continue to comply with Subtitle D, CCR Title 27, ACMC, and the General Plan Safety Element policies to minimize and/or avoid risks to life and property associated with earthquakes and seismic ground shaking. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death. Furthermore, as mentioned in the 2003 VRL CUP IS-MND, the landfill has been maintaining a setback distance between newly constructed disposal cells and the portion of Greenville Fault in accordance with 40 CFR Part 258, as well as CCR Title 27 regulations (Alameda County 2003). This would not change with the proposed project. Impacts related to fault rupture and seismic ground shaking would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*
- d. Would the project 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?*

As discussed above, the project site is located in a liquefaction zone, which has the potential to disrupt the refuse liner/cover, mix fill materials and leachate from various cells, and contaminate surface or groundwater. However, no new structures would be developed under the project and future engineering of the landfill would continue to be required to comply with Subtitle D and CCR Title 27, which would ensure the use of appropriate soil types for refuse liner/cover and prevent liquefaction and soil expansion (Alameda County 2003). Since the proposed project would only include an increase in permitted height, impacts to liquefaction and soil expansion would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

**Vasco Road Landfill Refuse Volume Increase Project**

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

As discussed under Impacts a.1 and a.2, the project site is located in a landslide zone, which has the potential to threaten the landfill's slope stability, affect liners/covers and leachate systems, disrupt operations, and contaminate surface and/or groundwater. However, the project would not change the disturbance footprint or result in the development of structures that would exacerbate the risk of landslides or erosion. Furthermore, engineering methods pursuant to Subtitle D and CCR Title 27 would continue to be applied to prevent slope failures on both natural and constructed slopes. Since the project would only include an increase in permitted height and would not consist of new development or construction activity, impacts to landslides and soil erosion would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The proposed project would not change the disturbance footprint associated with landfill operations but would increase the capacity of the landfill and extend the closure year. The landfill currently includes an erosion control system to collect and convey stormwater to minimize erosion. Additional design calculations were prepared to model the proposed height increase. The calculations showed that the existing drainages and erosion control system would not need modification due to the volume increase (SWT 2020). As described in Section 3, *Air Quality*, the proposed project is required to implement several ongoing measures to control dust, such as watering exposed areas, covering exposed areas, and applying dust inhibitors to prevent the loss of topsoil. These measures would continue to be implemented with the proposed project. The proposed project would not result in substantial soil erosion or the loss of topsoil.

**LESS THAN SIGNIFICANT IMPACT**

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

The project would increase permitted refuse height and would not involve the use of new septic tanks or alternative wastewater disposal systems. There would be no impact.

**NO IMPACT**

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

The proposed project would not change the existing disturbance footprint and does not include excavation or other ground-disturbing activities in undisturbed soils. Therefore, the project would not damage or destroy previously undiscovered paleontological resources or geologic features. There would be no impact.

**NO IMPACT**

## 8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting

#### *Climate Change and Greenhouse Gases*

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term “climate change” is often used interchangeably with the term “global warming,” but “climate change” is preferred to “global warming” because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC 2014), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2014).

Greenhouse gases (GHG) are gases that absorb and re-emit infrared radiation in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas CH<sub>4</sub> results from off-gassing associated with agricultural practices

and landfills. Observations of CO<sub>2</sub> concentrations, globally averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently observed increases in CH<sub>4</sub> and N<sub>2</sub>O concentrations are smaller than those assumed in the scenarios in previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Manmade GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases and SF<sub>6</sub> (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as “carbon dioxide equivalent” (CO<sub>2</sub>e), and is the amount of a GHG emitted multiplied by its GWP. CO<sub>2</sub> has a 100-year GWP of one. By contrast, CH<sub>4</sub> has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2007).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat trapping effect of GHGs, Earth’s surface would be about 34° C cooler. However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations (CalEPA 2015).

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

## **Impact Analysis**

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

Since the project is located in the San Francisco Bay Area Air Basin, this analysis uses the GHG emissions thresholds contained in the BAAQMD’s May 2017 *CEQA Air Quality Guidelines*. These thresholds are applicable to Alameda County and jurisdictions throughout the Bay Area. The BAAQMD has developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether or not a proposed project could result in potentially significant GHG emissions. If a proposed project meets all of the screening criteria, then the lead agency or applicant does not need to perform a detailed GHG assessment of their project’s GHG emissions. These screening levels are generally representative of new development on greenfield sites without any reduction measures taken into consideration. Projects that do not involve construction activities generate fewer emissions than would the greenfield-type projects upon which the screening criteria are based. When projects do not meet the screening criteria and require quantification of GHG emissions, BAAQMD has a project-level numeric threshold of 1,100 metric tons of CO<sub>2</sub>e emissions per year (BAAQMD 2017).

The proposed project would satisfy the BAAQMD screening criteria because it would not involve construction activities and, thus, would not require the quantification of GHG emissions. Although operational emissions from the proposed project would not increase on a daily basis, emissions would continue for an extended duration of 29 years. However, daily and annual GHG emissions would most likely decline in future years due to the usage of cleaner and more efficient equipment. In addition, the VRL would comply with BAAQMD Rule 34 which requires that landfill gas be collected and properly managed to minimize landfill emissions in order to prevent public nuisance and harmful impacts to public health, as well as 27 CCR Section 20921 which requires landfill gas collection to control landfill gas migration to less than five percent methane and less than 1.25 percent by volume into on-site structures. The VRL contains a landfill gas collection system under vacuum which draws landfill gas (mainly methane) to a central point for proper management. Landfill gas captured is transferred to the VRL's LFGTE located in the southwest portion of the site, which recycles landfill gas into electrical energy. Overall, the project would represent a continuation of existing GHG emissions sources and would not substantially increase emissions such that an impact on the environment would occur. Since the proposed refuse volume increase would not cause changes to the daily maximum permitted tonnage of waste, number of vehicle trips, environmental controls, or nuisance controls, the proposed project would not directly or indirectly generate an increase in GHG emissions, and impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

BAAQMD's *CEQA Guidelines* approach to developing a threshold of significance for GHG emissions is to identify the emissions level at which "a project would not be expected to conflict substantially with existing California legislation adopted to reduce statewide GHG emissions" and move towards climate stabilization (BAAQMD 2017b). As described above, because the project is below the BAAQMD's screening criteria for GHG, it is considered to have a less-than-significant impact related to GHG emissions. The proposed project would not conflict with existing California legislation adopted to reduce statewide GHG emissions at the time the BAAQMD's *CEQA Guidelines* were developed.

Since the adoption of the BAAQMD's *CEQA Guidelines*, the State of California has set a stricter GHG reduction target of 40 percent below 1990 levels by 2030 (Senate Bill 32 signed into law in 2016). The CARB lays out a strategy for achieving California's 2030 GHG target in its 2017 Climate Change Scoping Plan. As stated therein, part of reducing GHG emissions includes working toward in-state processing and management of waste generated in California. The proposed project is consistent with this goal of the Scoping Plan. Other VRL goals include increasing recycling and diversion from landfills, and continuing implementation of recycling programs. The proposed project would not conflict with the listed goals in the Scoping Plan or SB 32.

The Alameda County Board of Supervisors approved and adopted a Climate Action Plan (CAP) in February 2014 which outlines a course of action to reduce community-wide GHG emissions in the unincorporated Alameda County. The CAP aims to reduce GHG emissions to 15 percent below 2005 levels by 2020 and 80 percent below 1990 levels by 2050 (Alameda County 2014). The CAP contains goals and policies to improve recycling of construction and debris and increase solid waste reduction and diversion to 90 percent by 2030. Furthermore, California's Short-Lived Climate Pollutant Reduction Strategy (SB 1383) aims to reduce organic waste disposal by 50 percent by 2020 and 75 percent by 2025, which would divert organics from landfills and reduce GHG emissions.

**Vasco Road Landfill Refuse Volume Increase Project**

Although the proposed project would increase the refuse height, the increased capacity and extended closure date would allow for the landfilling of wastes that could not be diverted. Since the VRL provides a variety of recycling programs that would allow for diverting useful materials from the landfill, such as those summarized in Section 7, *Current Landfill Operations*, of the Project Description, the proposed project would be consistent with the applicable goals and policies in the CAP as well as regulations pertaining to GHG such as SB 1383. Impacts associated with conflicting with an applicable plan, policy, or regulation of an agency adopted for reducing the emissions of GHG would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



## **Setting**

According to the California Department of Toxic Substances Control (DTSC) EnviroStor database, the project site is not included on a list of hazardous waste sites. There are no active hazardous sites near the vicinity of the project site, with four inactive sites south of the site within City of Livermore city limits. The nearest hazardous waste site is approximately 9.1 miles east of the VRL where the Altamont Landfill is located (DTSC 2021). The VRL is a Class II and III landfill which is not permitted to accept liquid or solid hazardous waste.

## **Impact Analysis**

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

The VRL is permitted to accept designated wastes as approved by the RWQCB that contain elevated, but non-hazardous levels of metals, organic compounds, or other factors that could potentially impact water quality. However, pursuant to Mitigation Measures 22 through 28, and 30 through 58 of the 2003 VRL CUP IS-MND (see Appendix A), the landfill is required to comply with requirements that protect public health and safety, which include:

- VRL's Health and Safety Plan;
- Illness and Injury Prevention Program;
- Emergency Response Plan;
- Employee Exposure Monitoring Program;
- Landfill Gas Management Plan;
- Leachate Management Plan;
- Load Screening Program;
- Hazardous Materials Management Plan;
- RWQCB's Waste Discharge Requirements; and
- California Integrated Waste Management Board (CIWMB)/Alameda County's Solid Waste Facility Permit.

No routine transport, use, or disposal, of hazardous materials occurs at the landfill, and the VRL has a hazardous waste exclusion program that is conducted during all hours of waste acceptance. Alameda County also provides waste screening programs at municipal waste transfer stations and educates residents on proper household hazardous waste disposal methods, preventing hazardous wastes from entering the VRL. Since there would be no changes to the daily maximum permitted tonnage of waste, number of vehicle trips, environmental controls (e.g., leachate collection and removal system, landfill gas management, etc.), or nuisance controls (fire controls, dust controls, vector controls, etc.), the project would not create a significant hazard to the public or the environment. Impacts would be less than significant.

## **LESS THAN SIGNIFICANT IMPACT**

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

There are no schools within 0.25 miles of the project site. The nearest school is the Andrew N. Christensen Middle School located approximately 2.8 miles south of the project site. There would be no impact.

**NO IMPACT**

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

According to the California State Water Resources Control Board's (SWRCB) GeoTracker, the project site is located on a leaking underground storage tanks (LUST) cleanup site for De Paoli Equipment. However, the site has been closed since March 3, 1997, meaning cleanup activities have occurred in accordance with regulatory standards and no further cleanup action is required at this time (SWRCB 2022). Since no routine transport, use, or disposal, of hazardous materials has or would occur at the landfill, the project would not create a significant hazard to the public or the environment. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The nearest airport is the Livermore Municipal Airport located approximately 5 miles southwest of the project site and the project is not located within an airport land use planning area (Alameda County Community Development Agency 2012). Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area from airport operations. There would be no impact.

**NO IMPACT**

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

The proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan and landfill operations would continue to comply with the VRL's Emergency Response Plan. There would be no impact.

**NO IMPACT**

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

As discussed in Section 20, *Wildfire*, the project site is located in a moderate fire hazard severity zone (CalFire 2007). The proposed project would not involve activities or new development that would directly or indirectly expose people or structures to risk involving wildfires. There would be no impact.

**NO IMPACT**

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# 10 Hydrology and Water Quality

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

## **Setting**

The project site is located in the San Francisco Bay Hydrologic Region, which covers approximately 4,500 square miles and encompasses nine counties, including Alameda County. The site corresponds with the boundaries of the San Francisco Bay RWQCB Region 2 and the San Francisco Bay Area Integrated Regional Water Management Plan. The San Francisco Bay Hydrologic Region is a complex network of watersheds, marshes, rivers, creeks, reservoirs, and bays mostly draining into the San Francisco Bay and the Pacific Ocean (RWQCB 2017).

The project site is in the Arroyo Las Positas Watershed (Alameda County Flood Control and Water Conservation District 2021). The VRL has a surface water management system (SWMS) which is a drainage and erosion control system to collect and transfer stormwater in a controlled manner to minimize erosion and potential infiltration of stormwater into the refuse prism. The on-site stormwater is discharged through a network of drainage channels, culverts, and down drains, and eventually empties into one of the two sedimentation ponds and then into the Vasco Creek (Alameda County 2003).

All stormwater runoff from the project site is ultimately discharged into San Francisco Bay. The San Francisco Bay RWQCB monitors surface water quality through implementation of the Water Quality Control Plan (Basin Plan) and designates beneficial uses for surface water bodies and groundwater. The beneficial uses for San Francisco Bay include industrial service supply, commercial and sport fishing, shellfish harvesting, estuarine habitat, fish migration, preservation of rare and endangered species, fish spawning, wildlife habitat, water contact recreation, water non-contact recreation, and navigation (RWQCB 2017).

The San Francisco Bay RWQCB issued a site-specific Waste Discharge Requirement (WDR) (Order No. R2-2008-0074) in 2008 which monitors groundwater at the VRL and complies with CCR Title 27 Article 1 requirements. In addition, an Evaluation Monitoring Program (EMP) has been implemented for the groundwater monitoring program to address the presence of VOCs in underdrain sumps (Alameda County 2003). A Stormwater Pollution Prevention Plan (SWPPP) has been implemented for the site. The SWPPP was prepared in accordance with the requirements of the California State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activity and will be updated annually to reflect any changes to best management practices (BMPs).

## **Impact Analysis**

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

The proposed project would increase the permitted refuse volume and height of the landfill, but would not significantly alter the surface configuration, permeability, or topography of the landfill. Implementation of the proposed project would not increase runoff from the project site. Furthermore, the VRL has existing environmental controls to contain landfill contaminants pursuant to Subtitle D regulations. The Leachate Management Plan and groundwater monitoring network is designed to provide early detection of a release of leachate from wastes to groundwater, and the DUs are engineered to ensure cell liners and covers satisfy Subtitle D requirements for permeability, thickness, and material quality in order to separate stormwater runoff from solid and designated wastes. These measures would prevent contamination events before they happen and prevent surface or ground water from degrading. Development of the proposed project would not change

these requirements or otherwise violate water quality standards or waste discharge requirements. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project site is located in the Altamont Subbasin of the Livermore Valley Groundwater Basin (Alameda County 2003). The proposed project would involve an increase in permitted refuse volume and height, but would not change the disturbance footprint associated with landfill operations or increase impervious surfaces or result in other changes that would interfere with groundwater recharge in the Altamont Subbasin. Additionally, the proposed project does not include operational changes that would increase the use of groundwater resources that could result in a substantial decrease in groundwater supplies. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?*
- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The proposed increase in refuse volume and height of the landfill would not introduce more than the existing and current proposed impervious surfaces or structures. The proposed project would not change the footprint of the site. As described above in the Setting, the VRL has a surface water management system (SWMS) which is a drainage and erosion control system to collect and transfer stormwater in a controlled manner to minimize erosion and potential infiltration of stormwater into the refuse prism. The on-site stormwater is discharged through a network of drainage channels, culverts, and down drains, and eventually empties into one of the two sedimentation ponds and then into the Vasco Creek. An updated analysis of the SWMS was performed for the remaining undeveloped portions of the VRL in 2009 and additional design calculations were prepared to model the proposed height increase. The results showed that the proposed project would not alter the existing drainage pattern of the site such that existing drainages would need modification. Impacts

related to the alteration of the existing drainage pattern of the site or area would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The nearest large water body is the Los Vaqueros Reservoir located approximately 4 miles north of the project site. Since the Los Vaqueros Reservoir is at a lower elevation than the VRL, it would not pose as an inundation hazard (Alameda County 2003). The proposed project is not located in an area subject to flood hazards, tsunamis, or seiches (Federal Emergency Management Agency 2020). Therefore, the project would not result in an impact related to the risk of release of pollutants.

**NO IMPACT**

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

As discussed above under question (c), the proposed project would not result in changes to the amount of existing or proposed impervious surfaces on site and associated stormwater runoff rates and volumes from the project site. Additionally, the proposed project would not result in new sources of pollutants. Stormwater would continue to be managed using the SWMS and all discharges would be compliant with discharge permits. Therefore, the proposed project would not conflict with or obstruct implementation of the Basin Plan or any other water quality control or groundwater management plans. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Setting

The project site has a land use designation of Large Parcel Agriculture according to the Alameda County General Plan and a zoning of Agriculture (A) according to the Alameda County Zoning Ordinance (Alameda County 2021). The intent of Agricultural zoning is for “agricultural and other nonurban uses, to conserve and protect existing agricultural uses, and to provide space for and encourage such uses in places where more intensive development is not desirable or necessary for the general welfare” (Alameda County Municipal Code [ACMC] Section 17.06.010). Pursuant to ACMC Section 17.06.035, sanitary landfills are permitted in this zoning district as a conditional use if approved by the Planning Commission. A CUP was issued for the landfill in August 1983 (CUP C-4158), which allowed for the continuous operation and expansion of the landfill until the year 2022.

## Impact Analysis

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

The project would not change the landfill disturbance footprint or use of the site, or result in new development. As a result, the project would not physically divide an established community. There would be no impact.

### NO IMPACT

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

The project site has a land use designation of Large Parcel Agriculture and is zoned Agriculture. The Agriculture zone allows for sanitary landfill uses under a CUP, which was issued to the site in August 1983. The existing facility has provided solid waste management for the County since 1983, and the project would not change this use. Although the 2003 VRL CUP IS-MND included a mitigation measure calling for the rezoning of the site to Planned Development (PD) to allow for recycling on top of permitted Agriculture zone activities (Alameda County 2003), this rezoning never occurred,



**Vasco Road Landfill Refuse Volume Increase Project**

and the current recycling operations officially remain a non-conforming use. However, in the decades since the original CUP was issued, recycling activities have become a common and widely accepted ancillary use at municipal solid waste landfills. Recycling operations at landfills were not envisioned at the time the County's Zoning Ordinance was adopted, but they have since become an integral component of contemporary solid waste management strategy. They are not contrary to the character of the permitted sanitary landfill use at the VRL property; rather, they are functionally and aesthetically consistent with landfill operations. Consequently, the existing recycling operations are considered a compatible use with the landfill use that is a principal permitted use in the Agriculture zoning district. In addition, the applicant has applied for modifications to the current Conditional Use Permit (CUP-4158) from the County of Alameda to allow for the increased refuse capacity and extend the CUP to 2051. With approval of the revised CUP, the proposed project would be consistent with the Alameda County General Plan and zoning designations. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Impact Analysis

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No mining activities or extraction of mineral resources currently occur at the landfill (DOC 2015). The proposed project would not result in new ground disturbance or other activities that would result in loss of availability of a known or locally important mineral resource or mineral resource recovery site. There would be no impacts.

**NO IMPACT**

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# 13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Setting

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes are not perceived generally. Quiet suburban areas typically have noise levels in the range of 40 to 50 dBA, while arterial streets are in the 50 to 60+ dBA range. Normal conversational levels are in the 60 to 65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line of sight reduces noise levels by 5 to 10 dBA. The construction style for dwelling units in California generally provides a reduction of exterior-to-interior noise levels of about 30 dBA with closed windows (Federal Highway Administration 2006).

**Vasco Road Landfill Refuse Volume Increase Project**

Some land uses are more sensitive to ambient noise levels than other uses, due to varying characteristics of the receptors and the types of activities involved. For example, residences, schools, hospitals, churches, and libraries are more sensitive to noise than commercial and industrial land uses. The nearest residential use to the project site is the William Snyder residence located 0.15 miles west of the project site. The nearest school to the project site is the Andrew N. Christensen Middle School approximately 2.8 miles south of the site. The primary source of noise on site is generated by waste trucks and vehicles along North Vasco Road.

Vibration refers to groundborne noise and perceptible motion. Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can include perceptible noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB).

The background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. The range of interest for purposes of this evaluation is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Most perceptible indoor vibration is caused by sources in buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

*Regulatory Setting*

Noise regulations and ordinances typically establish allowable noise levels for different land uses and define exempt noise activities. The ACMC Section 6.60.040 contains exterior noise standards for sensitive receptors and commercial uses, as shown in Table 3 and Table 4.

**Table 3 Alameda County Exterior Sound Level Limits for Sensitive Receptors**

<b>Category</b>	<b>Cumulative Number of Minutes in any One Hour Time Period</b>	<b>Daytime 7:00 a.m. to 10:00 p.m.</b>	<b>Nighttime 10:00 p.m. to 7:00 a.m.</b>
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: ACMC Section 6.60.040A

**Table 4 Alameda County Exterior Sound Level Limits for Commercial Uses**

Category	Cumulative Number of Minutes in any One Hour Time Period	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
1	30	65	60
2	15	70	65
3	5	75	70
4	1	80	75
5	0	85	80

Source: ACOM Section 6.60.040B

*Project Site Noise Environment*

Three 15-minute noise measurements were taken at and in the vicinity of the VRL using an ANSI Type II sound level meter on November 11, 2021, as shown in Table 5. Figure 12 shows the locations of each noise measurement: measurement #1 was taken 75 feet from the VRL entrance and 100 feet from operations; measurement #2 was taken 50 feet from the centerline of North Vasco Road; and measurement #3 was taken approximately 100 feet from the centerline of North Vasco Road. The primary source of noise in the project area was traffic on North Vasco Road and operational noise of the VRL. As shown in Table 5, the measured  $L_{eq}$  levels ranged from 47.3 dBA at the landfill entrance to 67.6 dBA on Vasco Road. Notably, the noise level adjacent to active landfill operations was lower than the traffic noise on Vasco Road.

**Table 5 Project Site Noise Measurement Information**

Number	Location	Primary Noise Source	Time	Result ( $L_{eq}$ ) (dBA)
1	75 feet from landfill entrance, 100 feet from operations	Operational noise from landfill	11:38 a.m. to 11:53 a.m.	56.8
2	50 feet from centerline of North Vasco Road	Traffic on North Vasco Road	12:23 p.m. to 12:38 p.m.	67.6
3	100 feet from centerline of North Vasco Road	Traffic on North Vasco Road	12:48 p.m. to 1:03 p.m.	47.3

Source: Rincon 2021. See Appendix B for noise measurement results.

Figure 12 Noise Measurement Locations



## Impact Analysis

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

The proposed project would not generate new vehicle trips. Consequently, no additional noise or vibration from construction or roadway traffic would occur. No new sources of operational noise would be introduced by the project. Since receiving land uses and distance to receiving land uses would not change under the project, noise levels from the project would not exceed noise levels from existing conditions. The increased elevation of some fill locations could create new or expanded lines of sight to neighboring receptors; however, due to the distance from the receptors to where the landfill operations would occur, increases in noise levels would not be perceptible. In addition, Mitigation Measure 67 from the 2003 VRL CUP IS-MND would continue to apply in accordance with the proposed CUP revisions to ensure that truck drivers refrain from engine revving or jake braking<sup>5</sup> before 8:00 a.m. Therefore, the proposed project would not result in noise levels that would exceed the ACMC noise standards listed in Table 3 or in excessive groundborne vibration, and impacts would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

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

The project is not located within 2 miles of an airport or within the vicinity of an airport land use plan. The nearest airport is the Livermore Municipal Airport, approximately 5 miles southwest of the project site. Therefore, no impact related to airport noise would occur.

### NO IMPACT

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<sup>5</sup> Jake braking is a type of compression release brake that helps truck drivers slow down their trucks without wearing out the service brakes. However, Jake braking produces an excessive sound, so using them is prohibited in some areas (Matheson, Inc 2021).



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# 14 Population and Housing

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

## Impact Analysis

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

The proposed project would not involve construction of new residences or other population-generating uses, such as substantial employment growth. Therefore, the proposed project would not result in direct or indirect population growth and there would be no impact.

### NO IMPACT

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

The proposed refuse volume increase would occur within the existing landfill site, where active waste management operations occur. There are no residences or other habitable structures located on the site. Therefore, the proposed project would not displace people or housing. There would be no impact.

### NO IMPACT

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# 15 Public Services

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

## Setting

Fire protection services are provided by the Alameda County Fire Department (ACFD). The ACFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the project area. The VRL is serviced by Fire Station 20, located approximately 6.4 miles south of the project site (ACFD 2021a). ACFD has a target response time of 5 minutes or less for 90 percent of all emergency incidents (ACFD 2021b).

Police protection services are provided by the Alameda County Sheriff's Office (ACSO). The ACSO currently has over 1,500 authorized positions and an excess of 1,000 sworn personnel (ACSO 2021).

The Alameda County Office of Education (ACOE) is responsible for monitoring 18 school districts within Alameda, and the Alameda County Library provides services through 10 branches of libraries. The closest branch to the project site is the Dublin Branch at 200 Civic Plaza, located approximately 14.7 miles southwest of the site.

## Impact Analysis

- a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The proposed refuse volume increase would not result in operational changes or new development that would require additional services by the AFCD or ACSO. Therefore, the proposed project would not require the construction of new facilities or the alteration of existing fire and police protection facilities. There would be no impacts.

### NO IMPACT

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

As discussed under Section 14, *Population and Housing*, the project does not include residential development or substantial employment growth and would not directly or indirectly induce population growth in Alameda County. The project would not generate substantial numbers of new students, park users, or people who utilize public facilities such as libraries. Therefore, the proposed project would not adversely affect schools, parks, or libraries. There would be no impacts.

### NO IMPACT

# 16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Impact Analysis

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

The nearest park to the project site is the 8.2-acre Christensen Park, approximately 3 miles to the south. The proposed project does not include residential or other uses that would directly or indirectly induce population growth and thus increase the use of parks or other recreational facilities in Alameda County. Therefore, the project would not increase the use of parks or other recreational facilities such that substantial physical deterioration would occur. There would be no impact.

**NO IMPACT**

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

The proposed project would increase refuse volume within the existing landfill. The project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. There would be no impact.

**NO IMPACT**

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# 17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would proposed:

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Setting

I-580 provides regional access to the project site via highway entrances at North Vasco Road. North Vasco Road is a north-south, two-lane rural highway that serves eastern Alameda County and Contra Costa County and connects the Cities of Livermore and Brentwood. The project site can be accessed via an opening in North Vasco Road which connects to an internal landfill roadway leading to the disposal area. Traffic flow to the VRL is maintained and enforced in order to minimize interference into, on, and out of the site. Private vehicles, refuse trucks, and commercial waste disposal trucks make up most of the traffic flow.

The SWFP allows up to a maximum of 625 inbound and outbound vehicles per day. As shown in Table 6, average daily truck trips have ranged from approximately 189 to 235 roundtrips per day over the past 7 years between 2015 and 2021. Peak traffic occurs between 11:00 a.m. and 2:00 p.m. with volumes of approximately 30 to 50 vehicles per hour.

**Table 6 Average Truck Trips**

Year	2015	2016	2017	2018	2019	2020	2021
Annual Truck Trips	58,315	67,099	72,491	68,825	67,376	61,551	62,709
Average Daily Truck Trips	189	218	235	224	219	200	204

Source: Republic Services Vasco Road, LLC



## Impact Analysis

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The project would not include new land uses, structures, or habitable buildings that would generate new vehicle trips. The project would also not result in changes to the permitted maximum daily tonnage, which would remain at 2,518 tons per day; permitted traffic volume, which would remain at 625 vehicles per day; or hours of operation, which would remain at 6:00 a.m. to 5:00 p.m. from Monday through Friday and 6:00 a.m. to 4:30 p.m. on Saturdays. As shown in Table 6, average daily truck trips have generally remained level over the past 7 years. Though averages vary from 189 at the lowest level (2015) and 235 at the highest in (2017). Given the history of operations to date, tonnage receipts and traffic counts would be expected to remain stable and no substantial increase in traffic counts is expected. Further, given recent state legislation to reduce materials diverted to landfills (see Section 8, *Greenhouse Gas Emissions*), trips to and from the landfill would likely decrease over time. Therefore, intersections and roadways would continue to operate at existing levels of service, and the project would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

The project would not change traffic volumes, types of vehicles accessing the site, or road geometries or intersection configurations, and thus would not result in hazardous features for vehicle or pedestrians. As discussed in Section 15, *Population and Housing*, the proposed refuse volume increase would not induce or generate population growth. Therefore, the project would not alter existing transportation facilities. Impacts would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

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

Section 15064.3 of the 2019 CEQA Guidelines established new methodology for determining the significance of transportation impacts using vehicle miles traveled (VMT) as the metric for analyzing transportation impacts. The proposed project would not alter the permitted daily acceptance rate or daily traffic volume or result in new land uses or operations at the landfill. The landfill would continue to serve the same service area (meaning that vehicles would not be traveling further distances) and as discussed above under questions (a) and (c), tonnage receipts and traffic counts are expected to remain stable or decrease over time. Therefore, there would not be a substantial increase in VMT. This impact would be less than significant.

### POTENTIALLY SIGNIFICANT IMPACT

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

The proposed project does not propose features that would result in a change of access to and from the site. Therefore, there would be no impact to emergency access.

### NO IMPACT

# 18 Tribal Cultural Resources

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

## Setting

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted, expanding CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency must establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

Tribal cultural resources (TCR) are defined under PRC §21074(a)(1) as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either 1) included or determined to be eligible for inclusion in the CRHR, or 2) included in a local register of historical resources. TCRs are those determined to be significant by the lead agency at its discretion and supported by substantial evidence. In making a determination that something is a

TCR, the lead agency is required to consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

## **Impact Analysis**

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

As discussed under Section 5, *Cultural Resources*, the proposed project site does not contain known prehistoric or historic resources. The County of Alameda mailed a notification letter on January 11, 2022 to one local Native American tribe that has requested notification under AB 52, the Ohlone Indian Tribe. Under AB 52, tribes have 30 days from receipt of the letter to respond and request consultation. The tribe did not respond during that window and request formal consultation under AB 52. The project would not involve ground disturbance below the current level of disturbance, or disturbance outside of the existing disturbance footprint. Instead, the project would increase the height of the refuse areas to increase the capacity of the landfill. Therefore, the project would not impact potential buried tribal cultural resources. Since no cultural or tribal cultural resources have been identified on-site, and no ground-disturbing activities, new construction, or alteration of existing structures or ground surface would occur, impacts to TCR would be less than significant.

## **LESS THAN SIGNIFICANT IMPACT**

# 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Impact Analysis

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

The VRL contains a drainage control system, also known as the SWMS, and an erosion control system to collect stormwater and minimize erosion. A network of drainage channels, culverts, and down drains conveys surface water from the landfill into two sedimentation ponds, which eventually runs to Vasco Creek. The VRL drainage system is required to comply with the Alameda

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County Flood Control and Water Conservation District's Hydrology and Hydraulics Criteria Summary – Western Alameda County, which provides design requirements for flood control facilities. In addition, the drainage system is required to comply with stormwater requirements of the Industrial General Permit and NPDES permit and has an adopted SWPPP which provides BMPs to prevent discharges of pollutants in stormwater.

The proposed project would increase refuse volume and height of the landfill but would not result in changes or alterations to the existing stormwater collection system, the system's capacity, or the overall function of the system. The proposed project would not involve activities that would alter the existing drainage pattern onsite. Therefore, the project would not substantially increase stormwater runoff from the proposed project site such that new or expanded stormwater drainage facilities would be required. Impacts would be less than significant.

Since the proposed project does not involve an increase in operations with respect to the daily amount of volume of waste processed or number of truck trips visiting the site, existing electric power, natural gas, and telecommunication facilities would continue to serve the project site without the need for expansion or additional construction.

Water and wastewater services and facilities are discussed below under questions (b) and (c). Overall, impacts to utility facilities would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Water is provided to the project site by the City of Livermore's water utility, Livermore Municipal Water. Water supply is received by the Alameda County Flood Control and Water Conservation District, also known as Zone 7 Water Agency, which treats and sells drinking water to Livermore Municipal Water. The treated water is then dispersed into Livermore Municipal Water's five pump stations, and then to above-ground tanks through a system of 162 miles of pipes (City of Livermore 2021). Roughly 20 percent of Zone 7's water supply is available from water from the Livermore Valley Groundwater Basin (Zone 7 Water Agency 2021). The proposed refuse volume increase would not change existing operations or water demand and would not result in the need for additional water facilities. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Wastewater and leachate from the landfill are transported to the City of Tracy Wastewater Treatment Plant for treatment and disposal, which has an average dry weather flow (ADWF) of 10.8 million gallons per day (MGD) and is expected to undergo expansion to increase capacity to 12 MGD (City of Tracy 2019). The City of Tracy has issued a Wastewater Discharge Permit for the VRL effective September 1, 2019, which ensures leachate compliance with the City's effluent limits before disposal at the plant. The City has planned adequate capacity in wastewater treatment services to accommodate for new development and existing demand, and the system currently operates with sufficient capacity to meet average dry and wet weather flows (City of Tracy 2019). The project would not result in new development or land uses that would increase or change

wastewater demand. Therefore, the proposed project would not exceed the Tracy Wastewater Treatment Plant capacity or result in the need for additional wastewater facilities. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The proposed project would increase refuse volume and height and extend the permitted closure year of an existing permitted solid waste facility. The project would not involve changes to the existing landfill service area or the currently approved daily acceptance rate. Therefore, the proposed project would not result in an increase in the total waste stream such that it would impair the attainment of solid waste reduction goals.

As mentioned in the *Project Description*, the WMA requires compliance with Goals 1, 2 and 3 in the Alameda County ColWMP in order to approve the SWFP for the landfill. Additionally, the ColWMP also identifies siting criteria (“General Solid Waste Facility Siting Criteria”) that must be met by solid waste facilities that require a full SWFP from CalRecycle for a conformance determination. The proposed project would be required to comply with the General Solid Waste Facility Siting Criteria as well as Goals 1, 2, and 3 of the ColWMP (WMA 2020). Table 7 shows the project’s consistency with Goals 1, 2 and 3 within the ColWMP. As shown, the project would be consistent with the applicable objectives in Goals 1, 2, and 3 in the ColWMP.

As with the existing landfill operations, future activity under the project would be required to continue to adhere to federal, State, and local statutes and regulations regarding solid waste disposal and the project is designed to be consistent with and to implement solid waste regulations. The changes associated with the project would require revisions to the landfill’s current Solid Waste Facility Permit issued by the LEA with concurrence from CalRecycle. With approval of Permit revisions, the proposed project would be consistent with State regulations that govern the solid waste transfer facility. Impacts would be less than significant.

**Table 7 Consistency with ColWMP Goals**

Goals and Objectives	Consistency
<b>Goal 1: Disposal Capacity.</b> Maintain adequate disposal capacity and minimize landfill impacts.	
<b>Objective 1.1</b> Alameda County jurisdictions have a minimum of 15 years of disposal capacity available.	<b>Consistent:</b> The project would extend landfill closure year by 29 years from 2022 to 2051.
<b>Objective 1.2</b> Negative environmental impacts of landfills are mitigated.	<b>Consistent:</b> This IS-ND provides thorough analyses of potential environmental impacts and describes all necessary measures and requirements to avoid or reduce impacts to a less than significant level.
<b>Objective 1.3</b> Landfills become obsolete as a means of managing materials, replaced by circular material flows that minimize the use of non-renewable resources that have traditionally been landfilled, elimination of landfill waste through redesign of products and systems, and effective recovery of materials.	<b>Consistent:</b> The VRL provides waste diversion and materials recycling programs to the public for construction material and debris, metal, organics, paper, and plastics. This supports a closed loop material cycle and helps eliminate landfill waste.

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Goals and Objectives	Consistency
<p><b>Objective 1.4</b> When setting goals and targets for programs, use a systems perspective, selecting metrics to ensure effective program implementation and use of funds, while also advancing systemic changes which are difficult to measure.</p>	<p>This objective is not applicable to the proposed project.</p>
<p><b>Goal 2: Responsible Infrastructure.</b> Maximize environmental benefits by balancing high volume of recovery with related considerations such as quality of commodities, operating impacts of facilities, and other environmental impacts of programs.</p>	
<p><b>Objective 2.1</b> Member agencies have efficient, adequate, and environmentally-sound infrastructure for managing reuse activities and recyclables, organics, and other discards.</p>	<p><b>Consistent:</b> The VRL assists Alameda County and surrounding communities in meeting California State legislative mandate and goals for recycling and waste diversion by providing programs for organics, construction and demolition debris, shredder wastes, shredded tires, and household recyclables.</p>
<p><b>Objective 2.2</b> Direct and indirect environmental impacts of infrastructure, facilities, and related transportation are kept to a minimum.</p>	<p><b>Consistent:</b> This IS-ND provides thorough analyses of potential environmental impacts and describes all necessary measures and requirements to avoid or reduce impacts to a less-than-significant level.</p>
<p><b>Objective 2.3</b> Member agencies and processing facilities have reliable markets for commodities produced, including new markets or other beneficial uses.</p>	<p>This objective is not applicable to the proposed project.</p>
<p><b>Objective 2.4</b> Materials processed at facilities have minimal contamination, both from the source and post processing, and end products are suitable for their intended use.</p>	<p><b>Consistent:</b> The VRL has staff to oversee recycling and reuse operations, and trained landfill personnel would remove suspected hazardous waste and place them into proper containers in the hazardous materials storage unit located at the C&amp;D waste area. In order to prevent contamination, VRL employees would also look for metals in disposed waste. Materials recovery operations would take place away from the active working face of the landfill where material is compacted.</p>
<p><b>Objective 2.5</b> Facilities are managed and periodically upgraded, and/or new facilities developed, to maximize both the recovery of materials and the value of end products.</p>	<p><b>Consistent:</b> The VRL provides upgrades to DUs to ensure containment of wastes and prevent contamination. Future DUs would be constructed on a planned timeline in order to accommodate for a larger amount of refuse. The project would extend the landfill operation year by 29 years, which would ensure the prolonged operation of the facility and associated recycling programs materials recovery programs.</p>
<p><b>Goal 3: Materials Management.</b> Shift from managing discards to reducing consumption, managing materials at their highest and best use, and addressing environmental impacts across the full life cycle of materials and products.</p>	
<p><b>Objective 3.1</b> The materials management system is regenerative, constantly evolving to eliminate waste and to benefit human health and the environment.</p>	<p>This objective is not applicable to the proposed project.</p>
<p><b>Objective 3.2</b> Understanding of climate impacts informs and influences WMA programs.</p>	<p>This objective is not applicable to the proposed project.</p>
<p>Source: WMA 2020</p>	

**LESS THAN SIGNIFICANT IMPACT**

## 20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Impact Analysis

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*



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

According to CalFire, the project site is located in a moderate fire hazard severity zone. The project site is not located within a high or very high fire hazard severity zone (VHFHSZ) in a State Responsibility Area (SRA) (CalFire 2007). The nearest VHFHSZ is west of Pleasanton approximately 15 miles southwest of the project site. The project would not involve the development of new structures or land uses that generate new population or create an impediment to emergency response. Therefore, the project would not substantially impair an adopted emergency response plan or evacuation plan; expose people to pollutants or risks from wildfires; or require the installation or maintenance of associated infrastructure that may exacerbate fire risk. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact Analysis**

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

The project would not involve new ground-disturbing activities or new construction. Based on the information and analysis provided in this initial study, implementation of the project would not 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, reduce the number or restrict the range of rare or

**Vasco Road Landfill Refuse Volume Increase Project**

endangered plants or animals, or eliminate important examples of California history or prehistory. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Implementation of the project would result in less-than-significant environmental impacts. The impacts associated with the project would be localized at the project site and would not combine with other projects to cause cumulatively considerable environmental impacts. Given the limited impacts anticipated with project implementation, the project would not result in a considerable contribution to cumulative impacts. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Effects to human beings are generally associated with air quality, noise, traffic safety, and hazards. As discussed in this IS-ND, implementation of the project would result in less-than-significant environmental impacts with respect to all studied impact areas. The project would not cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# Appendix A

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Mitigation Measures from 2003 VRL Conditional Use Permit IS-MND



**XIX. MITIGATION MEASURES –**

The following mitigation measures have been identified in this document to reduce potentially significant impacts to less-than-significant levels.

**Air Quality:**

**Mitigation Measure 1:** The operator shall control fugitive dust in accordance with Bay Area Air Quality Management District (BAAQMD) regulations as they may apply to landfill operations. Treated wastewater (leachate and condensate) shall be used for control of dust resulting from the project to the extent possible. Earth-moving activities shall be accompanied by regular spraying with clean or reclaimed wastewater to control dust. The operator shall pave refuse access haul roads outside of active operation areas, or provide substantial dust suppression techniques as appropriate. Engineering controls shall be implemented by the operator, if needed, to control dust emissions. Such controls might include wind screens near the unloading areas, the use of dust suppressants, and screens or covers at the ADC mixing plant.

**Mitigation Measure 2:** The operator shall develop and implement a construction and operations dust mitigation plan/program, in conjunction with the BAAQMD, that would achieve a minimum average dust control efficiency of about 75 percent. The dust reduction efficiencies of the following measures range from 34 percent to 85 percent, according to the South Coast Air Quality Management District. In combination, a total dust control efficiency of at least 75 percent should be feasible. Components of this plan shall include:

- Minimize cell preparation activity to the extent feasible;
- Water the construction site on a regular basis, depending on wind conditions, dryness of soil, and intensity of activity;
- Restrict vehicles and equipment to compacted and watered surfaces to the extent possible;
- Use a chemical palliative (such as Dust Ban or Dustrol) or dust suppressant, if necessary, to reduce fugitive dust emissions from vehicle travel surfaces. Some chemical stabilizers can contain a considerable fraction of hydrocarbons, and shall be selected judiciously. The choice of chemical palliative may be recommended by the

BAAQMD, and shall be addressed through issuance of a Authority to Construct/Permit to Operate;

- Increase the frequency of watering on dry windy days; and
- Limit vehicle speeds on unpaved roads to 15 mph.

**Mitigation Measure 3:** The operator shall keep all operating equipment well tuned and regularly serviced to minimize exhaust emissions, and shall continue to implement the established regular and frequent check-up and service/maintenance program for all operating equipment at the landfill. The project operator shall continue to maintain construction equipment and associated pollution control equipment in an operational and fully tuned manner, consistent with the maintenance program.

**Mitigation Measure 4:** The operator shall obtain an Authority to Construct/Permit to Operate from the BAAQMD before any gas-to-energy (GTE) recovery project is implemented, and operation of the GTE facility shall comply with the terms of that permit.

**Mitigation Measure 5:** Current handling and odor control procedures shall be continued to ensure that odors are kept to a minimum.

**Mitigation Measure 6:** The operator shall control odors per CCR Title 14, Division 7, Chapter 3.1, Sections 17867 and 17863.4 and CCR Title 27, Section 20760. The operator shall continue to conduct a monitoring program as required by the BAAQMD Permit to ensure that there are no major odor leaks to the atmosphere.

**Mitigation Measure 7:** The operator shall bury excessively odorous wastes immediately with other landfill wastes, depending on their nature and source. The operator shall ensure that loading, unloading, and material handling activities are carried out efficiently and without delays to avoid excessive odors.

Biological Resources:

**Mitigation Measure 8:** VRL shall replace impacted California red-legged frog aquatic habitat by creating 4.45 acres of aquatic habitat on the mitigation site. Approximately 4.2 acres of the newly created wetlands would constitute new California red-legged frog breeding habitat, which would be a replacement ratio in excess of 2:1. (The new aquatic habitat would also mitigate effects on wetlands; see Mitigation Measure 12.)

VRL shall maintain and monitor the new mitigation ponds for a period of five years following completion of construction. Monitoring shall include hydrologic measurements in each pond over the course of the year and periodic monitoring of plants and animals that colonize the ponds. Annual monitoring reports detailing the results of biological monitoring shall be prepared by a qualified biologist and submitted to USFWS, CDFG, COE, and RWQCB. After the initial five-year period is over, and following confirmation by USFWS and CDFG that the ponds are functioning as designed, responsibility for reduced biological monitoring and maintenance shall shift to the East Bay Regional Park District (EBRPD), the owner of the property.

The operator shall not prohibit reasonable inspections by agents of either the CDFG or USFWS.

Implementation of this measure requires a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (COE), which has already been issued. An incidental take permit for impacts to the California red-legged frog, required for live capture and relocation of frogs to an offsite location, was previously issued by USFWS as a result of Section 7 (of the federal Endangered Species Act) consultation with the COE. In addition, a Clean Water Act Section 401 Water Quality Certification permit was issued by the San Francisco Bay Regional Water Quality Control Board as a prerequisite to the Section 404 permit. A California Fish and Game Code Section 1603 Streambed Alteration Agreement from CDFG is also required for implementation of this mitigation measure; this permit has also already been issued.

**Mitigation Measure 9:** To be consistent with the California Department of Fish and Game policy of preserving extant California tiger salamander habitat at a 1:1 ratio, VRL shall preserve approximately 200 acres of California tiger salamander habitat on the Bosley property. (This property has already been acquired by VRL but the permanent Habitat Conservation Easement that will ensure its preservation must still be approved by CDFG.)

After appropriate mitigation habitat is established, operator may remove the existing ponds as construction occurs in the Area X footprint after the California tiger salamander or other species have been resettled. This shall not apply to active sedimentation ponds or water retention ponds from which sediments need to be extracted on a periodic basis; except to the extent that sediment removal shall be conducted only during the months of June through September, after storm water runoff collected during the previous rainy season has evaporated or infiltrated sufficiently to allow surface cracking in collected sediments.

The operator shall not prohibit reasonable inspections by agents of either the CDFG or USFWS.

**Mitigation Measure 10:** The VRL shall preserve 290 acres of kit fox habitat on the Bosley property to make up for the loss of 88 acres of habitat in the currently permitted portion of the VRL. The 290-acre Bosley conservation easement contains approximately 285 acres of kit fox habitat. (This property has already been acquired by VRL but the permanent Habitat Conservation Easement that will ensure its preservation must still be approved by CDFG.)

**Mitigation Measure 11:** The Bosley property areas where stinkbells are known to occur shall be protected by orange construction fencing during construction.

The one area where heartscale individuals are most common shall be protected by construction fencing.

To reduce the impacts to brittlescale, seed from the affected populations shall be collected and stored. Following pond construction, soil around the base of the berm shall be compacted. Just before the start of the winter rainy seasons, the stored brittlescale seed shall be seeded into the compacted soil around the berm.

Wetlands and other features along farm roads that would be regraded to provide access to the mitigation pond site shall be avoided to the extent possible, and shall otherwise be protected from inadvertent intrusion by installation of orange construction fencing during the construction project. Under no circumstance shall saturated ground be adversely affected by the use of this access road. Similarly, all wetlands located adjacent to construction sites shall be protected from encroachment and other project related disturbance.

The operator shall not prohibit reasonable inspections by agents of either the CDFG or USFWS.

**Mitigation Measure 12:** VRL shall construct approximately 4.45 acres of new open water ponds and wetlands on the mitigation site (as discussed in Mitigation Measure 8, above), of which 0.35 acres shall mitigate impacts to waters of the United States at a replacement ratio of 1.1. (Mitigation for loss of red-legged frog habitat and affected wetlands can be concomitant; thus, 0.35 acres of the net new habitat would serve as both red-legged frog habitat and replacement for lost wetlands.)

VRL shall maintain and monitor the new mitigation ponds for a period of five years following completion of construction.

Monitoring shall include hydrologic measurements in each pond over the course of the year and periodic monitoring of plants and animals that colonize the ponds. Annual monitoring reports detailing the results of biological monitoring shall be prepared by a qualified biologist and submitted to USFWS, CDFG, COE, and RWQCB. After the initial five-year period is over, and following confirmation by USFWS and CDFG that the ponds are functioning as designed, responsibility for reduced biological monitoring and maintenance shall shift to the East Bay Regional Park District (EBRPD), the owner of the property.

VRL shall fence approximately 15,000 feet of stream zones in the 290-acre conservation easement area, as dictated by USFWS and CDFG, to facilitate protection of riparian/wetland areas from concentrated grazing pressure. VRL shall monitor grazing activity inside and outside the fenced riparian zones for a period of five years, and shall submit annual monitoring reports to USFWS and CDFG.

The operator shall not prohibit reasonable inspections by agents of either the CDFG or USFWS.

#### Cultural Resources:

**Mitigation Measure 13:** If any cultural artifacts are encountered during site grading or other construction activities, all ground disturbance shall be halted until the services of a qualified archaeologist can be retained to identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The applicant shall fund and implement the mitigation in accordance with Section 15064.5(c)–(f) of the CEQA Guidelines and Public Resources Code Section 21083.2.

**Mitigation Measure 14:** In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner must be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

#### Geology and Soils:

**Mitigation Measure 15:** The operator shall design and construct the landfill in accordance with all federal and State requirements relative to seismic safety, especially Subtitle D requirements and amendments thereto. Final

designs shall be reviewed by the Regional Water Quality Control Board in accordance with current Waste Discharge Requirements and the EA. RWQCB and LEA approvals shall signify that the proposed design meets all of the applicable seismic safety requirements. To protect on-site personnel, ensure the integrity of the landfill, and minimize any disruption to landfill operations in the event of an earthquake, the operator shall implement or follow procedures in the Earthquake Response Plan (part of the site's Emergency Response Plan currently in effect) to include post-earthquake inspection to evaluate any damage that may have occurred, ensure the integrity of the landfill containment systems, and make the landfill operational as soon as possible.

**Mitigation Measure 16:** New waste disposal operations shall be prohibited in the setback area required by 40 CFR, Part 258, as well as CCR Title 27 regulations, where the Greenville Fault trace passes through the site area.

**Mitigation Measure 17:** The operator shall design and construct the landfill in accordance with Title 14 and Title 27 requirements for final cover design, final surface grades, and continuing monitoring and maintenance to reduce potential impacts due to settlement. In addition, as required by Subtitle D and Title 27, the operator shall ensure that the leachate head does not exceed 12 inches. The design and subsequent modifications shall be reviewed by the Regional Water Quality Control Board as required by current Waste Discharge Requirements and the EA (as part of any application for a revised Solid Waste Facilities Permit). RWQCB and EA approvals shall signify that the proposed design meets all of the applicable requirements.

**Mitigation Measure 18:** The operator shall conduct slope stability analyses as required by the RWQCB or CIWMB in accordance with Title 27 of the CCR and stability shall be verified for each landfill cell and excavation. The purpose of the analyses shall be to determine potential hazards for hidden instability conditions, cut slopes, refuse slopes, and final cover. Measures shall be implemented to reduce specific identified slope instability hazards. These measures might include reducing the slope angle, keying slopes, buttressing unstable areas and excavation sequencing from higher-lying to lower-lying parts of unstable slopes. Similar verification shall occur for temporary refuse fill slopes for future fill sequences prior to construction of each cell. All slope stability investigations shall be conducted by a certified engineering geologist and/or registered geotechnical engineer. All final grading plans and slope stability analyses shall be submitted to the County Grading Inspector prior to the start of new liner construction for that cell.

- Mitigation Measure 19:** The proposed final topography design shall be described in the Report of Disposal Site Information, and shall be consistent with CCR Title 27 requirements. The EA's approval of the SWFP application will signify that the proposed topography meets all of the applicable Title 14 requirements.
- Mitigation Measure 20:** The operator established three permanent survey monuments on and in the immediate vicinity of the landfill in the 1991 to monitor long-term landfill settlement or lateral displacement, in accordance with Title 27 requirements. The monuments shall be periodically surveyed during the post-closure maintenance period. If the monitoring of settlement and displacement detects that more than anticipated amounts of movement of the monuments has occurred, an engineer or engineering geologist shall be retained to make specific recommendations for correcting the stability problem. A record of the monument survey results shall be filed with the EA.
- Mitigation Measure 21:** All offsite slope instabilities that could reasonably affect the landfill and perimeter drainage system shall be identified by an engineering geologist and corrected at the time that filling is carried out in that part of the VRL landfill area. At the time of the final closure plan, no significant slope instabilities shall remain onsite or adjacent to the site that could result in damage to the landfill or the perimeter drainage system. The operator's engineering geologist shall submit documented proof of compliance with this requirement to the EA and RWQCB.

Hazards and Hazardous Materials:

- Mitigation Measure 22:** The landfill operator shall comply with health and safety standards of Title 27 and the Injury and Illness Prevention Program (SB 198).
- Mitigation Measure 23:** The landfill operator shall adopt and fully apply any health and safety requirements for handling sludge and other designated wastes. Although WDRs specified by the RWQCB are not designed specifically to protect worker health and safety, compliance with WDRs would ensure that these wastes are handled properly and, in doing so, contribute to good waste handling practice among project workers. The VRL shall comply with the Health & Safety Plan's requirements for handling and management of designated wastes.
- Mitigation Measure 24:** For those designated wastes that do not have handling procedures fully described, the landfill operator shall develop and adopt handling provisions that are in compliance with WDRs issued by the RWQCB.

- Mitigation Measure 25:** The operator shall implement engineering controls as necessary to control dust emissions. Such controls might include wind screens near the unloading areas and the use of dust suppressants.
- Mitigation Measure 26:** The operator shall continue to implement a site Employee Exposure Monitoring Program that is designed to obtain and evaluate levels of exposure to various potentially toxic substances in the waste stream. The data obtained shall be compared to the regulatory exposure thresholds for the tested contaminants to monitor for acceptable levels.
- Mitigation Measure 27:** The landfill's Health and Safety Program shall continue to incorporate Respiratory Protection procedures, an Employee Exposure Monitoring Program, and a Training Program, as well as procedures for implementation, record keeping, audits, and accident investigations.
- Mitigation Measure 28:** Workers shall not eat near the active landfill area. Food and beverages shall only be consumed away from active landfill areas, or inside an enclosure such as an office building or mobile trailer.
- Mitigation Measure 29:** The landfill shall continue to be designed and constructed as a lined landfill in compliance with California (i.e., Title 27) and federal (i.e., Subtitle D) requirements. The landfill liner would prevent hazardous constituents in designated waste or in improperly disposed hazardous wastes from migrating out of the landfill. Landfill design and construction plans would be approved by the RWQCB. All designated wastes or similar wastes shall be disposed of only in the lined portions of the landfill.
- Mitigation Measure 30:** The VRL operator shall continue to implement its Load Screening Program, approved by the EA as part of the Report of Disposal Site Information and Solid Waste Facilities Permit, and by the RWQCB pursuant to the WDRs. The Program shall include, at a minimum, training of personnel to recognize regulated hazardous wastes, random inspection of incoming waste loads, inspection of all suspicious loads, procedures for handling unauthorized hazardous wastes, procedures to notify the proper authorities if hazardous wastes are discovered, and provisions for documentation of inspections and record keeping.
- Mitigation Measure 31:** The landfill operator shall apply provisions specified in the Health and Safety Plan for handling designated wastes. These provisions shall be in compliance with the RWQCB Waste Discharge Requirements. The Health and Safety Plan and revisions/amendments thereto are on file at EA offices.



- Mitigation Measure 32:** For those designated wastes (such as drilling muds and ash) for which handling procedures are not fully described in the Health and Safety Plan and revisions/amendments thereto, the landfill operator shall develop and adopt handling provisions that are in compliance with RWQCB Waste Discharge Requirements. Special care shall be taken to ensure that incompatible wastes are not mixed. The supplementary handling procedures shall be incorporated into the Health and Safety Plan.
- Mitigation Measure 33:** Designated wastes shall be accepted only from pre-approved generators, as required by the current waste acceptance guidelines. To be pre-approved, a generator would submit information that may include analytical data to the VRL demonstrating that its waste stream is non-hazardous prior to sending any waste to the landfill. Copies of the analytical data shall be forwarded to the EA, if requested. Wastes and ambiguous analytical data (indicating that it could be hazardous) shall not be accepted by the applicant for disposal at the landfill until the waste is proven to be non-hazardous by supplemental testing. This measure would allow the landfill to employ inexpensive screening tests that could flag wastes that are potentially hazardous without rejecting them outright, while allowing definitely nonhazardous wastes to pass. Waste proven to be hazardous either by the screening tests or by supplemental tests shall be taken elsewhere.
- Mitigation Measure 34:** The results of all characterization and monitoring activities shall be reported regularly to the RWQCB, as required by the current WDRs.
- Mitigation Measure 35:** Dust control procedures specified in the Health and Safety Plan and revisions/amendments shall be applied to handling of dry designated wastes received at the landfill.
- Mitigation Measure 36:** In an emergency, the landfill operator shall apply the existing Emergency Response Plan. Topics in the Plan include, at a minimum: spills, releases, emissions, natural disasters such as earthquakes, and medical emergencies. The Plan specifies policies and procedures for emergency communications, organization, and employee training regarding emergency response.
- Mitigation Measure 37:** The landfill operator shall comply with provisions of the CCR, Title 27, Section 20590, which requires that operating and maintenance personnel wear and use approved safety equipment for personal health and safety, as determined necessary by the EA, and Section 20615, which stipulates that site operation and maintenance personnel must be adequately trained in subjects pertinent to safety, health, environmental controls, and emergency procedures.

- Mitigation Measure 38:** Provisions of the current VRL Health and Safety Program shall continue to be applied to site operations.
- Mitigation Measure 39:** Landfill access shall continue to be controlled to discourage unauthorized entry by persons or vehicles.
- Mitigation Measure 40:** The landfill operator shall comply with all provisions of the CCR, Title 27, Division 2, Chapter 3, Subchapter 4, Article 1, “Disposal Site Operations” that apply to landfill health and safety.
- Mitigation Measure 41:** The landfill operator shall implement provisions for site access and traffic control if required by the Health and Safety Plan.
- Mitigation Measure 42:** The Landfill Gas Collection System for the landfill shall continue to comply with the permit issued by the BAAQMD. Compliance with the permit conditions and Regulation 8, Rule 34, along with implementation of Mitigation Measures 43 through 48, would reduce the explosion risk to a less-than-significant impact.
- Mitigation Measure 43:** Hazards associated with gas accumulation in on-site buildings shall be prevented by regular monitoring of building air and proper ventilation within buildings.
- Mitigation Measure 44:** The landfill operator shall install and maintain an automatic methane gas detection and alarm system for structures at the site.
- Mitigation Measure 45:** The landfill operator shall continue to implement the Fire Control Plan for the VRL, as approved by the Alameda County Fire Department. The Fire Control Plan manual specifies policies and procedures for emergency communications and employee training regarding emergency response to problems or malfunctions of the landfill gas management system.
- Mitigation Measure 46:** The landfill operator shall verify the absence of landfill gas buildup prior to any construction activity in all areas known to have the potential for gas accumulation and/or within 1,000 feet of the landfill footprint, and shall incorporate gas monitoring measures in the design of any structures that would be constructed in such areas.
- Mitigation Measure 47:** All site personnel working in structures shall be trained in the purpose of the landfill gas monitoring system and the proper response to an alarm.
- Mitigation Measure 48:** Consistent with Section 21160 of the CCR Title 27, landfill gas monitoring and control systems at the VRL shall be modified during the postclosure maintenance period to reflect changing land uses adjacent to the site.

- Mitigation Measure 49:** The project sponsor shall implement Mitigation Measures 1 and 2.
- Mitigation Measure 50:** The site operations shall include application of water for dust control whenever blowing dust is visible. In addition, the site operator shall water all unpaved access roads three times daily, or more frequently if warranted by dust conditions, or shall apply non-toxic soil stabilizers to the road surfaces. Leachate and underdrain water meeting regulatory requirements for dust control could also be used in lieu of water for dust control purposes.
- Mitigation Measure 51:** Designated wastes to be disposed of shall be mixed with (and covered by) MSW as part of the co-disposal process.
- Mitigation Measure 52:** The landfill operator shall continue to implement the procedures for control of vectors and birds set forth in the RDSI and approved by the EA, the Alameda County Department of Environmental Health. These procedures include maintaining a small cell size, constantly compacting the refuse fill, not allowing fresh refuse to remain exposed for more than 24 hours, promptly covering the refuse with soil or an approved ADC material, and using noise deterring procedures (e.g., propane guns). These and any other appropriate procedures, as determined by the EA, shall be set forth in a Vector Control Plan, to be approved by the EA.
- Mitigation Measure 53:** The EA shall periodically monitor the landfill for the presence of vectors. EA inspections would be documented in the administrative file.
- Mitigation Measure 54:** The area near the active face where sludge is mixed with MSW for co-disposal shall continue to be graded in such a way that any liquid run-off would be contained and would not flow away from the landfill.
- Mitigation Measure 55:** The formation of standing pools of water/liquid mixtures shall be minimized by quickly covering high moisture content wastes with MSW or dry designated wastes.
- Mitigation Measure 56:** The landfill operator shall implement the fire control procedures for the landfill, as described in the VRL Emergency Response Plan and approved by the Alameda County Fire Department. The Plan specifies policies and procedures for emergency communications, organization, and employee training regarding emergency response to landfill fires.

**Mitigation Measure 57:** The landfill operator shall maintain a low-flammability buffer zone or fire break around the perimeter of the active working area to isolate the landfill from the surrounding grasslands.

**Mitigation Measure 58:** The landfill operator shall continue to dispose of the landfill gas condensate in an appropriate manner: either within Subtitle D disposal cells or at an approved disposal facility, depending on the level of dissolved contaminants in the condensate.

Hydrology and Water Quality:

**Mitigation Measure 59:** Future waste disposal units shall be designed and constructed in accordance with the Subtitle D design requirements for landfills. The required landfill liner would reduce the likelihood of hazardous constituents in designated waste, or improperly disposed household or commercial hazardous wastes in the MSW, migrating out of the landfill.

**Mitigation Measure 60:** The operator shall continue to comply with the current Waste Discharge Requirements established by the Regional Water Quality Control Board for Vasco Road Landfill, as well as any future revisions to the WDRs. These requirements include, among other things, operation of leachate monitoring leak detection facilities. The operator shall submit a copy of the annual report prepared for the Regional Water Quality Control Board to the Planning Director so that he/she can verify compliance with the WDRs.

**Mitigation Measure 61:** In the event that springs or heavy seeps are encountered during site excavation for the landfill, additional subgrade drainage measures shall be taken to ensure that there is no seepage into the landfill and that groundwater/waste separation is maintained. Such measures may include additional geotextile drains, the extension of gravel chimney drains up the slope from the gravel drain on the floor of the landfill, and hydroaugers. Other measures also may be recommended by the project engineering geologist in response to local hydrogeological conditions.

**Mitigation Measure 62:** The operator shall continue to maintain and monitor the 11 groundwater monitoring stations located around the perimeter of the landfill, including wells MW-13, MW-36, and MW-37, which were placed to detect the potential movement of groundwater contaminants from the landfill site toward the Los Vaqueros Project reservoir. Semi-annual monitoring reports shall be submitted to the Regional Water Quality Control Board in accordance with the VRL Waste Discharge Requirements.

**Mitigation Measure 63:** The project sponsor shall implement Mitigation Measures 65 and 66, below, which are designed to control drainage and erosion.

**Mitigation Measure 64:** Ongoing landfill design and construction shall be employed to control drainage and erosion in accordance with the facility WDRs, including surface water run-on and run-off controls. Revisions to drainage and erosion plans shall be subject to review by the Planning Director with review by the Director of Public Works. The operator may proceed with proposed construction within ten calendar days of the Planning Director's receipt of written submittal unless otherwise notified by the Planning Director. The plans shall incorporate the following measures:

- i) The landfill shall be constructed, to the extent possible, against existing ridges such that all rainfall on areas adjacent to the footprint shall drain away from the landfill.
- ii) Detention basins shall be incorporated into the project design in places where peak discharges would increase substantially.
- iii) Drainage facilities for cells receiving designated wastes shall be constructed to accommodate the 1,000 year, 24-hour storm, or current design storm as required by state or federal law.

**Mitigation Measure 65:** The operator shall design the final grading and drainage of the Area X Landfill to minimize cover erosion. Design features shall include, where appropriate, deck area slopes to promote sheet drainage, a series of drainage benches, inlets, and down drains, debris/retention basins, and outlet structures.

Land Use:

**Mitigation Measure 66:** The project sponsor shall secure approval from the Alameda County Planning Commission to rezone the site to PD (Planned Development), which would allow recycling on top of normally permitted and conditionally permitted Agriculture zone activities. Alternatively, approval of a zoning ordinance amendment to allow recycling in the Agriculture zone would reduce this impact to a less-than-significant level.

Noise:

**Mitigation Measure 67:** All project equipment powered by internal combustion engines shall be properly muffled. In addition, the operator shall install signs at the landfill scale house requesting truck drivers to refrain from revving their engines or using the Jake brake prior to 8:00 a.m. on landfill property or on Vasco Road in the vicinity of the landfill.

Landfill personnel observing violators shall remind the driver at check-in of this requirement and request future compliance.

# Appendix B



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Noise Measurement Data Sheets

# Noise Measurement Locations

Vasco Road Landfill

**Legend**

-  NM
-  Project Location

NM 3

N Vasco Rd

N Vasco Rd

NM 1

NM 2





# Ambient Noise Survey Data Sheet

**Instructions:** Document noise measurement locations with a photo of the site, including the noise meter. Additionally, take notes on general and secondary noise sources, including the instantaneous noise level if possible. As a reminder, A/C weighting should be set to "A", and response time should typically be set to "slow." For additional information, please review the *Noise Measurement Protocols* in the case or on Jive.

**Project Name:** Vasco Road Landfill      **Job Number:** \_\_\_\_\_  
**Date:** November 11, 2021      **Operator Name:** Leslie Trejo

## Measurement #1

**Location:** Noise Measurement 1      **Begin time:** 11:38 AM      **Finish time:** 11:53676 AM  
**Measurement No.:** recording 1      **Wind (mph):** 7 mph      **Direction:** NNE  
**Cloud Cover Class:** Overcast (>80%)      Light (20-80%)      Sunny (<20%)  
**Calibration (dB):** Start:94.0      End: 93.9  
**Primary Noise Sources:** Operational Noise of Landfill      **Distance:** 75 feet from landfill entrance, 100 feet from operations  
**Secondary Noise Sources:** Cannons to deter birds periodically  
**Notes:** \_\_\_\_\_

**Traffic Count:** Passenger Cars: \_\_\_\_\_  
 Medium Trucks (2 axles, 6 tires): \_\_\_\_\_ Heavy Trucks (3+ axles): \_\_\_\_\_  
**Instantaneous Noise Sources/Levels** (e.g., airplane, bus airbrake, etc.): \_\_\_\_\_  
**L<sub>eq</sub>:** 56.8      **SEL:** 86.3      **L<sub>max</sub>:** 74.9      **L<sub>min</sub>:** 38.3      **PK:** 92.6  
**L(05):** 60.3      **L(10):** 56.2      **L(50):** 47.8      **L(90):** 42.3      **L(95):** 40.9  
**Response:** Slow      Fast      Peak      Impulse

## Measurement #2

**Location:** Residence on S. Vasco Road      **Begin time:** 12:23 PM      **Finish time:** 12:38 PM  
**Measurement No.:** Recording 2      **Wind (mph):** 7mph      **Direction:** NNE  
**Cloud Cover Class:** Overcast (>80%)      Light (20-80%)      Sunny (<20%)  
**Calibration (dB):** Start:93.9      End: 93.9  
**Primary Noise Sources:** Traffic on Vasco Road      **Distance:** 50 feet from centerline  
**Secondary Noise Sources:** \_\_\_\_\_  
**Notes:** \_\_\_\_\_

**Traffic Count:** Passenger Cars: \_\_\_\_\_  
 Medium Trucks (2 axles, 6 tires): \_\_\_\_\_ Heavy Trucks (3+ axles): \_\_\_\_\_  
**Instantaneous Noise Sources/Levels** (e.g., airplane, bus airbrake, etc.): \_\_\_\_\_  
**L<sub>eq</sub>:** 67.6      **SEL:** 97.1      **L<sub>max</sub>:** 78.5      **L<sub>min</sub>:** 35.2      **PK:** 100.2  
**L(05):** 72.0      **L(10):** 70.7      **L(50):** 65.7      **L(90):** 51.4      **L(95):** 47.6  
**Response:** Slow      Fast      Peak      Impulse

# Ambient Noise Survey Data Sheet

**Instructions:** Document noise measurement locations with a photo of the site, including the noise meter. Additionally, take notes on general and secondary noise sources, including the instantaneous noise level if possible. As a reminder, A/C weighting should be set to "A", and response time should typically be set to "slow." For additional information, please review the *Noise Measurement Protocols* in the case or on Jive.

**Project Name:** Vasco Road landfill      **Job Number:** \_\_\_\_\_  
**Date:** November 11 2021      **Operator Name:** Leslie Trejo

## Measurement #1

**Location:** Noise Measurement 3      **Begin time:** 12:48pm      **Finish time:** 1:03pm  
**Measurement No.:** recording 3      **Wind (mph):** 7mph      **Direction:** nne  
**Cloud Cover Class:** Overcast (>80%)      Light (20-80%)      Sunny (<20%)  
**Calibration (dB):** Start:93.9      End: 93.9  
**Primary Noise Sources:** traffic on Vasco road      **Distance:** approx. 100 feet  
**Secondary Noise Sources:** \_\_\_\_\_  
**Notes:** \_\_\_\_\_

**Traffic Count:** Passenger Cars: \_\_\_\_\_  
 Medium Trucks (2 axles, 6 tires): \_\_\_\_\_ Heavy Trucks (3+ axles): \_\_\_\_\_

**Instantaneous Noise Sources/Levels** (e.g., airplane, bus airbrake, etc.): \_\_\_\_\_

**Leq:** 47.3      **SEL:** 76.8      **L<sub>max</sub>:** 57.7      **L<sub>min</sub>:** 33.5      **PK:** 82.1  
**L(05):** 51.5      **L(10):** 50.4      **L(50):** 45.3      **L(90):** 39.8      **L(95):** 37.3  
**Response:** Slow      Fast      Peak      Impulse

## Measurement #2

**Location:** \_\_\_\_\_      **Begin time:** \_\_\_\_\_      **Finish time:** \_\_\_\_\_  
**Measurement No.:** \_\_\_\_\_      **Wind (mph):** \_\_\_\_\_      **Direction:** \_\_\_\_\_  
**Cloud Cover Class:** Overcast (>80%)      Light (20-80%)      Sunny (<20%)  
**Calibration (dB):** Start: \_\_\_\_\_ End: \_\_\_\_\_  
**Primary Noise Sources:** \_\_\_\_\_      **Distance:** \_\_\_\_\_  
**Secondary Noise Sources:** \_\_\_\_\_  
**Notes:** \_\_\_\_\_

**Traffic Count:** Passenger Cars: \_\_\_\_\_  
 Medium Trucks (2 axles, 6 tires): \_\_\_\_\_ Heavy Trucks (3+ axles): \_\_\_\_\_

**Instantaneous Noise Sources/Levels** (e.g., airplane, bus airbrake, etc.): \_\_\_\_\_

**Leq:** \_\_\_\_\_      **SEL:** \_\_\_\_\_      **L<sub>max</sub>:** \_\_\_\_\_      **L<sub>min</sub>:** \_\_\_\_\_      **PK:** \_\_\_\_\_  
**L(05):** \_\_\_\_\_      **L(10):** \_\_\_\_\_      **L(50):** \_\_\_\_\_      **L(90):** \_\_\_\_\_      **L(95):** \_\_\_\_\_  
**Response:** Slow      Fast      Peak      Impulse

Freq Weight : A  
Time Weight : SLOW  
Level Range : 40-100  
Max dB : 74.9 - 2021/11/11 11:44:37  
Level Range : 40-100  
SEL : 86.3  
Leq : 56.8

No. s	Date Time	(dB)
1	2021/11/11 11:37:14	55.1
2	2021/11/11 11:37:17	54.6
3	2021/11/11 11:37:20	52.5
4	2021/11/11 11:37:23	51.1
5	2021/11/11 11:37:26	50.5
6	2021/11/11 11:37:29	49.9
7	2021/11/11 11:37:32	48.6
8	2021/11/11 11:37:35	49.0
9	2021/11/11 11:37:38	48.0
10	2021/11/11 11:37:41	47.3
11	2021/11/11 11:37:44	50.0
12	2021/11/11 11:37:47	50.5
13	2021/11/11 11:37:50	53.6
14	2021/11/11 11:37:53	58.4
15	2021/11/11 11:37:56	71.1
16	2021/11/11 11:37:59	70.1
17	2021/11/11 11:38:02	62.8
18	2021/11/11 11:38:05	54.8
19	2021/11/11 11:38:08	51.8
20	2021/11/11 11:38:11	51.4
21	2021/11/11 11:38:14	56.2
22	2021/11/11 11:38:17	53.4
23	2021/11/11 11:38:20	51.4
24	2021/11/11 11:38:23	51.9
25	2021/11/11 11:38:26	54.5
26	2021/11/11 11:38:29	53.4
27	2021/11/11 11:38:32	53.0
28	2021/11/11 11:38:35	54.7
29	2021/11/11 11:38:38	59.8
30	2021/11/11 11:38:41	61.5
31	2021/11/11 11:38:44	60.3
32	2021/11/11 11:38:47	64.7
33	2021/11/11 11:38:50	60.5
34	2021/11/11 11:38:53	59.9
35	2021/11/11 11:38:56	56.7
36	2021/11/11 11:38:59	53.0
37	2021/11/11 11:39:02	50.9
38	2021/11/11 11:39:05	51.1
39	2021/11/11 11:39:08	49.3
40	2021/11/11 11:39:11	50.1
41	2021/11/11 11:39:14	49.4
42	2021/11/11 11:39:17	49.3
43	2021/11/11 11:39:20	51.4
44	2021/11/11 11:39:23	50.1
45	2021/11/11 11:39:26	52.9
46	2021/11/11 11:39:29	52.4
47	2021/11/11 11:39:32	53.6
48	2021/11/11 11:39:35	56.2
49	2021/11/11 11:39:38	50.3
50	2021/11/11 11:39:41	49.0
51	2021/11/11 11:39:44	49.9
52	2021/11/11 11:39:47	48.0
53	2021/11/11 11:39:50	47.3
54	2021/11/11 11:39:53	46.4
55	2021/11/11 11:39:56	46.0
56	2021/11/11 11:39:59	47.8
57	2021/11/11 11:40:02	47.9
58	2021/11/11 11:40:05	47.1
59	2021/11/11 11:40:08	46.9
60	2021/11/11 11:40:11	49.8
61	2021/11/11 11:40:14	49.3
62	2021/11/11 11:40:17	53.5
63	2021/11/11 11:40:20	50.0
64	2021/11/11 11:40:23	53.4
65	2021/11/11 11:40:26	55.6
66	2021/11/11 11:40:29	58.4
67	2021/11/11 11:40:32	53.6
68	2021/11/11 11:40:35	52.7
69	2021/11/11 11:40:38	51.8
70	2021/11/11 11:40:41	49.1
71	2021/11/11 11:40:44	46.8
72	2021/11/11 11:40:47	47.5
73	2021/11/11 11:40:50	46.6
74	2021/11/11 11:40:53	46.1
75	2021/11/11 11:40:56	47.1
76	2021/11/11 11:40:59	47.1
77	2021/11/11 11:41:02	46.3
78	2021/11/11 11:41:05	48.3
79	2021/11/11 11:41:08	47.0
80	2021/11/11 11:41:11	50.0
81	2021/11/11 11:41:14	44.9
82	2021/11/11 11:41:17	45.5
83	2021/11/11 11:41:20	47.5
84	2021/11/11 11:41:23	49.6

85	2021/11/11	11:41:26	49.3
86	2021/11/11	11:41:29	54.9
87	2021/11/11	11:41:32	64.4
88	2021/11/11	11:41:35	72.4
89	2021/11/11	11:41:38	64.4
90	2021/11/11	11:41:41	57.1
91	2021/11/11	11:41:44	55.3
92	2021/11/11	11:41:47	52.2
93	2021/11/11	11:41:50	53.1
94	2021/11/11	11:41:53	51.0
95	2021/11/11	11:41:56	49.5
96	2021/11/11	11:41:59	48.0
97	2021/11/11	11:42:02	49.5
98	2021/11/11	11:42:05	49.5
99	2021/11/11	11:42:08	50.1
100	2021/11/11	11:42:11	52.0
101	2021/11/11	11:42:14	46.6
102	2021/11/11	11:42:17	46.3
103	2021/11/11	11:42:20	46.4
104	2021/11/11	11:42:23	49.2
105	2021/11/11	11:42:26	48.1
106	2021/11/11	11:42:29	49.8
107	2021/11/11	11:42:32	52.1
108	2021/11/11	11:42:35	48.6
109	2021/11/11	11:42:38	48.1
110	2021/11/11	11:42:41	47.1
111	2021/11/11	11:42:44	49.8
112	2021/11/11	11:42:47	49.1
113	2021/11/11	11:42:50	47.7
114	2021/11/11	11:42:53	46.3
115	2021/11/11	11:42:56	46.4
116	2021/11/11	11:42:59	46.9
117	2021/11/11	11:43:02	48.0
118	2021/11/11	11:43:05	45.4
119	2021/11/11	11:43:08	44.6
120	2021/11/11	11:43:11	44.0
121	2021/11/11	11:43:14	52.6
122	2021/11/11	11:43:17	45.6
123	2021/11/11	11:43:20	45.0
124	2021/11/11	11:43:23	45.9
125	2021/11/11	11:43:26	45.1
126	2021/11/11	11:43:29	45.1
127	2021/11/11	11:43:32	44.6
128	2021/11/11	11:43:35	45.6
129	2021/11/11	11:43:38	44.3
130	2021/11/11	11:43:41	44.9
131	2021/11/11	11:43:44	45.7
132	2021/11/11	11:43:47	45.5
133	2021/11/11	11:43:50	46.7
134	2021/11/11	11:43:53	46.5
135	2021/11/11	11:43:56	52.3
136	2021/11/11	11:43:59	49.6
137	2021/11/11	11:44:02	50.1
138	2021/11/11	11:44:05	47.1
139	2021/11/11	11:44:08	46.4
140	2021/11/11	11:44:11	50.5
141	2021/11/11	11:44:14	53.0
142	2021/11/11	11:44:17	50.7
143	2021/11/11	11:44:20	49.1
144	2021/11/11	11:44:23	49.8
145	2021/11/11	11:44:26	54.5
146	2021/11/11	11:44:29	57.4
147	2021/11/11	11:44:32	69.3
148	2021/11/11	11:44:35	74.8
149	2021/11/11	11:44:38	70.1
150	2021/11/11	11:44:41	70.5
151	2021/11/11	11:44:44	63.1
152	2021/11/11	11:44:47	55.3
153	2021/11/11	11:44:50	49.9
154	2021/11/11	11:44:53	50.4
155	2021/11/11	11:44:56	51.5
156	2021/11/11	11:44:59	47.9
157	2021/11/11	11:45:02	48.6
158	2021/11/11	11:45:05	48.2
159	2021/11/11	11:45:08	45.0
160	2021/11/11	11:45:11	45.1
161	2021/11/11	11:45:14	44.9
162	2021/11/11	11:45:17	43.2
163	2021/11/11	11:45:20	43.0
164	2021/11/11	11:45:23	42.5
165	2021/11/11	11:45:26	43.0
166	2021/11/11	11:45:29	44.4
167	2021/11/11	11:45:32	44.1
168	2021/11/11	11:45:35	53.4
169	2021/11/11	11:45:38	45.6
170	2021/11/11	11:45:41	49.3
171	2021/11/11	11:45:44	43.5
172	2021/11/11	11:45:47	48.8
173	2021/11/11	11:45:50	46.2
174	2021/11/11	11:45:53	48.6
175	2021/11/11	11:45:56	44.7
176	2021/11/11	11:45:59	45.3
177	2021/11/11	11:46:02	45.2
178	2021/11/11	11:46:05	46.6
179	2021/11/11	11:46:08	47.9
180	2021/11/11	11:46:11	47.4
181	2021/11/11	11:46:14	47.5
182	2021/11/11	11:46:17	46.1

183	2021/11/11	11:46:20	49.7
184	2021/11/11	11:46:23	50.9
185	2021/11/11	11:46:26	48.4
186	2021/11/11	11:46:29	45.7
187	2021/11/11	11:46:32	43.1
188	2021/11/11	11:46:35	41.8
189	2021/11/11	11:46:38	41.0
190	2021/11/11	11:46:41	46.9
191	2021/11/11	11:46:44	42.0
192	2021/11/11	11:46:47	41.2
193	2021/11/11	11:46:50	42.9
194	2021/11/11	11:46:53	41.9
195	2021/11/11	11:46:56	42.6
196	2021/11/11	11:46:59	44.5
197	2021/11/11	11:47:02	44.9
198	2021/11/11	11:47:05	42.9
199	2021/11/11	11:47:08	43.3
200	2021/11/11	11:47:11	42.9
201	2021/11/11	11:47:14	44.1
202	2021/11/11	11:47:17	44.8
203	2021/11/11	11:47:20	43.4
204	2021/11/11	11:47:23	42.2
205	2021/11/11	11:47:26	41.5
206	2021/11/11	11:47:29	40.6
207	2021/11/11	11:47:32	50.8
208	2021/11/11	11:47:35	43.8
209	2021/11/11	11:47:38	42.7
210	2021/11/11	11:47:41	43.2
211	2021/11/11	11:47:44	43.8
212	2021/11/11	11:47:47	45.8
213	2021/11/11	11:47:50	49.1
214	2021/11/11	11:47:53	53.9
215	2021/11/11	11:47:56	59.0
216	2021/11/11	11:47:59	62.8
217	2021/11/11	11:48:02	60.3
218	2021/11/11	11:48:05	55.3
219	2021/11/11	11:48:08	49.7
220	2021/11/11	11:48:11	49.9
221	2021/11/11	11:48:14	50.0
222	2021/11/11	11:48:17	49.5
223	2021/11/11	11:48:20	49.1
224	2021/11/11	11:48:23	51.6
225	2021/11/11	11:48:26	57.2
226	2021/11/11	11:48:29	59.2
227	2021/11/11	11:48:32	59.2
228	2021/11/11	11:48:35	67.5
229	2021/11/11	11:48:38	61.8
230	2021/11/11	11:48:41	52.5
231	2021/11/11	11:48:44	45.4
232	2021/11/11	11:48:47	42.7
233	2021/11/11	11:48:50	42.5
234	2021/11/11	11:48:53	40.7
235	2021/11/11	11:48:56	39.9
236	2021/11/11	11:48:59	41.9
237	2021/11/11	11:49:02	41.1
238	2021/11/11	11:49:05	45.1
239	2021/11/11	11:49:08	41.4
240	2021/11/11	11:49:11	42.9
241	2021/11/11	11:49:14	41.0
242	2021/11/11	11:49:17	40.0
243	2021/11/11	11:49:20	41.4
244	2021/11/11	11:49:23	39.6
245	2021/11/11	11:49:26	40.3
246	2021/11/11	11:49:29	46.4
247	2021/11/11	11:49:32	49.2
248	2021/11/11	11:49:35	44.2
249	2021/11/11	11:49:38	46.7
250	2021/11/11	11:49:41	49.2
251	2021/11/11	11:49:44	49.7
252	2021/11/11	11:49:47	47.6
253	2021/11/11	11:49:50	46.4
254	2021/11/11	11:49:53	46.3
255	2021/11/11	11:49:56	46.2
256	2021/11/11	11:49:59	47.0
257	2021/11/11	11:50:02	47.3
258	2021/11/11	11:50:05	47.2
259	2021/11/11	11:50:08	47.9
260	2021/11/11	11:50:11	46.2
261	2021/11/11	11:50:14	48.0
262	2021/11/11	11:50:17	45.8
263	2021/11/11	11:50:20	43.2
264	2021/11/11	11:50:23	43.4
265	2021/11/11	11:50:26	42.0
266	2021/11/11	11:50:29	42.8
267	2021/11/11	11:50:32	43.0
268	2021/11/11	11:50:35	43.0
269	2021/11/11	11:50:38	45.0
270	2021/11/11	11:50:41	46.1
271	2021/11/11	11:50:44	42.9
272	2021/11/11	11:50:47	42.8
273	2021/11/11	11:50:50	43.9
274	2021/11/11	11:50:53	44.3
275	2021/11/11	11:50:56	42.9
276	2021/11/11	11:50:59	53.1
277	2021/11/11	11:51:02	46.2
278	2021/11/11	11:51:05	50.4
279	2021/11/11	11:51:08	46.5
280	2021/11/11	11:51:11	48.3

281	2021/11/11	11:51:14	44.4
282	2021/11/11	11:51:17	45.5
283	2021/11/11	11:51:20	44.6
284	2021/11/11	11:51:23	47.4
285	2021/11/11	11:51:26	50.8
286	2021/11/11	11:51:29	54.5
287	2021/11/11	11:51:32	52.5
288	2021/11/11	11:51:35	51.2
289	2021/11/11	11:51:38	55.0
290	2021/11/11	11:51:41	57.1
291	2021/11/11	11:51:44	49.7
292	2021/11/11	11:51:47	44.0
293	2021/11/11	11:51:50	40.4
294	2021/11/11	11:51:53	39.2
295	2021/11/11	11:51:56	39.6
296	2021/11/11	11:51:59	42.3
297	2021/11/11	11:52:02	38.9
298	2021/11/11	11:52:05	42.1
299	2021/11/11	11:52:08	40.4
300	2021/11/11	11:52:11	41.1

Freq Weight : A  
Time Weight : SLOW  
Level Range : 40-100  
Max dB : 78.5 - 2021/11/11 12:26:05  
Level Range : 40-100  
SEL : 97.1  
Leq : 67.6

No.s	Date Time	(dB)
1	2021/11/11 12:22:41	51.9
2	2021/11/11 12:22:44	65.0
3	2021/11/11 12:22:47	60.7
4	2021/11/11 12:22:50	61.3
5	2021/11/11 12:22:53	74.6
6	2021/11/11 12:22:56	71.1
7	2021/11/11 12:22:59	66.3
8	2021/11/11 12:23:02	68.7
9	2021/11/11 12:23:05	77.5
10	2021/11/11 12:23:08	77.1
11	2021/11/11 12:23:11	71.9
12	2021/11/11 12:23:14	67.5
13	2021/11/11 12:23:17	68.3
14	2021/11/11 12:23:20	65.9
15	2021/11/11 12:23:23	60.4
16	2021/11/11 12:23:26	74.4
17	2021/11/11 12:23:29	71.1
18	2021/11/11 12:23:32	65.9
19	2021/11/11 12:23:35	57.4
20	2021/11/11 12:23:38	65.5
21	2021/11/11 12:23:41	56.7
22	2021/11/11 12:23:44	50.0
23	2021/11/11 12:23:47	62.8
24	2021/11/11 12:23:50	68.1
25	2021/11/11 12:23:53	65.2
26	2021/11/11 12:23:56	56.3
27	2021/11/11 12:23:59	61.8
28	2021/11/11 12:24:02	65.6
29	2021/11/11 12:24:05	64.9
30	2021/11/11 12:24:08	70.7
31	2021/11/11 12:24:11	62.8
32	2021/11/11 12:24:14	52.6
33	2021/11/11 12:24:17	56.8
34	2021/11/11 12:24:20	65.2
35	2021/11/11 12:24:23	56.1
36	2021/11/11 12:24:26	49.4
37	2021/11/11 12:24:29	47.3
38	2021/11/11 12:24:32	61.2
39	2021/11/11 12:24:35	64.5
40	2021/11/11 12:24:38	55.6
41	2021/11/11 12:24:41	47.4
42	2021/11/11 12:24:44	41.5
43	2021/11/11 12:24:47	36.8
44	2021/11/11 12:24:50	36.2
45	2021/11/11 12:24:53	38.3
46	2021/11/11 12:24:56	58.2
47	2021/11/11 12:24:59	65.8
48	2021/11/11 12:25:02	56.4
49	2021/11/11 12:25:05	61.0
50	2021/11/11 12:25:08	71.4
51	2021/11/11 12:25:11	69.6
52	2021/11/11 12:25:14	67.1
53	2021/11/11 12:25:17	63.8
54	2021/11/11 12:25:20	67.0
55	2021/11/11 12:25:23	68.1
56	2021/11/11 12:25:26	65.0
57	2021/11/11 12:25:29	62.9
58	2021/11/11 12:25:32	56.5
59	2021/11/11 12:25:35	65.7
60	2021/11/11 12:25:38	61.9
61	2021/11/11 12:25:41	61.8
62	2021/11/11 12:25:44	64.6
63	2021/11/11 12:25:47	60.1
64	2021/11/11 12:25:50	57.8
65	2021/11/11 12:25:53	66.3
66	2021/11/11 12:25:56	58.2
67	2021/11/11 12:25:59	67.5
68	2021/11/11 12:26:02	77.2
69	2021/11/11 12:26:05	72.9
70	2021/11/11 12:26:08	69.9
71	2021/11/11 12:26:11	72.4
72	2021/11/11 12:26:14	68.0
73	2021/11/11 12:26:17	67.9
74	2021/11/11 12:26:20	68.7
75	2021/11/11 12:26:23	63.2
76	2021/11/11 12:26:26	55.5
77	2021/11/11 12:26:29	48.0
78	2021/11/11 12:26:32	45.3
79	2021/11/11 12:26:35	46.6
80	2021/11/11 12:26:38	49.0
81	2021/11/11 12:26:41	46.8
82	2021/11/11 12:26:44	50.9
83	2021/11/11 12:26:47	48.3
84	2021/11/11 12:26:50	51.2

85	2021/11/11	12:26:53	54.1
86	2021/11/11	12:26:56	60.6
87	2021/11/11	12:26:59	74.3
88	2021/11/11	12:27:02	73.2
89	2021/11/11	12:27:05	71.5
90	2021/11/11	12:27:08	69.2
91	2021/11/11	12:27:11	68.9
92	2021/11/11	12:27:14	62.0
93	2021/11/11	12:27:17	64.6
94	2021/11/11	12:27:20	66.3
95	2021/11/11	12:27:23	68.2
96	2021/11/11	12:27:26	68.5
97	2021/11/11	12:27:29	70.2
98	2021/11/11	12:27:32	67.7
99	2021/11/11	12:27:35	62.7
100	2021/11/11	12:27:38	69.6
101	2021/11/11	12:27:41	70.0
102	2021/11/11	12:27:44	66.5
103	2021/11/11	12:27:47	65.2
104	2021/11/11	12:27:50	58.5
105	2021/11/11	12:27:53	48.9
106	2021/11/11	12:27:56	43.3
107	2021/11/11	12:27:59	57.1
108	2021/11/11	12:28:02	64.9
109	2021/11/11	12:28:05	74.7
110	2021/11/11	12:28:08	69.0
111	2021/11/11	12:28:11	69.7
112	2021/11/11	12:28:14	68.4
113	2021/11/11	12:28:17	67.8
114	2021/11/11	12:28:20	68.9
115	2021/11/11	12:28:23	69.1
116	2021/11/11	12:28:26	65.8
117	2021/11/11	12:28:29	68.2
118	2021/11/11	12:28:32	65.7
119	2021/11/11	12:28:35	63.5
120	2021/11/11	12:28:38	68.7
121	2021/11/11	12:28:41	69.8
122	2021/11/11	12:28:44	74.3
123	2021/11/11	12:28:47	70.7
124	2021/11/11	12:28:50	71.9
125	2021/11/11	12:28:53	75.7
126	2021/11/11	12:28:56	71.1
127	2021/11/11	12:28:59	72.0
128	2021/11/11	12:29:02	70.5
129	2021/11/11	12:29:05	70.8
130	2021/11/11	12:29:08	67.9
131	2021/11/11	12:29:11	66.3
132	2021/11/11	12:29:14	57.2
133	2021/11/11	12:29:17	48.2
134	2021/11/11	12:29:20	49.3
135	2021/11/11	12:29:23	61.2
136	2021/11/11	12:29:26	70.1
137	2021/11/11	12:29:29	62.5
138	2021/11/11	12:29:32	54.9
139	2021/11/11	12:29:35	47.6
140	2021/11/11	12:29:38	52.2
141	2021/11/11	12:29:41	66.6
142	2021/11/11	12:29:44	67.6
143	2021/11/11	12:29:47	70.8
144	2021/11/11	12:29:50	70.1
145	2021/11/11	12:29:53	67.0
146	2021/11/11	12:29:56	61.7
147	2021/11/11	12:29:59	52.2
148	2021/11/11	12:30:02	43.3
149	2021/11/11	12:30:05	53.8
150	2021/11/11	12:30:08	66.5
151	2021/11/11	12:30:11	69.8
152	2021/11/11	12:30:14	70.9
153	2021/11/11	12:30:17	62.7
154	2021/11/11	12:30:20	58.6
155	2021/11/11	12:30:23	65.0
156	2021/11/11	12:30:26	56.2
157	2021/11/11	12:30:29	49.8
158	2021/11/11	12:30:32	59.3
159	2021/11/11	12:30:35	65.5
160	2021/11/11	12:30:38	57.8
161	2021/11/11	12:30:41	62.2
162	2021/11/11	12:30:44	65.7
163	2021/11/11	12:30:47	62.5
164	2021/11/11	12:30:50	66.0
165	2021/11/11	12:30:53	64.4
166	2021/11/11	12:30:56	68.2
167	2021/11/11	12:30:59	73.7
168	2021/11/11	12:31:02	67.4
169	2021/11/11	12:31:05	57.8
170	2021/11/11	12:31:08	49.8
171	2021/11/11	12:31:11	63.1
172	2021/11/11	12:31:14	68.8
173	2021/11/11	12:31:17	70.7
174	2021/11/11	12:31:20	67.4
175	2021/11/11	12:31:23	64.9
176	2021/11/11	12:31:26	70.2
177	2021/11/11	12:31:29	70.2
178	2021/11/11	12:31:32	61.1
179	2021/11/11	12:31:35	66.5
180	2021/11/11	12:31:38	66.8
181	2021/11/11	12:31:41	67.6
182	2021/11/11	12:31:44	65.7



183	2021/11/11	12:31:47	63.5
184	2021/11/11	12:31:50	68.9
185	2021/11/11	12:31:53	75.9
186	2021/11/11	12:31:56	70.1
187	2021/11/11	12:31:59	68.9
188	2021/11/11	12:32:02	68.3
189	2021/11/11	12:32:05	72.3
190	2021/11/11	12:32:08	69.1
191	2021/11/11	12:32:11	66.5
192	2021/11/11	12:32:14	61.9
193	2021/11/11	12:32:17	69.1
194	2021/11/11	12:32:20	73.6
195	2021/11/11	12:32:23	71.3
196	2021/11/11	12:32:26	69.7
197	2021/11/11	12:32:29	65.3
198	2021/11/11	12:32:32	65.7
199	2021/11/11	12:32:35	66.5
200	2021/11/11	12:32:38	62.2
201	2021/11/11	12:32:41	71.0
202	2021/11/11	12:32:44	68.4
203	2021/11/11	12:32:47	67.7
204	2021/11/11	12:32:50	64.1
205	2021/11/11	12:32:53	70.0
206	2021/11/11	12:32:56	68.7
207	2021/11/11	12:32:59	68.5
208	2021/11/11	12:33:02	65.6
209	2021/11/11	12:33:05	58.3
210	2021/11/11	12:33:08	51.8
211	2021/11/11	12:33:11	56.1
212	2021/11/11	12:33:14	66.6
213	2021/11/11	12:33:17	66.2
214	2021/11/11	12:33:20	60.6
215	2021/11/11	12:33:23	52.2
216	2021/11/11	12:33:26	48.8
217	2021/11/11	12:33:29	52.8
218	2021/11/11	12:33:32	63.8
219	2021/11/11	12:33:35	68.1
220	2021/11/11	12:33:38	69.1
221	2021/11/11	12:33:41	69.2
222	2021/11/11	12:33:44	69.7
223	2021/11/11	12:33:47	70.5
224	2021/11/11	12:33:50	69.4
225	2021/11/11	12:33:53	69.6
226	2021/11/11	12:33:56	67.2
227	2021/11/11	12:33:59	62.7
228	2021/11/11	12:34:02	63.8
229	2021/11/11	12:34:05	67.8
230	2021/11/11	12:34:08	66.7
231	2021/11/11	12:34:11	66.7
232	2021/11/11	12:34:14	58.8
233	2021/11/11	12:34:17	61.2
234	2021/11/11	12:34:20	64.4
235	2021/11/11	12:34:23	55.5
236	2021/11/11	12:34:26	52.5
237	2021/11/11	12:34:29	50.0
238	2021/11/11	12:34:32	53.7
239	2021/11/11	12:34:35	64.8
240	2021/11/11	12:34:38	65.7
241	2021/11/11	12:34:41	70.5
242	2021/11/11	12:34:44	68.8
243	2021/11/11	12:34:47	70.5
244	2021/11/11	12:34:50	71.0
245	2021/11/11	12:34:53	63.8
246	2021/11/11	12:34:56	67.8
247	2021/11/11	12:34:59	66.2
248	2021/11/11	12:35:02	67.0
249	2021/11/11	12:35:05	62.8
250	2021/11/11	12:35:08	65.2
251	2021/11/11	12:35:11	68.0
252	2021/11/11	12:35:14	68.1
253	2021/11/11	12:35:17	67.4
254	2021/11/11	12:35:20	64.5
255	2021/11/11	12:35:23	70.0
256	2021/11/11	12:35:26	69.5
257	2021/11/11	12:35:29	73.3
258	2021/11/11	12:35:32	69.5
259	2021/11/11	12:35:35	66.3
260	2021/11/11	12:35:38	70.0
261	2021/11/11	12:35:41	68.1
262	2021/11/11	12:35:44	60.5
263	2021/11/11	12:35:47	53.7
264	2021/11/11	12:35:50	61.0
265	2021/11/11	12:35:53	59.1
266	2021/11/11	12:35:56	51.0
267	2021/11/11	12:35:59	56.3
268	2021/11/11	12:36:02	60.7
269	2021/11/11	12:36:05	63.7
270	2021/11/11	12:36:08	66.1
271	2021/11/11	12:36:11	67.7
272	2021/11/11	12:36:14	67.5
273	2021/11/11	12:36:17	65.2
274	2021/11/11	12:36:20	66.9
275	2021/11/11	12:36:23	67.5
276	2021/11/11	12:36:26	63.3
277	2021/11/11	12:36:29	63.5
278	2021/11/11	12:36:32	67.8
279	2021/11/11	12:36:35	63.6
280	2021/11/11	12:36:38	64.8

281	2021/11/11	12:36:41	65.1
282	2021/11/11	12:36:44	62.5
283	2021/11/11	12:36:47	53.0
284	2021/11/11	12:36:50	49.6
285	2021/11/11	12:36:53	64.2
286	2021/11/11	12:36:56	64.1
287	2021/11/11	12:36:59	63.6
288	2021/11/11	12:37:02	75.9
289	2021/11/11	12:37:05	70.4
290	2021/11/11	12:37:08	66.8
291	2021/11/11	12:37:11	66.4
292	2021/11/11	12:37:14	65.2
293	2021/11/11	12:37:17	65.4
294	2021/11/11	12:37:20	65.7
295	2021/11/11	12:37:23	65.7
296	2021/11/11	12:37:26	70.5
297	2021/11/11	12:37:29	70.1
298	2021/11/11	12:37:32	69.0
299	2021/11/11	12:37:35	66.4
300	2021/11/11	12:37:38	65.4

Freq Weight : A  
Time Weight : SLOW  
Level Range : 40-100  
Max dB : 57.7 - 2021/11/11 13:01:55  
Level Range : 40-100  
SEL : 76.8  
Leq : 47.3

No.s	Date Time	(dB)
1	2021/11/11 12:47:48	50.3
2	2021/11/11 12:47:51	53.2
3	2021/11/11 12:47:54	50.5
4	2021/11/11 12:47:57	46.3
5	2021/11/11 12:48:00	43.1
6	2021/11/11 12:48:03	42.3
7	2021/11/11 12:48:06	41.5
8	2021/11/11 12:48:09	41.6
9	2021/11/11 12:48:12	41.5
10	2021/11/11 12:48:15	38.3
11	2021/11/11 12:48:18	37.2
12	2021/11/11 12:48:21	39.1
13	2021/11/11 12:48:24	37.1
14	2021/11/11 12:48:27	34.7
15	2021/11/11 12:48:30	34.7
16	2021/11/11 12:48:33	37.1
17	2021/11/11 12:48:36	36.9
18	2021/11/11 12:48:39	43.8
19	2021/11/11 12:48:42	45.7
20	2021/11/11 12:48:45	44.8
21	2021/11/11 12:48:48	48.0
22	2021/11/11 12:48:51	45.2
23	2021/11/11 12:48:54	38.9
24	2021/11/11 12:48:57	35.4
25	2021/11/11 12:49:00	34.0
26	2021/11/11 12:49:03	37.4
27	2021/11/11 12:49:06	39.6
28	2021/11/11 12:49:09	40.5
29	2021/11/11 12:49:12	41.0
30	2021/11/11 12:49:15	41.6
31	2021/11/11 12:49:18	46.7
32	2021/11/11 12:49:21	48.9
33	2021/11/11 12:49:24	50.1
34	2021/11/11 12:49:27	50.5
35	2021/11/11 12:49:30	50.0
36	2021/11/11 12:49:33	50.0
37	2021/11/11 12:49:36	48.6
38	2021/11/11 12:49:39	44.9
39	2021/11/11 12:49:42	45.2
40	2021/11/11 12:49:45	43.2
41	2021/11/11 12:49:48	41.9
42	2021/11/11 12:49:51	42.9
43	2021/11/11 12:49:54	48.4
44	2021/11/11 12:49:57	45.0
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46	2021/11/11 12:50:03	42.8
47	2021/11/11 12:50:06	49.4
48	2021/11/11 12:50:09	49.0
49	2021/11/11 12:50:12	46.3
50	2021/11/11 12:50:15	46.1
51	2021/11/11 12:50:18	51.1
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53	2021/11/11 12:50:24	44.4
54	2021/11/11 12:50:27	43.1
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56	2021/11/11 12:50:33	45.6
57	2021/11/11 12:50:36	45.9
58	2021/11/11 12:50:39	47.7
59	2021/11/11 12:50:42	41.9
60	2021/11/11 12:50:45	45.2
61	2021/11/11 12:50:48	43.0
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63	2021/11/11 12:50:54	44.3
64	2021/11/11 12:50:57	40.8
65	2021/11/11 12:51:00	43.3
66	2021/11/11 12:51:03	45.4
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68	2021/11/11 12:51:09	47.1
69	2021/11/11 12:51:12	43.5
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72	2021/11/11 12:51:21	50.2
73	2021/11/11 12:51:24	50.3
74	2021/11/11 12:51:27	46.0
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76	2021/11/11 12:51:33	49.6
77	2021/11/11 12:51:36	44.3
78	2021/11/11 12:51:39	47.0
79	2021/11/11 12:51:42	46.8
80	2021/11/11 12:51:45	45.0
81	2021/11/11 12:51:48	40.9
82	2021/11/11 12:51:51	42.2
83	2021/11/11 12:51:54	51.9
84	2021/11/11 12:51:57	48.5

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91	2021/11/11	12:52:18	43.6
92	2021/11/11	12:52:21	47.3
93	2021/11/11	12:52:24	47.0
94	2021/11/11	12:52:27	49.5
95	2021/11/11	12:52:30	55.1
96	2021/11/11	12:52:33	50.1
97	2021/11/11	12:52:36	51.4
98	2021/11/11	12:52:39	46.2
99	2021/11/11	12:52:42	46.0
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101	2021/11/11	12:52:48	41.5
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104	2021/11/11	12:52:57	47.3
105	2021/11/11	12:53:00	46.1
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111	2021/11/11	12:53:18	53.0
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115	2021/11/11	12:53:30	42.4
116	2021/11/11	12:53:33	45.1
117	2021/11/11	12:53:36	43.7
118	2021/11/11	12:53:39	40.7
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122	2021/11/11	12:53:51	38.5
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133	2021/11/11	12:54:24	43.8
134	2021/11/11	12:54:27	40.4
135	2021/11/11	12:54:30	44.6
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224	2021/11/11	12:58:57	51.4
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245	2021/11/11	13:00:00	41.3
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247	2021/11/11	13:00:06	44.1
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