Notice of Preparation

To: OPR and all Responsible and Trustee Agencies

(Address)

From: Alameda County - Planning Dept.

224 W. Winton, Room 111

Hayward, Ca 94544

Subject: Notice of Preparation of a Draft Environmental Impact Report

Alameda County impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (\Box is \blacksquare is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Alameda County shown above. We will need the name for a contact person in your agency.

Project Title: Jess Ranch Compost Facility Project

Project Applicant, if any: Jess Ranch Property Owners

Date

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ture Title 670-6684 Telephone

at the address

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT Jess Ranch Compost Facility Project

April 26, 2018

The County of Alameda (County) will be the Lead Agency and will prepare an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) for the Jess Ranch Compost Facility Project (Proposed Project). The County is soliciting public and agency input on the scope and content of the environmental information to be contained in the EIR. The overall types and levels of activities that the County could anticipate under the Proposed Project and the potential associated environmental impacts are described below.

Project Title: Jess Ranch Compost Facility Project

Project Applicant: Jess Ranch Property Owners

Project Location: The Proposed Project is located in the eastern portion of unincorporated Alameda County, at the eastern edge of the Bay Area. The Central Valley is immediately to the east. The Project site is located close to the organic waste generating communities of the Bay Area, as well as the potential agricultural soils amendment markets of the Central Valley. The nearest communities include the City of Livermore, approximately eight miles west of the Project site, and the City of Tracy, approximately eight miles east of the Project site.

The Proposed Project would be implemented at the Jess Ranch property located east of the Altamont Pass. The Project site comprises about 30 acres located within the southeastern portion of the 160-acre Jess Ranch property. The Project site is bounded on the north by I-580; to the east, south and west by agricultural lands; and to the southwest by the Union Pacific Railroad right-of-way. Figure 1 shows the regional location of the Project site.



Figure 1 Regional Location Map

Project Description: The Proposed Project facility would receive and process organic materials, primarily greenwaste, foodwaste, and biosolids, but would also receive untreated scrap wood,

natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash, and clean construction debris. Non-hazardous liquid wastes may also be accepted as a substitute for the water that is added for efficient composting. The Project would process organic material utilizing a covered windrow system that would be a combination of aerated static pile (ASP) with either positive or negative aeration, and covered windrow composting technology. Initially, the Project would realize a daily throughput of up to 500 tons per day (TPD), increasing up to a maximum of 1,000 TPD, producing compost-based soil amendments for agricultural, horticultural, erosion control and land reclamation uses. Alameda County is the approving agency for the Conditional Use Permit, which constitutes the Project action or Proposed Project under CEQA.

The Proposed Project could process up to 1,000 TPD of organic material utilizing a windrow system incorporating either negative air or positive air ASP technology. For the unimproved property, construction of the Project would necessitate grading, excavation and soil removal, deposition and compaction of fill material, reuse of excavated soil as fill, transporting and installing materials and equipment, disposal of soil and construction waste, and construction of retention ponds and project access roads. The active composting area would occupy approximately 15 acres, within which curing and screening zones would occupy approximately 8 acres and other operating areas (including access roads) would occupy approximately 7 acres. Active composting windrow piles would vary in height, up to a maximum of 12 feet. A drainage system incorporated into the windrow area would deliver storm runoff from the compost site to a stormwater detention pond. Construction would be completed in two phases: construction of the initial facility with a capacity of 500 TPD (Phase I) followed with expansion of the facility up to 1,000 TPD (Phase II). Figure 2 shows the overview of the proposed site plan.

Proposed Project Analysis: The County, as the lead agency, has the principal responsibility for approving and carrying out the project and ensuring that the requirements of CEQA have been met. The County has determined that an EIR will be prepared for the proposed project (CEQA Guidelines §15063[a]). The environmental checklist concluded the proposed project could have a potentially significant impact on the following resources, and they would be analyzed as part of the EIR: aesthetics, air quality and greenhouse gases, biological resources, cultural resources, geology and seismicity, hazards and human health, hydrology and water quality, land use and agriculture, noise, public services and utilities, and transportation and circulation. The County would certify completion of the EIR and, based on consideration of the analysis provided in the EIR, would determine whether to approve or disapprove the Proposed Project.

Pursuant to State CEQA Guidelines Section 15082(b), comments regarding the scope and environmental analysis must be submitted no later than 30-days after receipt of this notice. The public review period is from April 26, 2018 until May 26, 2018. Please send your written comments no later than May 26, 2018 to:

Damien Curry, Alameda County Planning 224 W. Winton Avenue, Rm 111 Hayward, CA 94544 Or via email to: damien.curry@acgov.org

Comments may also be provided at the public scoping meeting to be held on May 21, 2018 at 1:00 p.m. The meeting will be held at 224 W. Winton Ave, Room 160, Hayward, CA 94544. The public meeting will provide an opportunity to disseminate information and solicit comments on the scope and content of the EIR of the Proposed Project.

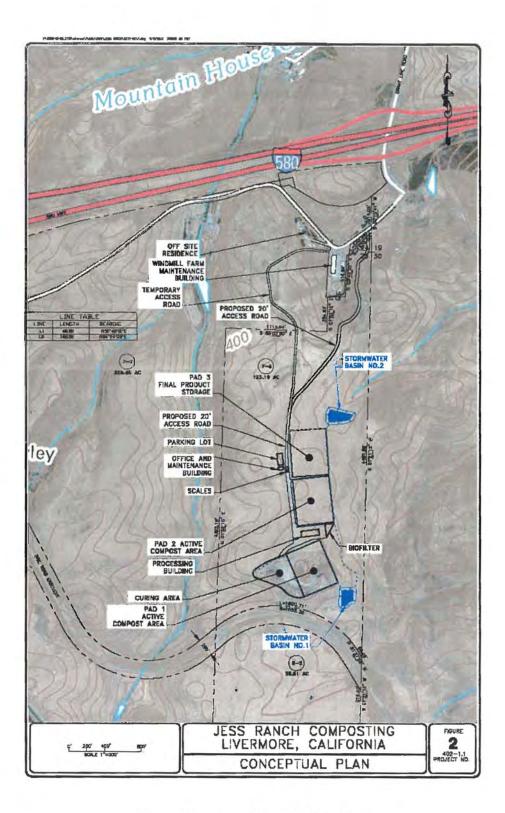


Figure 2 Proposed Site Plan Overview

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Appendix C

mana converyioneer	se, P.O. Box 3044, Sacramento, (Address: 1400 Tenth Street, Sacra			SCH #	
Project Title: Jess Ranch	Compost Facility			A company of the	
Lead Agency; County of Ala	ameda		Contact Person:	Damien Curry	
Mailing Address: 224 W. Wi	nton Ave, Rm 111		Phone: 510-67	0-6684	
City: Hayward, CA		Zip: 94544	County: Alameda		
Project Location: County:		City/Nearest Con	nmunity: City of L	ivermore and City of Tracy	
Cross Streets: W. Grant Line				Zip Code: 95377	
Longitude/Latitude (degrees, r		'44.9 "N/ 121	• 34 '43.6 "W		
Assessor's Parcel No.: 99B-78	300-7-7 and 99B-7800-7-8	Section: 24,25,35	Twp.: 2S	Range: 3E, 4E Base:	
Within 2 Miles: State Hwy	#: 1-580/1-205	Waterways: None			
Airports:	Vone	Railways: Souther	n Pacific	Schools: None	
Document Type: CEQA: NOP Early Cons Neg Dec Mit Neg Dec	Draft EIR Supplement/Subsequent EIR (Prior SCH No.) Other:	NEPA:] NOI Oth] EA] Draft EIS] FONSI	er: Doint Document Final Document Other:	
General Plan Amendmen General Plan Element Community Plan	t		it sion (Subdivision,	Redevelopment Coastal Permit etc.) Other:	
Commercial:Sq.ft.	Acres Employees Acres Employees Acres Employees	Mining:	Type reatment: Type Co	mpost Facility MGD	
Water Facilities: Type	MGD				
Project Issues Discussed	in Document:				
Aesthetic/Visual Agricultural Land Air Quality Archeological/Historical Biological Resources Coastal Zone Drainage/Absorption	 Fiscal Flood Plain/Flooding Forest Land/Fire Hazard Geologic/Seismic Minerals Noise Population/Housing Balance Public Services/Facilities 	Solid Waste	ersities ns ity Compaction/Gradi lous	 ☐ Vegetation ☑ Water Quality ☐ Water Supply/Groundwate ☐ Wetland/Riparian ☐ Growth Inducement ☑ Land Use ☐ Cumulative Effects ☐ Other: 	

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Air Resources Board	Office of Historic Preservation
Boating & Waterways, Department of	Office of Public School Construction
California Emergency Management Agency	Parks & Recreation, Department of
California Highway Patrol	Pesticide Regulation, Department of
Caltrans District #	Public Utilities Commission
Caltrans Division of Aeronautics	X Regional WQCB #5
Caltrans Planning	Resources Agency
Central Valley Flood Protection Board	Resources Recycling and Recovery, Department of
Coachella Valley Mtns. Conservancy	S.F. Bay Conservation & Development Comm.
Coastal Commission	San Gabriel & Lower L.A. Rivers & Mtns. Conservanc
Colorado River Board	San Joaquin River Conservancy
Conservation, Department of	Santa Monica Mtns. Conservancy
Corrections, Department of	State Lands Commission
Delta Protection Commission	SWRCB: Clean Water Grants
Education, Department of	SWRCB: Water Quality
Energy Commission	SWRCB: Water Rights
Fish & Game Region #	Tahoe Regional Planning Agency
Food & Agriculture, Department of	Toxic Substances Control, Department of
Forestry and Fire Protection, Department of	Water Resources, Department of
General Services, Department of	
Health Services, Department of	Other:
Housing & Community Development	Other:
Native American Heritage Commission	
ocal Public Review Period (to be filled in by lead age	ncy)
tarting Date April 26, 2018	Ending Date May 26, 2018
ead Agency (Complete if applicable):	
onsulting Firm: HDR	Applicant: Jess Ranch Property Owners
ddress: 601 Union Street, Suite 700	Address:
State/Zip: Seattle, WA 98101	City/State/Zip:
ontact: Rona Spellecacy	Phone:

Signature of Lead Agency Representative:

Date: 4/26/2018

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

6.1

Memo

Date:	Tuesday, June 19, 2018
Project:	Jess Ranch EIR
To:	Damien Curry, CDA, Alameda County Planning; Mike Harding, Biosolids Recycling, Inc.
From:	HDR: Malia Bassett, AICP, HDR; Rona Spellecacy, CEP, AICP
Subject:	Jess Ranch EIR Public Scoping Comment Summary

In April 2018, Alameda County initiated the public scoping process for the Jess Ranch Compost Facility EIR project. The project would receive and process organic materials, primarily greenwaste, foodwaste and biosolids, and would also receive untreated scrap wood, natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash and clean construction debris.

The public scoping meeting was held on May 21, 2018 to solicit comments to help determine the scope of the Jess Ranch Environmental Impact Report (EIR). The meeting was held from 1-2pm at the Alameda County Planning Department, Room 160 in Hayward, California. A Notice of Preparation for the EIR was sent to responsible agencies. In addition, public information was sent to local print media, and as a result information was made public regarding the time, date, location and purpose of the public scoping meeting.

Five citizens attended the public scoping meeting. Attendee sign-in information will be added to the project mailing list for future notifications. Attendees received handouts and comment forms and were able to view presentation boards that outlined the project background, study area, the proposed site plan and a timeline of the process.

The scoping meeting was held to solicit the concerns of the affected public and agencies. The input received during the comment period will assist the EIR preparation process by helping to develop the issues and alternatives that will be analyzed in the EIR.

The State of California's CEQA Guidelines do not require formal responses to each comment/question raised during the scoping period. However, all comments and input received during the comment period are being taken into consideration in developing the EIR. Another comment period will be held to allow sufficient time for the public and interested agencies and organizations to review the draft EIR when it is published. At that time, all comments on the draft document will be responded to in writing.

Individuals who submitted comments during the scoping comment period are listed below. Comment themes in both the public meeting and written comments included concerns with respect to traffic, fire hazards, odors, and noise. A brief summary of the comments received during the scoping period is provided below.

- Bonnie S. Terra, Division Chief, Alameda County Fire Department
 - Project needs to comply with all building and fire code requirements.
 - \circ Project is in a State Responsibility Area (SRA), CalFire needs to be contacted.

- Maria Mendoza, Supervising Hazardous Materials Specialist, Alameda County Department of Environmental Health
 - Requesting review of Draft EIR when available; add Alameda County Local Enforcement Agency as a Reviewing Agency.
 - Compostable regulations have changed since 2015.
- Aileen Mendoza, Supervising Hazardous Materials Specialist, Alameda County Department of Environmental Health
 - \circ $\;$ No records under the Clean Water Program for the facility were located.
 - Business in Alameda County need to comply with the County's Stormwater Management and Discharge control Ordinance (Chapter 13.08).
 - Consider applicable waste discharge requirements of the State Water Board for composting facilities.
- Maria Mendoza, Supervising Hazardous Materials Specialist, Alameda County Health Care Services
 - June 29, 2015 comment letter regarding the Conditional use Permit for the proposed project
 - Christine Schneider, Senior Planner, Contra Costa Water District
 - Project east of Contra Costa Water District's mitigation site.
 - Concern over access and easement issues; potential noise, light and glare, dust and odor, CRLF and CTS habitat, water runoff, spread of nonnative plants and seed dispersal associated with construction and operation
- Laurel Mendoza, Property Owner near proposed project
 - Use of nearby mitigation land and loss of habitat;
 - Dust as a result of truck traffic on dirt road and potential danger for nearby properties;
 - Potential traffic impacts;
 - Potential security issues;
 - Potential odors;
 - \circ ~ Potential increase in fire hazards.
- Bobbie DeMaria, Public
 - Concerned with potential health issues, wind, fire danger and traffic.
- Peggy Moore, Christopher A. Castello, Annamarie Castello, Community Members
 - The following areas should be analyzed as a part of the EIR: Surface Water, Groundwater, Storage of Raw & Finished Compost Material, Odors and Airborne/Vector Transmitted Pathogens, Dust, Fire and Noise Pollution.

Attachments:

- Written Comments Received
- Scoping Meeting Sign-In Sheet
- Scoping Meeting Comment Form
- Scoping Meeting Display Boards (About the Project, Key Features, Project Area, Timeline)



Please Sign-In

Name	Street Address (include zip code)	E-mail Address	Phone Number	A

Jess Ranch Compost Facility Project

Scoping Meeting

May 21, 2018

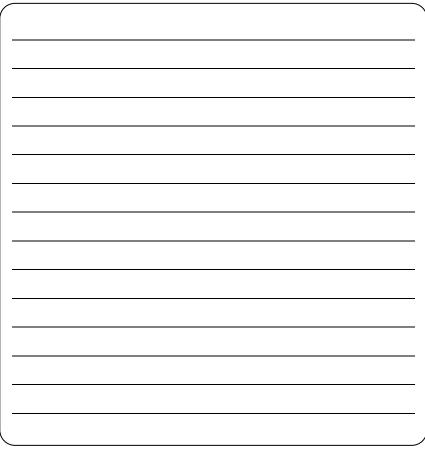
Affiliation (If Any)	Do you want to receive project announcements?
	Please add me to the email list
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Jess Ranch Compost Facility Project Scoping Meeting – Wednesday, May 21, 2018

Comment Form

1.) Do you have any comments about the project that you would like to share with us?



2.) Please provide the following information:

Name:	
Address:	
Email:	

3.) Do you want to receive project email announcements?

Yes No

Thank you for your comments!

Please give your comment to a project team member, or send to:

Alameda County Planning Attn: Damien Curry 224 W. Winton Avenue, Rm III Hayward, CA 94544

damien.curry@acgov.org



About the Project

Alameda County is overseeing the environmental review process for the proposed Jess Ranch Compost Facility Project located on the existing Jess Ranch property in east Alameda County. Communities are increasingly examining and using recycling and composting technologies as a practical and efficient method to reduce solid wastes from landfills throughout the United States. This Project is being proposed in response to a series of Alameda County and State of California mandates to reduce materials going to landfills that could otherwise be processed more sustainably. This project seeks to develop a compost facility for processing organic materials.

The poposed compost facility would receive and process the following organic materials:

•Greenwaste	•Nat
•Foodwaste	•No
•Biosolids	•lner
 Untreated scrap wood 	con

Non-hazardous liquid wastes may also be accepted as a substitute for the water that is added for efficient composting.

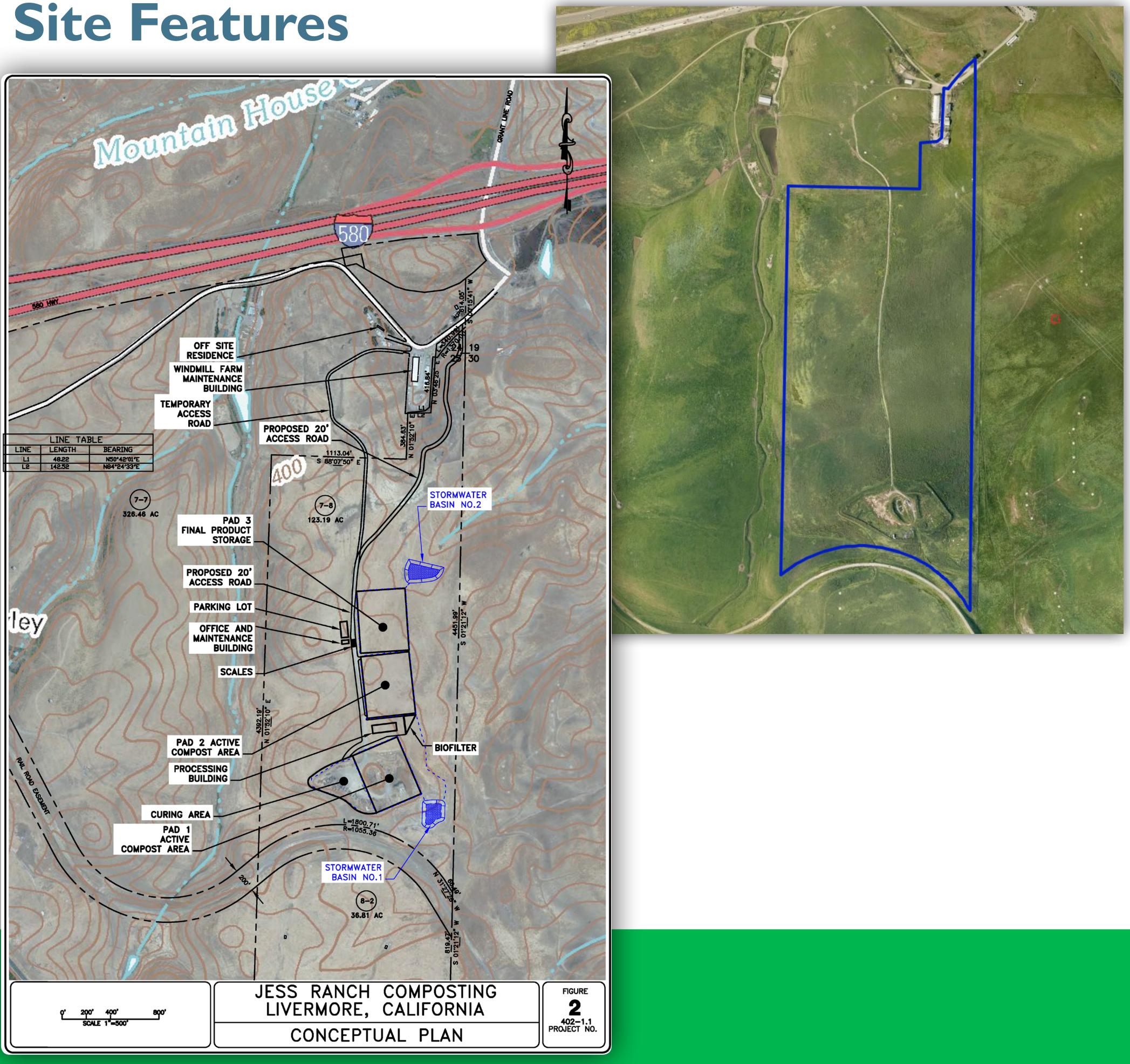
JESS RANCH COMPOST FACILITY PROJECT

- tural fiber products
- on-recyclable paper waste

rt material (sediment, gypsum, wood ash, and clean nstruction debris)

ABOUT THE PROJECT





JESS RANCH COMPOST FACILITY PROJECT

Environmental Analysis

This environmental review process will study the following areas of the environment:

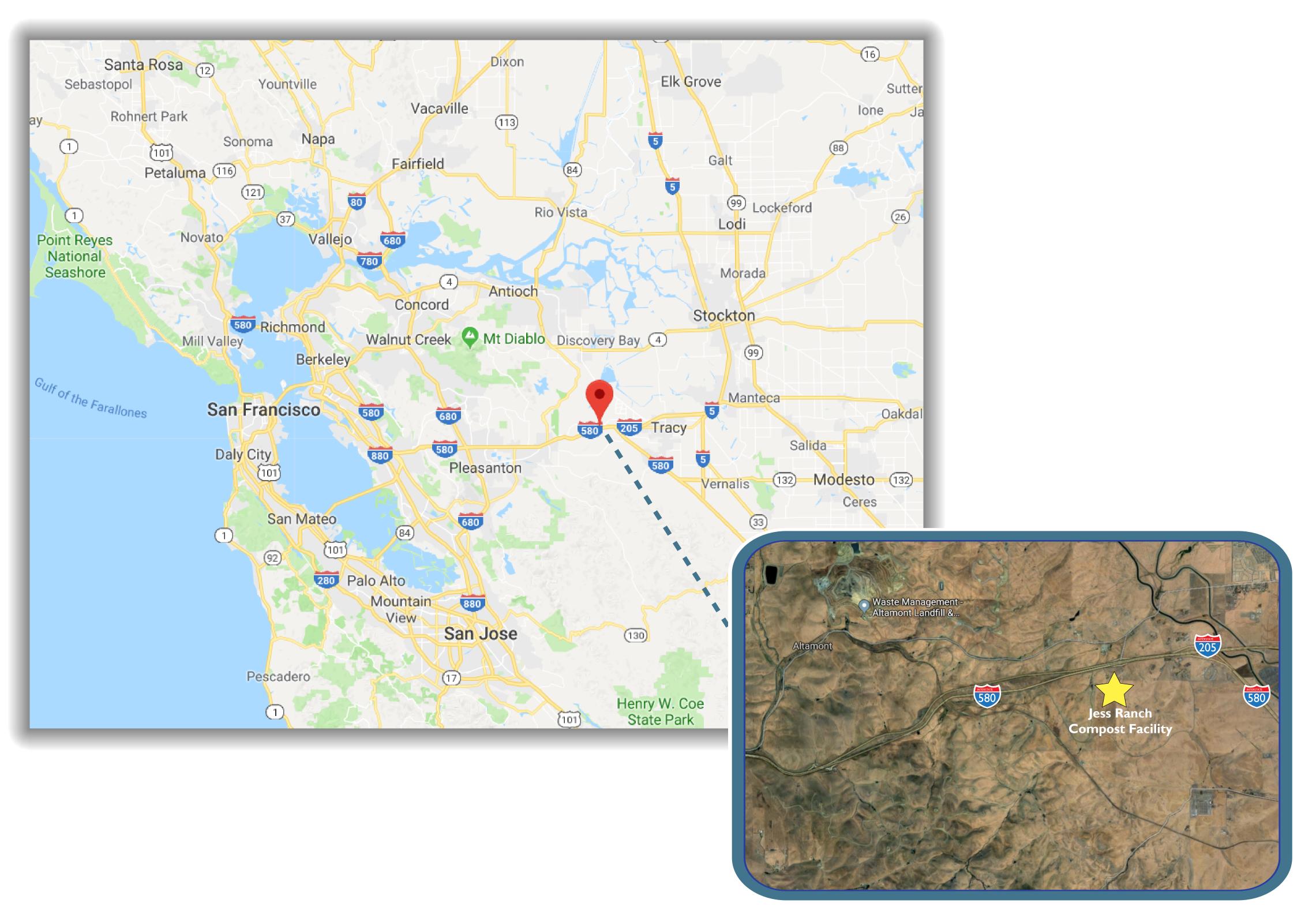
- •Aesthetics
- •Air Quality and Greenhouse Gases
- •Biological Resources
- •Cultural Resources
- •Geology and Seismicity
- •Hazards and Human Health
- Hydrology and Water Quality
- Land Use and Agriculture
- •Noise
- Public Services and Utilities
- Transportation and Circulation

ENVIRONMENTAL REVIEW



JESS RANCH COMPOST FACILITY PROJECT

Project Area



•Project is located in the eastern portion of unincorporated Alameda County, at the eastern edge of the Bay Area. The Central Valley is immediately to the east.

•Site is located close to the organic waste generating communities of the Bay Area, and

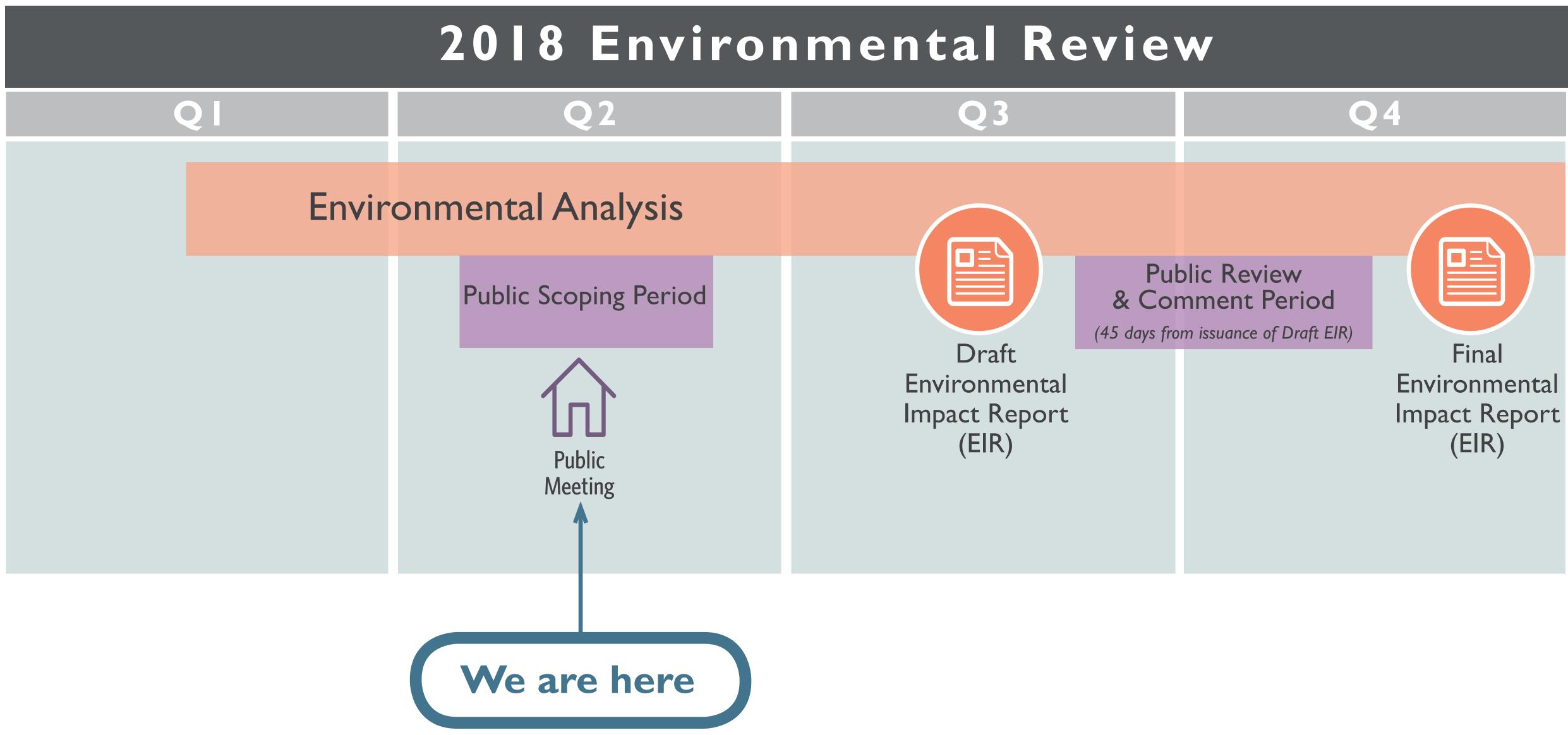
the potential agricultural soils amendment markets of the Central Valley.

- •Project would be built at the Jess Ranch property located east of the Altamont Pass, and would be operated by Denali Water Solutions, LLC.
- •Site would take up about 30 acres of the southeastern portion of the 160-acre Jess Ranch property.
- •Site is bounded on the north by I-580; to the east, south and west by agricultural lands; and to the southwest by the Union Pacific Railroad right-of-way.





Project Timeline



JESS RANCH COMPOST FACILITY PROJECT







From:	Curry, Damien, CDA
To:	Spellecacy, Ronalee R.; Davis, Cassie
Cc:	Michael Harding
Subject:	FW: NOP Comments on the Jess Ranch Compost Facility Project
Date:	Friday, May 25, 2018 3:21:12 PM
Attachments:	NOP Comments - Proposed Jess Ranch Compost Facility Project EIR.PDF

Damien Curry Alameda County Planning (510) 670-6684

damien.curry@acgov.org

CONFIDENTIALITY NOTICE: This e-mail message including attachments, if any, is intended only for the person(s) or entity(ies) to which it is addressed and may contain confidential and /or privileged material. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

From: Christine Schneider [mailto:cschneider@ccwater.com] Sent: Thursday, May 24, 2018 4:14 PM To: Curry, Damien, CDA <damien.curry@acgov.org> **Cc:** 'Farinha, Melissa@Wildlife' <Melissa.Farinha@wildlife.ca.gov>; 'Valerie Hentges (valerie_hentges@fws.gov)' <valerie_hentges@fws.gov>; 'Laurel Mendoza' <mendozaranch@gmail.com> Subject: NOP Comments on the Jess Ranch Compost Facility Project

Hello Damien-please find attached the Contra Costa Water District's comments on the Notice of Preparation (NOP) for the Jess Ranch Compost Facility Project.

As stated in this comment letter, the proposed Compost Facility Project site is located just east of CCWD's 433-acre Grant Line Road Unit within the larger 651-acre Altamont Habitat Management Unit (HMU). This land was purchased as mitigation to offset project effects on state and federal threatened and endangered species from the expansion of the Los Vaqueros Reservoir in Contra Costa County, California and ongoing operations and maintenance activities associated with reservoir operation. This land was acquired because of its ecological resources. It is being managed according to a Habitat Management Plan (HMP) approved by both U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), consistent with requirements in the USFWS Biological Opinion (Reference # 81420-2009-F-0201-1) and CDFW Incidental Take Permit (Permit No. 2081-2011-002-03) for the Los Vagueros Expansion Project. A Conservation Easement for the entire Altamont Habitat Management unit is pending with CDFW.

We are ccing our contacts at both the US Fish and Wildlife Service and the California Department of Fish and Wildlife to keep them in the loop. Please "reply to all" should you have any comments or questions.

Thank you, Christine

Christine Schneider, MS, RLA

Senior Planner Contra Costa Water District PO Box H20 Concord, CA 94524 (925) 688-8118 <u>cschneider@ccwater.com</u>



Board of Directors Lisa M. Borba, AICP President Connstance Holdaway Vice President Ernesto A. Avila, P.E. Bette Boatmun John A. Burgh

> General Manager Jerry Brown

May 24, 2018

Sent Via Hard Copy & Email to Damien.curry@acgov.org

Damien Curry Alameda County Planning 224 W. Winton Avenue, Rm 111 Hayward, CA 94544

Subject: Comment Letter Regarding the Jess Ranch Compost Facility Project EIR

Dear Mr. Curry:

The Contra Costa Water District (CCWD) is in receipt of Alameda County's Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the above referenced project. The proposed Jess Ranch Compost Facility Project would receive and process organic materials, primarily greenwaste, foodwaste, and biosolids, but would also receive untreated scrap wood, natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash, and clean construction debris. Non-hazardous liquid wastes may also be accepted as a substitute for the water that is added for efficient composting. The project would process organic material utilizing a covered windrow system that would be a combination of aerated static pile (ASP) with either positive or negative aeration, and covered windrow composting technology. Initially, the Project would realize a daily throughput of up to 500 tons per day (TPD), increasing up to a maximum of 1,000 TPD, producing compost-based soil amendments for agricultural, horticultural, erosion control and land reclamation uses. Alameda County is the approving agency for the Conditional Use Permit, which constitutes the Project action or Proposed Project under the California Environmental Quality Act (CEQA).

The project site is located just east of CCWD's 433-acre Grant Line Road Unit within the larger 651-acre Altamont Habitat Management Unit (HMU). This land was purchased as mitigation to offset project effects on state and federal threatened and endangered species from the expansion of the Los Vaqueros Reservoir in Contra Costa County, California and ongoing operations and maintenance activities associated with reservoir operation. This land was acquired because of its ecological resources. It is being managed according to a Habitat Management Plan (HMP) approved by both U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), consistent with requirements in the USFWS Biological Opinion (Reference # 81420-2009-F-0201-1) and CDFW Incidental Take Permit (Permit No. 2081-2011-002-03) for the Los Vaqueros Expansion Project. A Conservation Easement for the entire Altamont Habitat Management unit is pending with CDFW.

The Grant Line Road property was acquired and is managed to preserve, enhance and restore habitat for various species protected under the federal and State endangered species acts including the California red-legged frog (*Rana draytonii*), the California tiger salamander (*Ambystoma*)

Damien Curry Alameda County Planning NOP Comments for the Proposed Jess Ranch Compost Facility Project EIR May 24, 2018 Page 2

californiense) (Central California DPS), and the endangered San Joaquin kit fox (*Vulpes macrotis mutica*). Two of these species, California red-legged frog and California tiger salamander, have been observed on the Altamont HMU and potential habitat for the San Joaquin kit fox is also present on the HMU. Western burrowing owl, a California species of special concern, is also found at the site. The majority (415 acres) of the site is grassland. Consistent with the HMP, grazing is the primary management tool used to meet habitat goals on the Grant Line Road property.

The following are CCWD's specific comments:

A. Access and Easement Issues:

The Grant Deed between CCWD and the Jess Family Trust allows for a 60-foot wide nonexclusive access easement through the Grant Line Road Unit. A 20-foot wide gravel road currently exists within the easement. The road is used by CCWD, its grazing tenant, Union Pacific Railroad, Pacific Gas & Electric Company, and could be used by a future tenant that may utilize the building that is labeled "Windmill Farm Maintenance Building" on Figure 2 of the NOP. Access and easement issues associated with using this road are outlined below.

- 1. Entry Access: Figure 2 of the NOP shows that the access for the proposed facility is through the Grant Line Road /Jess Ranch Road gate on CCWD property, which, as stated above, is the only point of ingress/egress for not only CCWD but also for the other parties. For security and to ensure ease of access, CCWD would prefer that alternative access be identified and evaluated.
- 2. Use of "Temporary Access Road": The easement is shown in Figure 2 of the NOP and is labeled "temporary access road". CCWD assumes the temporary access is for construction of the project only. CCWD would prefer that this easement not be used during the construction phase of the proposed project and requests that alternative construction access be identified and evaluated. If this easement must be used, the impacts of using this road to construct the proposed composting facility need to be addressed in the EIR.
- 3. Upgrade of the Temporary Access Road: The current temporary access road is narrow and is surfaced with a combination of gravel and very old and potholed asphalt. This road would need to be improved to support the proposed truck traffic to and from this facility.
- 4. Long-Term Use of Temporary Access Road: Any proposed long-term use of the temporary access road would need to be specifically analyzed.
- 5. **Safety:** The EIR needs to address safety issues related to significant truck traffic in an actively grazed area. The proposed temporary access road runs through a grazing pasture, and specifically an off-season bull field, and is also used by other easement holders. The significant increase in truck traffic proposed during construction increases the risk of gates being left open and cows wandering onto the road or off the property. Additionally, fire is an ongoing risk in open grassland that could be exasperated by the high number of construction vehicles. Going off the existing gravel road would exacerbate these risks and should be strictly prohibited. The project proponent's easement is non-exclusive, and

Damien Curry Alameda County Planning NOP Comments for the Proposed Jess Ranch Compost Facility Project EIR May 24, 2018 Page 3

CCWD, the grazing tenant and other parties use this road. This level of construction traffic could affect safe use of the road by these other parties.

- 6. **Impacts to San Joaquin Kit Fox:** This conservation property was purchased to increase the natural range of the San Joaquin kit fox in hopes of providing a safe natural dispersal into the northern range. The improvement of the temporary access road would result in fragmenting CCWD habitat into smaller blocks. The fragmentation can cause decrease in fox abundance through changes in social ecology, productivity, space use, dispersal and survival. Any established unnatural barriers could cause a decrease in natural food selection for the fox.
- 7. **Impacts to CRLF**: The temporary access road is approximately 675 feet from an occupied California red-legged frog breeding pond. Dust and runoff from the road could increase sedimentation, decrease water quality, and negatively impact California red-legged frog breeding habitat.
- 8. **Impacts to Stewardship Goals**: The significant number of proposed truck trips per day could affect the grazing tenant's ability to appropriately graze the property to meet stewardship goals as defined in the HMP.

B. Compost Facility Construction and Operation Issues:

The proposed project is to be located approximately 600 feet from the CCWD property line. The proposed project could result in impacts to CCWD property and special-species habitat from increased noise, light/glare, dust/odor, water runoff, and vehicle strikes from increased truck traffic. Compost Facility Operational issues of the Compost Facility that could affect the use of the CCWD property by special-status species are detailed below.

- 1. **Increased Noise:** As the site is currently vacant, the change in land use will result in an increased level of noise. Noise from his new use could negatively affect the special-status species that use the CCWD parcel, resulting in decreased or limited breeding success.
- 2. Increased Light and Glare: New construction and operation will cause increased light and glare in an area of open grasslands and sparse development. Any increase would be thus more significant than if this type of project was sited in an area either more vegetated or more intensively used. Light and glare from this new use could negatively affect the special-status species that use the CCWD parcel, resulting in decreased or limited breeding success.
- 3. **Increased Dust and Odor:** The proposed project could cause dust and odor, which would blow towards CCWD property. Dust can have significant impacts on the health of cattle, and could cause sedimentation/turbidity in the occupied California red-legged frog breeding pond. Dust and odor could affect the tenants at both the residence and the maintenance building.
- 4. **Impacts to CRLF and CTS Habitat from Water Runoff.** The proposed Curing Area is within 800 feet and upslope from a California red-legged frog breeding pond. Water runoff from the curing area could increase erosion and sedimentation, and thus decrease water quality at this pond.

Damien Curry Alameda County Planning NOP Comments for the Proposed Jess Ranch Compost Facility Project EIR May 24, 2018 Page 4

- 5. **Impacts from Pathogens in Water Runoff.** Runoff from the Curing Area could introduce pathogens into the California red-legged frog and California tiger salamander breeding habitat that could result in decreased breeding success.
- 6. **Impacts from the Spread of Nonnative Plants:** There is a large infestation of black mustard on the proposed project site, which is upwind from the CCWD parcel. The increased rate of use at the proposed project site could increase invasive seed dispersal to the property, as the dominant winds in summer are from the east, and can gust up to 35 miles per hour. The potential increase in nonnative plants is in direct conflict with requirements in the HMP to reduce Cal IPC listed plant infestations.
- 7. Nonnative Seed Dispersal: The introduction of green waste to the site could result in increased seed dispersal of nonnative invasive plants, in conflict with the HMP.

Should you require clarification on CCWD comments, please contact me at <u>cschneider@ccwater.com</u> or at (925) 688-8118.

Sincerely,

Churchmic Schnud

Christine Schneider Senior Planner

CS:ck

Cc: Melissa Farinha Valerie Hentges Laurel Mendoza

From:	Curry, Damien, CDA
То:	Spellecacy, Ronalee R.; Davis, Cassie
Cc:	Michael Harding
Subject:	FW: Comment regarding NOP PLN2015-00087 for proposed Compost Facility
Date:	Friday, May 25, 2018 3:22:57 PM
Attachments:	Outlook-new ehd lo.png
	LEA Comments Proposed Composting Facility Jess Ranch Unincorporated Alameda County.pdf

Damien Curry Alameda County Planning (510) 670-6684 damien.curry@acgov.org

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From: Mendoza, Maria, Env. Health

Sent: Thursday, May 24, 2018 1:07 PM

To: Curry, Damien, CDA <damien.curry@acgov.org>

Cc: Browder, Ronald, Env. Health <ronald.browder@acgov.org>; Khan, Muhammed, Env. Health <muhammed.khan@acgov.org>; Auyeung, Jane, Env. Health <Jane.Auyeung@acgov.org>; Suen, Wing, Env. Health <wing.suen@acgov.org>; Surdilla, Arthur, Env. Health <arthur.surdilla@acgov.org>; Tran, Baohuong (Tina), Env. Health <Baohuong.Tran@acgov.org>; Khan, Muhammed, Env. Health <muhammed.khan@acgov.org>

Subject: Re: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Hello Damien,

Alameda County Department of Environmental Health, Office of Solid/Medical Waste Management, the Local Enforcement Agency (LEA) for CalRecycle, has previously made comments on the proposed project per attached June 29, 2015 letter on Conditional Use Permit. The LEA has not received new information since review of the 2015 documents. Alameda County LEA would like to have a more thorough review and comments when the draft EIR becomes available. There have been changes in the Compostable regulations since 2015 that the LEA may have to incorporate as comments for the operator of Jess Ranch Composting Facility to address. Please add Alameda County LEA as one of the agencies in the Reviewing Agencies Checklist for the draft EIR.

LEA Comments:

Notice of Completion & Environmental Document Transmittal Form (Appendix C)

Items below Under Section **Project Issues Discussed in the Document** are not marked. The LEA would like for these issues to be included and addressed in the draft EIR:

• Drainage/Absorption

- Fire Hazard
- Solid Waste
- Water Supply/Groundwater
- Other/Etc.

Also, staff from our Department's Land Use Program may need to provide comments on the issues below. In case they did not receive the NOP, please include them as one of the reviewing agencies. Contact person is Muhammed Khan. I included him in the cc:

- Septic Systems (Land Use Program)
- Water Supply/Groundwater
- Other/Etc.

Please let me know if there's a link in your website regarding the proposed project including any documents pertinent to the site.

Thank you. Feel free to contact me if you have any questions.



Maria A. Mendoza | REHS Supervising Hazardous Materials Specialist Alameda County Department of Environmental Health Solid/Medical Waste Management and Body Art Programs 1131 Harbor Bay Parkway | Alameda, California 94502 Office 510-567-6730 | Facsimile 510-337-9234 | QIC 30410 maria.mendoza@acgov.org | www.acgov.org/aceh

From: Curry, Damien, CDA

Sent: Tuesday, May 22, 2018 4:39 PM

To: Curry, Damien, CDA <<u>damien.curry@acgov.org</u>>

Cc: Spellecacy, Ronalee R. <<u>Ronalee.Spellecacy@hdrinc.com</u>>; Davis, Cassie

<<u>Cassie.Davis@hdrinc.com</u>>

Subject: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Good afternoon – Just a reminder that the Planning Department continues to seek comment regarding information contained in the attached NOP in advance of the preparation of the draft project EIR. Thanks

Damien Curry

Alameda County Planning (510) 670-6684

damien.curry@acgov.org CONFIDENTIALITY NOTICE: This e-mail message including attachments, if any, is intended only for the person(s) or entity(ies) to which it is addressed and may contain confidential and /or privileged material. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

From:	Curry, Damien, CDA
To:	Spellecacy, Ronalee R.; Davis, Cassie
Cc:	Michael Harding
Subject:	FW: Comment regarding NOP PLN2015-00087 for proposed Compost Facility
Date:	Friday, May 25, 2018 3:21:44 PM
Cc: Subject:	Michael Harding FW: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Damien Curry Alameda County Planning (510) 670-6684 damien.curry@acgov.org

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From: Mendoza, Aileen, Env. Health Sent: Friday, May 25, 2018 9:38 AM

To: Curry, Damien, CDA <damien.curry@acgov.org>

Cc: Gosselin, Sharon <sharon@acpwa.org>; Hugo, Susan, Env. Health <susan.hugo@acgov.org> **Subject:** RE: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Hi, Damien – Thank you for the opportunity to comment on the subject project. We did not find records of this facility under the Clean Water Program and cannot provide a compliance history for the facility. However, any business in Alameda County shall comply with the County's Stormwater Management and Discharge Control Ordinance (Chapter 13.08). In addition, the State Water Board has waste discharge requirements (WDR) to address water quality protection at composting facilities that currently exist or may be constructed. Please consider these requirements and any applicable hazardous materials/waste laws for the project. Thank you

Aileen Mendoza Supervising Hazardous Materials Specialist Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, Alameda, CA 94502-6577 Ph: (510) 383-1708 Fax: (510) 337-9335 www.acgov.org/aceh

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To: Curry, Damien, CDA <damien.curry@acgov.org>
 Cc: Spellecacy, Ronalee R. <<u>Ronalee.Spellecacy@hdrinc.com</u>>; Davis, Cassie
 <<u>Cassie.Davis@hdrinc.com</u>>

Subject: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Good afternoon – Just a reminder that the Planning Department continues to seek comment regarding information contained in the attached NOP in advance of the preparation of the draft project EIR. Thanks

Damien Curry Alameda County Planning (510) 670-6684

damien.curry@acgov.org

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ALAMEDA COUNTY HEALTH CARE SERVICES



AGENCY



June 29, 2015

ENVIRONMENTAL HEALTH SERVICES Office of Solid/Medical Waste Management 1131 Harbor Bay Parkway, Alameda, CA 94502-6577 (510) 567-6790 FAX (510) 337-9335

Alameda County Community Development Agency Planning Department 224 West Winton Ave. Hayward, CA 94544 Attn: Damien Curry

SUBJECT: Alameda County Local Enforcement Agency (LEA) Comments on Conditional Use Permit (Case No. PLN2015-00087) for a Proposed Composting Facility at Jess Ranch located at 15850 Jess Ranch Rd., Unincorporated Alameda County (APN#: 099B-7800-007-04)

Dear Mr. Curry:

Alameda County Department of Environmental Health, Office of Solid/Medical Waste Management, the Local Enforcement Agency (LEA) for CalRecyle, would like to thank you for the opportunity to review and comment on the Conditional Use Permit (CUP) PLN2015-00087 for the proposed Composting Facility at Jess Ranch, 15850 Jess Ranch Road in Unincorporated Alameda County. As the agency responsible for permitting and inspecting solid waste facilities, the LEA is providing the following comments:

Project Summary

The Proposed Project would receive and process organic materials, primarily greenwaste, foodwaste and biosolids, as defined below, but would also receive untreated scrap wood, natural fiber products such as rice hulls and straw, non-recyclable paper waste and inert materials such as sediment, gypsum, wood ash and clean construction debris. Non-hazardous liquid wastes may also be accepted as a substitute for the water that would be added for efficient composting.

The Proposed Project would utilize a combination of aerated static pile (ASP) and covered windrow composting technology, with either positive or negative aeration. The Proposed Project would begin with maximum daily throughput of 500 tons per day (tpd) and increase up to a maximum of 1,000 tpd, receiving organic materials and producing compost and soil amendments for agricultural, horticultural, erosion control and land reclamation uses.

LEA Staff's General Comments and Recommendations

The operator shall submit a complete Solid Waste Facility Permit (SWFP) application package, as well as Conformance Finding Information. In the Project Description, and throughout the document, the operator shall indicate the types of users of the site (e.g. commercial, public, and/or private). If the facility will be open to the public, the operator shall indicate if those hours are different from the Facility's Hours of Operation. Storage time limits shall be indicated, based on the types of feedstock, and should be consistent throughout the documents.

The Proposed Project has potential environmental effects and must be evaluated under the California Environmental Quality Act (CEQA). The operator is required to submit evidence of CEQA compliance along with the SWFP application package prior to issuance of a full permit.

Please refer to CalRecycle's web link - Compost Facility Outline for Environmental Review Documents for specific requirements:

http://www.calrecycle.ca.gov/swfacilities/permitting/CEQA/Documents/Guidance/Compost.htm

An application will not be accepted for filing by the LEA until it is deemed that progress in completing the CEQA environmental documentation requirements is sufficient to enable the LEA to adequately review and complete the permit process. NOTE: The LEA has been informed that an Initial Study is being prepared by the operator. Please refer to CalRecycle's web link, which summarizes the full permit application package submittal requirements for the applicant/operator: http://www.calrecycle.ca.gov/swfacilities/permitting/Checklists/FullPermit/

Also, please be advised that there are proposed revisions to Title 14 and Title 27 regulations for Compostable Materials and Transfer/Processing Operations and Facilities which may affect your submittal to the LEA. Proposed changes include but are not limited to the following:

- 1. Provides several feedstock definitions and the types of operations or facilities that can accept them;
- 2. Revises metal concentrations allowed in compost;
- 3. Revises LEA inspection frequency language;
- 4. Provides operators and LEA with a mechanism to address chronic odor and identify sources of odor;
- 5. Establishes criteria for safe land application of compostable materials;
- 6. Requires compost products to meet physical contaminant limits by weight;
- 7. Updates the Solid Waste Facility Permit/Waste Discharge Requirements Application (Form E-1-77) and Instructions.

To reflect the proposed changes in the regulations, the operator shall make the necessary changes to the documents as they apply to the Proposed Project when submitting application documents to the LEA and other agencies. (NOTE: For more information, please visit CalRecycle's Proposed Regulations <u>website http://www.calrecycle.ca.gov/Laws/Rulemaking/Compost/default.htm</u>. CalRecycle has initiated the second 15-day written comment period from June 29 – July 14, 2015).

Thank you for considering our comments. Alameda County LEA reserves the right to provide additional comments and recommendations as new information becomes available. If you have any questions, please feel free to contact me at (510) 567-6730 or via email at <u>maria.mendoza@acgov.org</u>.

Sincerely,

Man

Maria A. Mendoza, REHS Supervising Hazardous Materials Specialist Alameda County Department of Environmental Health Office of Solid/Medical Waste Management

Cc: Patrick Snider, CalRecycle Ronald Browder, Acting Director, Alameda County DEH Don Atkinson-Adams, Acting Chief, Alameda County DEH Arthur Surdilla and Stephanie Lee, Office of Solid/Medical Waste Management

COMMENTS FOR NOTICE OF PREPARATION FOR THE EIR

JESS RANCH COMPOST FACILITY PROJECT

SUBMITTED BY: PEGGY MOORE, CHRISTOPHER A. CASTELLO, ANNAMARIE CASTELLO

We request the following areas be analyzed in the EIR for this project:

- <u>Surface Water:</u> All surface runoff water should be "retained" unless an ongoing system of analyses is incorporated into the standard operating procedures. The analyses must be completed by a California Certified Laboratory and the reports made public on a timely basis. The retention pond should be of sufficient size for at least at 300-year event plus daily waste water discharge for a sufficient period.
- 2. <u>Groundwater:</u> Monitoring wells of various depths should be incorporated into the operating system to assure no contaminates are entering the aquafers or that the ambient groundwater is not being degraded. Appropriate placement would include down-gradient of the retention / detention pond as well as other sites around the facility.
- 3. <u>Storage of Raw & Finished Compost Material</u>: Must be confined to areas that have controlled and captured storm water runoff. Areas must of sufficient size to handle the seasonal nature of the inflow of raw resources and storage of the finished compost. Storage and processing areas must be restricted to those sites shown on the applicant's plans.
- 4. <u>Trash:</u> A system of netting or other devices should be installed to prevent the scattering of trash.
- 5. <u>Odors and Airborne/Vector Transmitted Pathogens:</u> Inherent in composting systems whether or not under cover. Food waste is generally the cause. Loading and unloading of materials are vulnerable stages. A system of suppression of these issues should be in place.
- 6. <u>Dust:</u> A system to control dust from both the handling of materials and from traffic and equipment on site will be necessary to protect the surrounding areas.
- 7. <u>Fire:</u> Heat is a part of the composting process and, if not properly monitored, will ignite the composting material. This proposed facility is in an agricultural zone predominated by native pasture and prone to windy conditions. Fires can spread rapidly in the Altamont region. Fire suppression systems must be considered in this process.
- 8. <u>Noise Pollution:</u> Given the proximity of rural residences and various types of livestock operations, noise suppression systems and / or limits on hours of operation must be considered to protect the existing neighborhood.

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT Jess Ranch Compost Facility Project

April 26, 2018

The County of Alameda (County) will be the Lead Agency and will prepare an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) for the Jess Ranch Compost Facility Project (Proposed Project). The County is soliciting public and agency input on the scope and content of the environmental information to be contained in the EIR. The overall types and levels of activities that the County could anticipate under the Proposed Project and the potential associated environmental impacts are described below.

Project Title: Jess Ranch Compost Facility Project

Project Applicant: Jess Ranch Property Owners

Project Location: The Proposed Project is located in the eastern portion of unincorporated Alameda County, at the eastern edge of the Bay Area. The Central Valley is immediately to the east. The Project site is located close to the organic waste generating communities of the Bay Area, as well as the potential agricultural soils amendment markets of the Central Valley. The nearest communities include the City of Livermore, approximately eight miles west of the Project site, and the City of Tracy, approximately eight miles east of the Project site.

The Proposed Project would be implemented at the Jess Ranch property located east of the Altamont Pass. The Project site comprises about 30 acres located within the southeastern portion of the 160-acre Jess Ranch property. The Project site is bounded on the north by I-580; to the east, south and west by agricultural lands; and to the southwest by the Union Pacific Railroad right-of-way. Figure 1 shows the regional location of the Project site.



Figure 1 Regional Location Map

Project Description: The Proposed Project facility would receive and process organic materials, primarily greenwaste, foodwaste, and biosolids, but would also receive untreated scrap wood,

natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash, and clean construction debris. Non-hazardous liquid wastes may also be accepted as a substitute for the water that is added for efficient composting. The Project would process organic material utilizing a covered windrow system that would be a combination of aerated static pile (ASP) with either positive or negative aeration, and covered windrow composting technology. Initially, the Project would realize a daily throughput of up to 500 tons per day (TPD), increasing up to a maximum of 1,000 TPD, producing compost-based soil amendments for agricultural, horticultural, erosion control and land reclamation uses. Alameda County is the approving agency for the Conditional Use Permit, which constitutes the Project action or Proposed Project under CEQA.

The Proposed Project could process up to 1,000 TPD of organic material utilizing a windrow system incorporating either negative air or positive air ASP technology. For the unimproved property, construction of the Project would necessitate grading, excavation and soil removal, deposition and compaction of fill material, reuse of excavated soil as fill, transporting and installing materials and equipment, disposal of soil and construction waste, and construction of retention ponds and project access roads. The active composting area would occupy approximately 15 acres, within which curing and screening zones would occupy approximately 8 acres and other operating areas (including access roads) would occupy approximately 7 acres. Active composting windrow piles would vary in height, up to a maximum of 12 feet. A drainage system incorporated into the windrow area would deliver storm runoff from the compost site to a stormwater detention pond. Construction would be completed in two phases: construction of the initial facility with a capacity of 500 TPD (Phase I) followed with expansion of the facility up to 1,000 TPD (Phase II). Figure 2 shows the overview of the proposed site plan.

Proposed Project Analysis: The County, as the lead agency, has the principal responsibility for approving and carrying out the project and ensuring that the requirements of CEQA have been met. The County has determined that an EIR will be prepared for the proposed project (CEQA Guidelines §15063[a]). The environmental checklist concluded the proposed project could have a potentially significant impact on the following resources, and they would be analyzed as part of the EIR: aesthetics, air quality and greenhouse gases, biological resources, cultural resources, geology and seismicity, hazards and human health, hydrology and water quality, land use and agriculture, noise, public services and utilities, and transportation and circulation. The County would certify completion of the EIR and, based on consideration of the analysis provided in the EIR, would determine whether to approve or disapprove the Proposed Project.

Pursuant to State CEQA Guidelines Section 15082(b), comments regarding the scope and environmental analysis must be submitted no later than 30-days after receipt of this notice. The public review period is from April 26, 2018 until May 26, 2018. Please send your written comments no later than May 26, 2018 to:

Damien Curry, Alameda County Planning 224 W. Winton Avenue, Rm 111 Hayward, CA 94544 Or via email to: damien.curry@acgov.org

Comments may also be provided at the public scoping meeting to be held on May 21, 2018 at 1:00 p.m. The meeting will be held at 224 W. Winton Ave, Room 160, Hayward, CA 94544. The public meeting will provide an opportunity to disseminate information and solicit comments on the scope and content of the EIR of the Proposed Project.

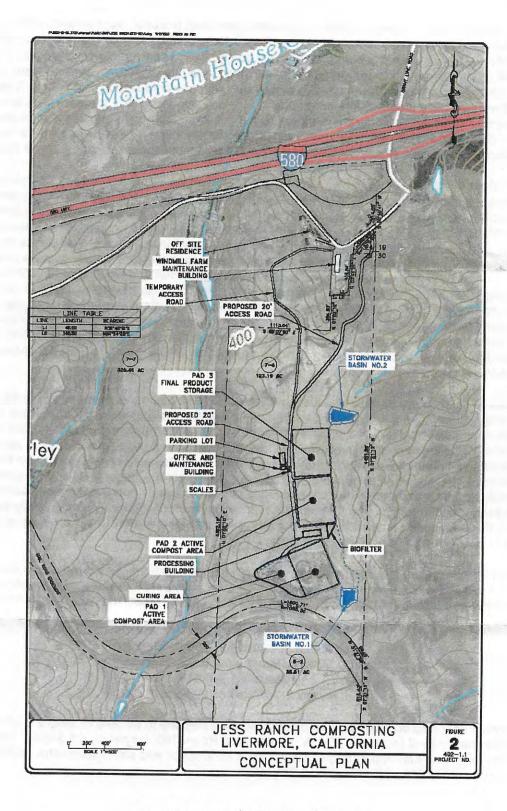


Figure 2 Proposed Site Plan Overview

Print Form

Appendix C

Mail to: State Clearinghous For Hand Delivery/Street A	e, P.O. Box 3044, Sacramento, 6 ddress: 1400 Tenth Street, Sacra	CA 95812-3044 (amento, CA 95814	916) 445-0613 4	SCH #	
Project Title: Jess Ranch	Compost Facility				
Lead Agency: County of Ala	meda		Contact Person: I	Damion Curn	
Mailing Address: 224 W. Wir					
City: Hayward, CA		7:	Phone: 510-670-6684		
		Zip: 94544	County: Alamed		
Project Location: County:A					
Cross Streets: W. Grant Line		_ City/Nearest Cor	nmunity: City of Liv	vermore and City of Tracy	
	the second se			Zip Code: 95377	
Longitude/Latitude (degrees, m	unutes and seconds): $37 \circ 42$	<u>44.9</u> "N/ <u>121</u>	• <u>34 ′ 43.6 ″</u> w	Total Acres: 30	
Assessor's Parcel No.: 99B-78		Section: 24,25,36	Twp.: 2S	Range: 3E, 4E Base:	
Within 2 Miles: State Hwy #: 1-580/1-205		Waterways: None			
Airports: N	one	Railways: Souther	n Pacific	Schools: None	
Document Type:					
CEQA: X NOP Early Cons Neg Dec Mit Neg Dec	Draft EIR Supplement/Subsequent EIR (Prior SCH No.) Other:		NOI Othe EA Draft EIS FONSI	r: Doint Document Final Document Other:	
Community Plan	Site Plan	Land Divi	sion (Subdivision, e	etc.) Other:	
Development Type:					
Residential: Units					
Office: Sq.ft.	Acres Employees	🗌 Transpor	tation: Type		
Industrial: So ft	Acres Employees	Mining:			
Educational:	Acres Employees		Type	MW	
Recreational:		Waste Treatment: Type Compost Facility MGD			
Water Facilities: Type	:Type MGD		Other:		
				and the second sec	
Project Issues Discussed in	n Document:				
X Aesthetic/Visual	Fiscal	Recreation/Pa	rks	Vagetation	
X Agricultural Land	Flood Plain/Flooding	Schools/Univ		Vegetation Water Quality	
Air Quality	Forest Land/Fire Hazard	Septic System	IS	Water Supply/Groundwat	
X Archeological/Historical	X Geologic/Seismic	Sewer Capaci		Wetland/Riparian	
Biological Resources	Minerals Noise	Soil Erosion/C	Compaction/Gradin	g Growth Inducement	
Drainage/Absorption		Solid Waste		X Land Use	
Economic/Jobs	Population/Housing Balance Public Services/Facilities	Traffic/Circul		Cumulative Effects Other:	
Present and lea/Zaning/C	and all all and all all all all all all all all all al				
arge Parcel Agriculture	eneral Plan Designation:				

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Air Resources Board	Office of Historic Preservation
Boating & Waterways, Department of	Office of Public School Construction
California Emergency Management Agency	Parks & Recreation, Department of
California Highway Patrol	Pesticide Regulation, Department of
Caltrans District #	Public Utilities Commission
Caltrans Division of Aeronautics	X Regional WQCB #5
Caltrans Planning	Resources Agency
Central Valley Flood Protection Board	Resources Recycling and Recovery, Department of
Coachella Valley Mtns. Conservancy	S.F. Bay Conservation & Development Comm.
Coastal Commission	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
Colorado River Board	San Joaquin River Conservancy
Conservation, Department of	Santa Monica Mtns. Conservancy
Corrections, Department of	State Lands Commission
Delta Protection Commission	SWRCB: Clean Water Grants
Education, Department of	SWRCB: Water Quality
Energy Commission	SWRCB: Water Rights
Fish & Game Region #	Tahoe Regional Planning Agency
Food & Agriculture, Department of	Toxic Substances Control, Department of
Forestry and Fire Protection, Department of	Water Resources, Department of
General Services, Department of	
Health Services, Department of	Other:
Housing & Community Development	Other:
Native American Heritage Commission	
cal Public Review Period (to be filled in by lead age	Ending Date May 26, 2018
tarting Date April 26, 2018	
ad Agency (Complete if applicable):	
ad Agency (Complete if applicable):	Applicant: Jess Ranch Property Owners
ad Agency (Complete if applicable): nsulting Firm: HDR dress: 601 Union Street, Suite 700 y/State/Zip: Seattle, WA 98101	Address:
ad Agency (Complete if applicable): nsulting Firm: HDR dress: 601 Union Street, Suite 700 y/State/Zip: Seattle, WA 98101 ntact: Rona Spellecacy	Address: City/State/Zip:
ad Agency (Complete if applicable): Insulting Firm: HDR Idress: 601 Union Street, Suite 700 ty/State/Zip: Seattle, WA 98101 Intact: Rona Spellecacy	Address:
arting Date April 26, 2018 ad Agency (Complete if applicable): Insulting Firm: HDR Idress: 601 Union Street, Suite 700 ty/State/Zip: Seattle, WA 98101 Intact: Rona Spellecacy one: 206-826-4728	Address: City/State/Zip:

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Curry, Damien, CDA
Spellecacy, Ronalee R.
FW: Jess Ranch Compost Facility Project - comments regarding proposed project
Monday, May 21, 2018 9:12:55 AM

Damien Curry Alameda County Planning (510) 670-6684

damien.curry@acgov.org

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From: mendozaranch@gmail.com [mailto:mendozaranch@gmail.com]
Sent: Friday, May 18, 2018 12:12 PM
To: Curry, Damien, CDA <damien.curry@acgov.org>
Subject: Fwd: Jess Ranch Compost Facility Project - comments regarding proposed project

Sent from my iPhone

Begin forwarded message:

From: Laurel Mendoza <<u>mendozaranch@gmail.com</u>> Date: May 16, 2018 at 8:44:49 AM PDT To: <u>damien.curry@ac.gov.org</u> Subject: Jess Ranch Compost Facility Project - comments regarding proposed project

Mr. Curry - I recently received a Notice of Preparation document in my residence mail, as I am a property owner residing near the proposed project. I also, however, am the cattle grazing tenant on the property owned by Contra Costa Water District, through which this proposed project would be accessed. The impact to me of this project would be direct, financially impactful, and destructive to the habitat I am tasked with grazing. I have numerous concerns, and will try to be as brief as possible.

The property that I lease was purchased by the Contra Costa Water District (CCWD), from the Jess family, as a mitigation parcel. It is home to two to state and federally listed special status species - the California Tiger Salamander and the Red Legged Frog. It also is potential habitat for the San Joaquin Kit Fox, another state and federally listed special species for which potential habitat is maintained. Additionally, the land is home to the Burrowing Owl and Golden Eagle, both of which are regularly spotted on the very land this project would go through. **First, and foremost**, as a lessee who is not allowed to conduct ANY activities on the land I rent that may impose on or threaten the species residing on the habitat lands, I would like a specific explanation as to how a neighboring

landowner would be granted the right to turn that mitigation land into a "truck route" in order to facilitate this ill-conceived venture. If they want to build a compost facility on their land, then make them build the roads ON their own land to access said facility.

The identified road goes through 36 acres of pasture land that I rent, which I use to house my bulls during the nine month "off season" each year. I pay for the land, and I carry substantial liability insurance on the land. My insurer requires that I provide truthful identification of all lands on which my cattle are being grazed, and that I identify all persons and vehicles with routine access, and the nature of all activities occurring on this land. This proposed use could greatly affect my insurance rates, and/or my ability to maintain my insurance altogether. From my standpoint, even if my insurer agreed to keep this field insured, I would not personally feel that I could expose myself to the liability of mixing a "truck route" with a "bull field." I would then have to pay to have my bulls housed elsewhere, which would cost me in the thousands for every month of the nine month "off season." For CCWD, this would mean that they would not be able to meet their mitigation requirements for maintaining the habitat which was set aside for the endangered species, and it would actually put those animals in jeopardy. I would like explanation as to how this will be allowed for a private use by an adjacent property owner.

Besides the loss to the habitat, from strictly a road/access standpoint, and who will bear the cost of the impact, I would also like an answer. Here are my concerns I would like addressed. Access to this project will have a significant maintenance/road deterioration proponent to it. The proposed access is up a potholed partial asphalt road to the front gate of Grant Line, then straight up a gravel road to a second gate, between the Powerworks facility and our security residence. They would then go through this second locked gate, which sits at an incline, and continues up a steep gravel road, which is NOT all-weather, to access the Jess parcel. This roadbed would not handle the traffic even in the short term, and would require constant maintenance, and would be impassable in the wet season. If, somehow, this ridiculous use is approved in a mitigation field, how will this road be maintained to keep it passable, and who will bear the cost.

And speaking of the road.... the tenants at the security residence on my lease will be GREATLY impacted. The dirt road, with the proposed heavy truck traffic, sits 125 feet from their front door. They often work swing or grave shifts (sleep during the day), and have dogs who are allowed to exercise in the front unfenced yard. They will be buried in an omnipresent cloud of dust, and their quality of life will suffer greatly. Who will compensate them for this, and how?

ALSO, regarding the access to this project, it lies at the intersection of a freeway on ramp and a freeway off ramp, adjacent to a culdesac with a bootleg park-andride which grows by the day, due to the exponentially increasing Altamont Pass commuter traffic. I often have a tough time exiting/entering the lease, due to people double-parked while they load and unload work work crews and tools/supplies. If you introduce the proposed level of truck traffic, you now have a bad accident waiting to happen. I definitely think that these conditions warrant a Traffic Impact Study and, should this be overlooked, I imagine there will be an eventual lawsuit in the wings when something really bad happens.

From a security standpoint, there will simply be no security. As a tenant, I was required to sign out keys to the entrance lock, identifying who they would be issued to, to maintain security. I believe the Jess family had to do likewise. However, they We are struggling at this time already with the fact that the Jess family has since placed a combination lock on the front gate, and then given out the combination to unknown/unnamed individuals to accommodate moneymaking activities along their easement. I regularly find the existing gate unlocked, or locked in a manner that bypasses everybody else's locks, effectively locking people in or out. The "fix" recommended by Connie Jess is to give us the combination to their bootleg lock, so we can get back in or out. This is not a fix it is ignoring the root of the problem. If this new facility goes in, there will essentially be no security whatsoever on my lease, because there will be an exponential increase in the number of unknown individuals who now have unfettered access into the CCWD parcel. Short of staging a security staffer at the gate, the tenants will be left vulnerable, as will I, to trespass and theft. I would like an answer as to how the security issue will be rectified, and who will pay for it.

If I look at this from the standpoint of not only a grazing tenant, but also a nearby residential neighbor, here is what I think. You can call it what you want, but this proposed project is basically a dump facility. The smell will be atrocious, there will be debris picked up and carried everywhere by the everpresent high winds, and the increased fire hazard from the composting piles will be off the charts. If I lose cows because they swallow the garbage and bloat and die, who can I bill for the loss? If I or my neighbors lose land or, God forbid, a home, to a fire, who shall we hold liable?

These are legitimate questions, and they deserve and I expect an answer. The rights of a landowner to make money on their property STOP when they negatively impact the rights of others. I look forward to an explanation of how this project can occur without doing so.

From:	Curry, Damien, CDA
To:	Spellecacy, Ronalee R.
Cc:	Davis, Cassie; Michael Harding
Subject:	FW: Comment regarding NOP PLN2015-00087 for proposed Compost Facility
Date:	Friday, May 25, 2018 3:23:30 PM

Damien Curry Alameda County Planning (510) 670-6684 damien.curry@acgov.org

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From: Terra, Bonnie, ACFD
Sent: Thursday, May 24, 2018 9:29 AM
To: Curry, Damien, CDA <damien.curry@acgov.org>
Subject: RE: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Good Morning Damien,

Not sure if you are still looking for something from ACFD and if so what. The only comments ACFD has are as follows:

The project shall comply with all building and fire code requirements in effect at the time of building permit, start of grading, and start of business.

Please note this project is located in State Responsibility Area (SRA). Therefore, you should reach out to Cal Fire.

I hope this helps. Please let me know if you need anything else.

Sincerely, Bonnie S. Terra, Division Chief Alameda County Fire Department 6363 Clark Avenue, Dublin CA 94568 (510) 632-3473 or (925) 833-3473 Office | (925) 875-9387 Facsimile

From: Curry, Damien, CDA
Sent: Tuesday, May 22, 2018 4:39 PM
To: Curry, Damien, CDA <<u>damien.curry@acgov.org</u>>

Cc: Spellecacy, Ronalee R. <<u>Ronalee.Spellecacy@hdrinc.com</u>>; Davis, Cassie <<u>Cassie.Davis@hdrinc.com</u>>

Subject: Comment regarding NOP PLN2015-00087 for proposed Compost Facility

Good afternoon – Just a reminder that the Planning Department continues to seek comment regarding information contained in the attached NOP in advance of the preparation of the draft project EIR. Thanks

Damien Curry Alameda County Planning (510) 670-6684 damien.curry@acgov.org

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FX

Initial Study

Jess Ranch Compost Facility, Conditional Use Permit, PLN2015-00087

Alameda County

October 2019

Prepared for: Alameda County Prepared by: HDR Engineering, Inc.

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Environmental Checklist Form

- 1. Project Title: Jess Ranch Compost Facility, Conditional Use Permit, PLN2015-00087
- 2. Lead Agency name and address: Alameda County; 399 Elmhurst Street, Suite 141 Hayward, CA 94544
- 3. **Contact person and phone number**: Damien Curry, Alameda County Planning, (510) 670-6684 or damien.curry@acgov.org
- 4. Project location: 15850 Jess Ranch Road, Alameda County, CA (APN 99B -7800-007-08)
- 5. **Project sponsor's name and address**: Joe and Connie Jess, 15850 Jess Ranch Rd, Livermore, CA, 94550
- 6. Land use designation:

Large Parcel Agriculture land use designation as defined by the East County Area Plan (ECAP), and the Agricultural (A-District) zoning designation as defined by the Title 17 Zoning Ordinance of the Alameda County Code of Ordinances.

- 7. **Zoning:** "A" (Agricultural, 100 acre minimum parcel size)
- 8. Description of project:

The Proposed Project would receive and process organic materials, primarily greenwaste, foodwaste, and biosolids, but may also receive untreated scrap wood, natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash, and clean construction debris. Non-hazardous liquid wastes may also be accepted for use in moisture conditioning of the compost piles. The Proposed Project would process organic material utilizing an aerated static pile (ASP) system with positive or negative aeration or a combination of both. The Proposed Project would be developed in two phases, with Phase 1 supporting a daily throughput of up to 500 TPD and Phase 2 developing the facility to full build out for a maximum of 1,000 TPD. The proposed Project will receive organic materials and produce compost-based soil amendments for agricultural, horticultural, erosion control and land reclamation uses.

9. Surrounding land uses and setting:

The Project site is surrounded on all sides by lands also designated as Large Parcel Agriculture by the ECAP and Grazing Lands by the Farmland Mapping and Monitoring Program. Land uses on these surrounding annual grasslands are mainly livestock grazing and breeding, as well as wind farms. Adjacent property owned by the Contra Costa Water District contains a residence and a service center structure for wind turbine operators that is currently available for lease. The closest change in land use designation within Alameda County is Urban and Built up Land about 8 miles west of the Project site in the City of Livermore.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

Table 1. Summary of Anticipated Permits and Approvals

Agency	Type of Approval		
Federal			
United States Army Corps of Engineers	Clean Water Act Section 404 Permit		
United States Fish and Wildlife Service	Section 7 Consultation for Federal Endangered Species Act compliance		
State			
California Department of Fish and Wildlife	Consultation for State Endangered Species Act compliance		
California Native American Heritage Commission	Consultation for effects on Native American burials or artifacts		
Regional Water Quality Control Board	General Order Coverage or Waste Discharge Requirements		
	National Pollutant Discharge Elimination System General Permit for Stormwater Discharge Associated with Construction Activities, and Industrial Stormwater Permit		
	Clean Water Act Section 401 Water Quality Certification		
CalRecycle	Solid Waste Facilities Permit		
Local			
Bay Area Air Quality Management District	Authority to Construct, Pollution Control District Regulation VIII-Fugitive Dust Control, Rule 8010		
	Permit to Operate		
	Permit to Construct		
Alameda County	Conditional Use Permit		
	Building and Grading Permits		
	Review of Stormwater Pollution Prevention Plan		
Alameda County Waste Management	Determination of Conformance with County Integrated Waste Management Plan (CoIWMP)		
	CoIWMP Amendment (Non-Disposal Facility Element)		
Alameda County Department of	Solid Waste Facilities Permit		
Environmental Health (Local Enforcement Agency)	Approval and Permit for Septic System Design and Installation		
	Registration with Certified Unified Program Agency (CUPA)		
	Review and Approval of Vector Program		
Alameda County Flood Control District, Zone 7	Approval for proposed onsite septic system		

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

No. On August 19, 2016, the Alameda County Planning Department sent a Notification of Consultation Opportunity to Native American tribes affiliated with the project area, pursuant to PRC section 20080.3.1. To date, Alameda County has not received any requests for consultation and no tribal cultural resources (TCRs) have been identified.

Environmental Factors Potentially Affected

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

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

Determination (To be Completed by the Lead Agency)

On the basis of this initial evaluation:

- □ I find that the project would not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- □ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- □ I find that the proposed project may have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- □ I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached

sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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

Signature

Date:

Introduction

This section provides background information on the Jess Ranch Compost Facility Project (Proposed Project) and specifies the specific need and Project Objectives for the Proposed Project. This section discusses the requirements of this environmental review under the California Environmental Quality Act (CEQA) and an overview of the planning process.

Project Background

The owners of Jess Ranch (ranch), Joe and Connie Jess, are the applicants for the Proposed Project located in eastern Alameda County, California. The Proposed Project would be located within the 160-acre Jess Ranch property located south of Interstate 580 (I-580) at 15850 Jess Ranch Road, Alameda County, CA (APN 99B -7800-007-08), just east of the Altamont Pass at Grant Line Road. The Zoning classification for the property is "A" (Agricultural, 100 acre minimum parcel size) with an East County Area Plan (ECAP) Land Use Designation of Large Parcel Agriculture.

The property owners, who have been operating the ranch since 1969, assumed ownership in 1973 and would retain ownership of the project site following development of the Proposed Project. Like many of the Altamont area properties, the 160-acre ranch has historically been used as a cattle grazing operation. Currently, a majority of the ranch functions as a cow-calf operation, with ranch lands being used primarily for cattle grazing and breeding. The ranch typically supports approximately 50 head of cattle year-round.

The owners have previously worked with the Natural Resources Conservation Service (NRCS) and the Alameda County Resource Conservation District, and have participated in the NRCS' Environmental Quality Incentives Program. In 2007, the owners participated in the preparation of a Comprehensive Resource Management System Plan for the ranch and developed the Jess Ranch Conservation Plan. In addition, the owners hired private consultants to perform biological site assessments of the ranch in May 2005, November 2015, and March 2016. These previous actions are further described in Chapter 3, Environmental Setting and Impact Analysis.

Due to the arid nature of this part of Alameda County, the owners have previously brought in biosolids to apply to the grassland (began 1992). The land application of the biosolids had a very positive impact on the quality and growth of the pasture grasses. However, biosolids applications have since been discontinued (2014) due to the anticipated development of the proposed composting facility and will no longer occur at the site.

Introduction to the Composting Process

This section provides an overview of the typical composting process and provides a description of the specific types of composting procedures that would be utilized for the Proposed Project.

Composting is the aerobic, or oxygen-requiring, decomposition of organic waste by microorganisms under controlled, high temperature conditions. Like all living organisms, composting microbes require air, water, nutrients and a suitable temperature to grow and multiply. Proper management of these four basic needs is necessary to ensure a high rate of decomposition in a compost pile while also minimizing any potential nuisance conditions. During composting, microorganisms consume oxygen (O2) while feeding on organic matter. As microbes successively break down and consume nutrients from complex organic compounds in the feedstock, compost is formed.

The general objectives of composting are to:

- Process organics wastes in a way that puts the organic material to its highest and best use instead of landfilling, by producing a soil amendment product
- Transform biodegradable organic materials into a biologically stable material in a reasonable time
- Destroy weed seeds, pathogens, insect eggs, and other unwanted organisms that may be present in the original feedstock
- Produce a product that can be safely used as soil amendment to support soil integrity and plant growth

In any well-managed composting facility, natural decomposition processes are accelerated and controlled to produce a quality product that meets applicable standards of use in a relatively short period of time.

Composting Essentials

An important requirement for active composting is an appropriate balance between carbon and nitrogen, which is measured by the carbon-to-nitrogen (C:N) ratio – the ratio, by weight of total organic carbon to total nitrogen. A blend of carbon and nitrogen is essential for the composting process. Grasses and green wastes such as leaves, along with food wastes and biosolids contain a high nitrogen content. More fibrous sources such as wood chips, branches, dried leaves, dried grasses, and straw provides a higher carbon content. Having a balanced ratio of carbon and nitrogen is a necessary component for the composting process to maintain aerobic conditions within the compost pile and sustain microbial activity.

Maintaining porosity within the compost pile is essential. Porosity is the volume of void space in a material divided by its total volume, and is closely related to particle size. If particle sizes are too small, then they will pack together and obstruct air movement in the pile. If air cannot move through the pile, the material can go anaerobic and result in potential nuisance conditions. Bulking agents are often utilized to help achieve the necessary porosity for active composting.

Moisture is also essential to composting, since much of the decomposition in a compost pile occurs within the liquid that covers the particle surfaces. Ideally, the moisture level within the compost pile will be between 40% and 60%. If a mixture is too wet, the water may displace the oxygen supply for microorganisms, resulting in potentially anaerobic conditions. If the mixture is too dry, it can inhibit the composting process and potentially result in fires.

Types of Composting Methods

A variety of methods or technologies have been developed to compost municipal organic feedstock materials. Each method has distinct operational characteristics such as compost pile configuration and level of management and equipment required. Factors such as project size, distance to sensitive receptors, and volume and type of feedstock materials all play a role in determining the appropriate method.

Two of the most common composting methods are open windrow composting and aerated static pile composting.

1. Windrow Composting

Windrow composting is a composting method by which organic materials are placed into long piles, or windrows. The windrows are turned periodically, which helps to add air to the piles, maintain

porosity, maintain optimal moisture, and redistribute cooler and hotter portions of the pile. While turning typically occurs with a windrow turning machine, piles can also be turned with a loader.

While windrows can compost without some sort of cover placed over it, some composters will utilize a cover as part of the windrow composting process. Typically cover material includes micropore fabric material (a waterproof and breathable material), or use of a biocover that consists of wood media, finished compost, or ground compost overs. Covers help to protect the windrows from weather, and maintain moisture. The use of covers can also help to manage odors and reduce air emissions that result from the composting process. Additionally, use of covers may also reduce active compost time. With the covers, windrows are still turned periodically during the active composting phase. The micro-pore fabric cover is removed prior to turning and replaced following turning. A bio-cover would be incorporated into the windrow during the turning process, and a new biocover layer reapplied followed turning.

2. Aerated Static Pile Composting

Aerated static piles (ASPs) are closely managed piles that are mechanically aerated by blowers that either push (positive) and/or pull (negative) air through the piles. Positive air systems push air up through the compost pile, where a cover over the pile acts as a filter to reduce air emissions and odors. Negative air systems pull air from the bottom of the composting pile which is then conveyed via a piping system to a standalone biofilter to reduce odors and air emissions.

Air is being forced through the pile, so ASP systems are not turned as frequently as a windrow system. In addition, an ASP system can support larger piles sizes. The pathogen reduction process is shorter for ASP systems because the pile is covered or insulated (with a layer of wood chips or a membrane cover). Temperature sensors are used in the ASP system, and can be used to automatically control the frequency of aeration to prevent excessively high or low pile temperatures.

As a result, the active composting phase in an ASP system is faster than an open windrow method. Because of the larger pile sizes and faster active composting phase, ASP systems can support a larger annual throughput and/or a smaller composting footprint.

A negative air ASP, or a push/pull ASP system will utilize a standalone biofilter. Biofiltration uses microorganisms to break down or transform organic compounds into carbon dioxide, water and some salts. The biofilters are comprised of stockpiled loose organic materials, typically wood. Approximately every 1 to 2 years the biofilter material may require replacement. The spent biofilter material is an inert, innocuous organic compound that will require disposal in a landfill or may become part of the bulking agent used in the composting process.

Compost Management

The composting process can be broken down into four steps. Each is described in turn below:

1. Feedstock Receiving and Pre-processing

Incoming feedstocks are consolidated in a dedicated receiving area prior to being processed. The feedstock is typically prepared for composting through a pre-process, such as grinding, shredding and/or screening.

During this phase, materials to be composted may be either premixed prior to being formed into a windrow, or are layered (e.g., typically on a bed of ground yard trimmings, wood chips or sawdust) and then mixed with the turner.

A truck or conveyor system is used to deliver the feedstock from the stockpiles to the composting area.

2. Active Composting

Following pre-processing, the prepared feedstock is constructed into windrows or ASP piles for the active composting process. For an open windrow composting method, this active composting phase can take 30-45 days. For an ASP system, this active composting phase can take 14-20 days. It is during this active composting phase that the composting material heats up to a proper temperature to comply with pathogen reduction requirements. It is also during this phase that weed seeds, insect eggs, and other unwanted organisms are destroyed. Temperature is monitored through this active composting process to verify that the materials are reaching the proper temperatures. A majority of the objectionable odors and air contaminants are reduced by 80% during the first 12-14 days of the composting cycle.

For an open windrow composting method, the windrows will be turned periodically during this phase. While turning can be achieved with a Front End Loader, it is typically performed with a Windrow Turner. Pile turning introduces oxygen, accelerates physical degradation of feedstocks and provides an opportunity to adjust the moisture content to the optimum level. Many windrow turners have a watering attachment or a water truck will accompany a turner, which enables moisture to be added to the pile while turning.

Aerated static piles are not turned during active composting as they are on a forced air system, so pile porosity must be maintained by structural integrity of the material. Amendments such as ground wood chips or green waste (shredded tires may also be used to accomplish the same purpose) are commonly used to help maintain pile structure.

At the completion of the active composting cycle, the compost product is moved out of its zone or pile with front-end loaders and delivered to the curing area.

3. Curing

Following the active composting phase, the material is transferred to a separate area for curing. The curing phase allows for the compost product to stabilize before final screening. Compost material will cure for approximately 20-40 days.

4. Final Screen, storage and load out

Following the curing phase, the compost product will be prepared to send to market. This usually involves screening the finished product to customer specs and to separate the larger fraction (or "overs").

The finished product meets requirements for maximum acceptable pathogen concentrations, meeting requirements for Salmonella, fecal coliform in the compost product as outlined in the CalRecycle regulations.

Finished compost product will also meet maximum acceptable metals concentrations as outlined in the regulations. Metals include: Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, and Zinc.

Physical Contamination of the finished compost product is also limited by the regulations. Finished product cannot contain more than .5% by weight of contaminants greater than 4 millimeters, and no more than 20% of that .5% can be film plastic greater than 4 millimeters.

Testing and sampling occur during and after the composting process to ensure these standards prior to removal of the compost from the facility.

Odor Control

Odor management is vital to successfully siting and maintaining composting facilities. The first step in odor control is an understanding of the process and how to minimize odor generation.

The primary sources of odor generation at composting facilities are:

- 1. Delivery and handling of raw feedstocks
- 2. Active composting process
- 3. Screening operations
- 4. Curing process

Controllable factors that impact the potential for odor generation includes feedstock quality, aeration, moisture, porosity, pH, temperature and time. Most of the odorous compounds are generated during the first 14 days of active composting. To reduce any potential odors generated by anaerobic metabolism, the process is kept in an aerobic state.

Best management practices throughout the composting process to help reduce odor includes good housekeeping practices, liquids control such as leachate collection and treatment, and prompt processing of more odorous feedstock. Potential emission control systems include chemical scrubbers, granular activated carbon (GAC), trickling filters (biofiltration towers) or biofilters.

Need for the Proposed Project

Throughout California, local jurisdictions are using recycling and composting technologies as a practical and efficient method to divert organics materials from landfills. As new state and local policy results in more aggressive diversion targets, the need for additional organics processing/recycling infrastructure increases. In the August 2018 report, Composting in California, a joint paper written by the California Air Pollution Control Officers Association, the California Air Resources Board and CalRecycle, it is stated that California will need at least 75-100 new organics processing facilities to meet the demands of the new policies.

The Proposed Project responds to a series of Alameda County (County) and State of California (State) mandates to increase organics diversion from landfills.

Under State law, cities and counties have been mandated to significantly reduce the volume of all solid waste taken to landfills. Specifically, the 1989 California Integrated Waste Management Act (IWMA), Assembly Bill (AB) 939, mandated that jurisdictions reduce the volume of waste that is landfilled by 25 percent in 1995 and by 50 percent by 2000, as compared to the 1990 baseline disposal levels. The Act also established a hierarchy of preferred waste management practices as follows:

- a) Source reduction, to reduce the amount of waste generated at its source;
- b) Recycling and composting, to divert solid waste from entering landfills; and
- c) Environmentally safe landfill disposal or transformation (incineration of solid waste).

There have also been a number of new state laws enacted affecting organic waste management, which include the following:

- Senate Bill (SB) 1383. Requires reduction in methane by reducing 50% of currently disposed organic waste in landfills by 2020, and 75% by 2025.
- Assembly Bill (AB) 1572. This bill gives the California Department of Resources and Recycling Recovery (CalRecycle) greater flexibility in ensuring locals comply with sustainable waste management law while reducing burdens associated with oversight for areas that exceed state requirements.
- **AB 876.** Requires jurisdiction to report estimated additional organics infrastructure required and locations for new/expanded infrastructure. The local counties and regional agencies are also required to estimate the amount of organic waste during a 15-year period.
- **AB 1594.** The bill requires a local jurisdiction to include information in an annual report on how the local jurisdiction intends to address these diversion requirements and divert green material that is being used as alternative daily cover.

In 1990, Alameda County voters approved Measure D, the Alameda County Waste Reduction and Recycling Act, with the goal of reducing waste by 75 percent by 2010. Measure D also established the Alameda County Source Reduction and Recycling Board (Board), which is responsible for programs that promote source reduction, recycling, recycled product procurement, market development, and grants to non-profit waste reduction enterprises.

Because organic materials comprise a large portion of the waste stream, and because organics diversion is critical to achieving a countywide 75 percent landfill waste diversion goal, the Alameda County Waste Management Authority (Authority), also known as StopWaste, and the Board have targeted organic materials for diversion from landfills and have enacted policies and goals to develop composting capacity within the County (ACWMA 2015). The Authority is responsible for the preparation of the Alameda County Integrated Waste Management Plan and Alameda County Hazardous Waste Management Plan. In addition, it manages a long-range program for development of solid waste facilities and offers many programs in the areas of source reduction and recycling, market development, technical assistance and public education.

In 2003, the ACWMA adopted the *Alameda County Source Reduction and Recycling Plan, Vision 2010: 75% and Beyond* (Plan). The Plan identified specific programs, objectives, and strategies for the County to reach a 75 percent and beyond diversion rate, and served as a guiding document, together with the Countywide Integrated Waste Management Plan (CoIWMP).

The Organics Program of the Plan consists of two complementary efforts:

- a sustainable landscaping program that prevents, and recycles plant debris and promotes recycled content building materials in landscapes, and
- centralized collection and processing of food scraps, plant debris and contaminated paper.

According to the Plan, food is the single largest category of landfilled waste at 12 percent, and with the addition of contaminated paper and plant debris, the compostable portion of the waste stream is 27 percent of all landfilled materials. The 2017-2018 Annual Waste Characterization Study showed

that organics, broken into categories: food soiled paper, plant debris and food scraps made up 18.2% of the waste stream. The Plan considers composting as the preferred method of handling compostable materials because it is a cost effective, proven technology that is environmentally beneficial. The Plan also states that to reach the 75 percent diversion, targeting programs to divert foodwaste and contaminated paper and demolition and construction debris are especially important.

The ACWMA has established a goal of promoting the siting of up to two composting facilities within Alameda County. This goal is established in the Plan adopted by both the County Recycling Board and StopWaste. The purpose of in-county facilities is to minimize the transporting of organic materials out of the County and to provide a local site for the purchase of finished compost materials, such as mulch. As described above, the majority of the organic waste material generated in the County is currently being landfilled, or is being transported to organics processing facilities outside of the County.

Table 2.1-1 lists current composting facilities in Alameda County along with associated capacities and feedstock types accepted at each facility.

Composti ng Facility	SWIS Number	Location	Maximum Permitted Throughput Tons/day	Maximum Permitted Capacity (Tons/year)	Waste type
Bee Green Recycling and Supply	01-AA- 0326	740 Julie Ann Way Oakland , CA 94621	199	NA	Green Materials, Wood waste
Vision Recycling	01-AA- 0308	30 Greenville Rd. Livermore , CA 94551	200	62,000	Green Materials, Wood waste
Vision Recycling	01-AA- 0313	6756 Central Ave. Newark , CA 94560	200	72,000	Wood waste
Vision Recycling Green Waste Compostin g	01-AA- 0322	30 Greenville Rd. (B) Livermore , CA 94551	3,375	13,500	Green Materials, Wood waste

1. Table 0-1. Active Composting Facilities in Alameda County

Composti ng Facility	SWIS Number	Location	Maximum Permitted Throughput Tons/day	Maximum Permitted Capacity (Tons/year)	Waste type
Altamont Landfill Compostin g Facility	01-AA- 0325	10840 Altamont Pass Rd. Livermore , CA 94551	500	346,700	Agricultural, residential foodwaste, Construction/d emolition, Green Materials, Mixed municipal

1. Table 0-1. Active Composting Facilities in Alameda County

Source: CalRecycle 2018

The Proposed Project is consistent with goals and objectives of the Alameda County Waste Management Plan as stated in Objective 2.5 which is "to achieve by composting an additional 425,000 tons of countywide diversion of organics per year by 2020".

Currently, a major portion of Alameda County's composting feedstock is being transported out of County to composting facilities, such as the Recology Blossom Valley Organics North facility located in Vernalis (approximately 21 miles southeast of the Proposed Project), Newby Island Landfill composting facility located in Milpitas (approximately 36 miles southwest of the Proposed Project), and the Redwood Landfill composting facility located in Marin County (approximately 79 miles northwest of the Proposed Project). Approximately 35 percent of the remaining potential organic composting feedstock is currently disposed of in Alameda County landfills. In addition, Waste Management's Altamont Landfill has been recently permitted to accept up to 500 tons per day (TPD) of greenwaste, foodwaste and agricultural waste. Altamont Landfill opened the first industrial covered ASP composting facility in Alameda County in April 2018 (Waste Management 2018). The facility is capable of processing up to 500 TPD of residential green waste co-collected with foodwaste and is located approximately 5 miles northwest of the Project area. No other composting facilities in Alameda County accept agricultural waste, foodwaste, or biosolids, as shown in Table 2.1-1 (California Department of Resources Recycling and Recovery [CalRecycle] 2018).

The Bay Area produces approximately 160,000 dry tons of biosolids annually. Currently biosolids are generally applied during dry months and used as landfill cover during the rainy season. The Proposed Project would be the only site in the Bay Area that could use biosolids as a compost feedstock.

It is anticipated that a significant portion of the feedstock supplying the Proposed Project would come from Alameda County. Organic feedstocks would also likely come from other Bay Area counties.

The location and design of the Proposed Project have been chosen to serve the anticipated market areas—primarily agricultural uses in the California Central Valley —while providing sufficient isolation to minimize the potential for aesthetic concerns, odors and similar effects in residential areas. Transportation distances, both to transport organic material feedstock to the Project site and to transport composted material to market areas, are balanced with remoteness to minimize adverse effects. The Project site is located within a 30-mile radius of major sources of organic materials, which is generally a lesser distance than where organics are currently being transported for processing.

Project Objectives

The primary objectives of the Proposed Project are as follows:

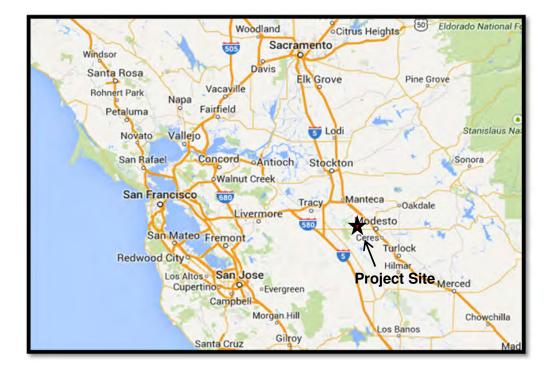
- Assist jurisdictions in Alameda County in meeting the diversion goals of the IWMA and Alameda County's Measure D by diverting organic materials from landfills;
- Assist other jurisdictions in other counties, as appropriate, in meeting their individual diversion goals;
- Assist the state in providing additional organics processing capacity to meet the requirements of recent legislation;
- Facilitate and secure a long-term, in-county, organics processing facility available to government agencies to increase the diversion of green and food materials from the waste stream;
- Satisfy local and regional market demands for compost-based amendments; and
- Support the County in meeting their 75-percent goal for waste reduction countywide by diverting from the waste stream up to 1,000 TPD of organic materials.

Overview of the Proposed Project

Regional Project Setting

The Proposed Project is located in the eastern portion of unincorporated Alameda County, at the eastern edge of the San Francisco Bay Area. San Joaquin County is located immediately to the east. As such, the Project site is conveniently located close to the urban and suburban organic waste generating communities of the San Francisco Bay Area, as well as the potential agricultural soils amendment markets of California's Central Valley. The nearest communities to the Proposed Project include the City of Livermore, located approximately eight miles west of the Project site, and the City of Tracy, located approximately eight miles east of the Project site. The California Aqueduct and the Central Valley Project Canal are located approximately 2.5 miles northeast of the Project site. The regional location of the Project site is shown on Figure 2.3-1.

Figure 2.2-1 Regional Location



Project Site

The Proposed Project would be implemented at the Jess Ranch property located east of the Altamont Pass at 15850 Jess Ranch Road (APN 99B-7800-007-08) (Figure 2.3-2). The Project site comprises of approximately 30 acres located within the southeastern portion of the 160-acre Jess Ranch property (Figure 2.2-2). The Project site is bounded on the north by I-580; to the east, south and west by agricultural lands; and to the southwest by the Southern Pacific Railroad right-of-way.

Access to the Project site is provided via I-580 and West Grant Line Road; the I-580/ Grant Line Road interchange is located approximately 0.5 mile from the Project site. At the terminus of West Grant Line Road is Jess Ranch Road. A gravel road crosses the Project site from north to south. A second gravel/dirt road is located south of the storage area and runs along the southern Project site boundary. The former Southern Pacific Railroad right-of-way crosses through the Jess Ranch property from southeast to northwest for slightly more than 1,500 feet; this right-of-way is 200 feet in width and delineates the southern boundary of the Project site access routes and the location of the former Southern Pacific Railroad right-of-way are displayed on Figure 2.4-3.

The parcel on which the Project site is located does not contain any residences or other buildings. Adjacent to the Jess Ranch are parcels which are both publicly and privately owned. Parcels to the west and north are owned by the Contra Costa Water District (CCWD) (APN 99B-7800-007-07) and are under a conservation easement to be used as habitat mitigation. The Contra Costa Water District property shares an address with the Jess Ranch property at 15850 Jess Ranch Road; however, these two properties have separate APNs, as distinguished above. Cattle continue to graze on these parcels as part of the property management plan. The CCWD parcel contains a temporary modular residence that will be removed from the site in 2019, as well as a service center structure for wind turbine operators. The CCWD parcel is currently accessed by a number of vehicles daily. An easement shared with the CCWD would be used as part of the Proposed Project only during pre-construction as a temporary access road. Access to the Project site during

construction and operations would be through use of a new road that would be constructed as part of the project.



Figure 2.2-2 Project Site

Other land uses in the general vicinity of the Proposed Project include wind farms, grazing lands and rural residences. The nearest school is the Mountain House School located approximately four miles to the north of the Project site on Mountain House Road.

The Project site is located on the eastern edge of the Altamont Hills, and drains into the San Joaquin Delta watershed by way of Mountain House Creek. The average elevation of the Project site is approximately 470 feet. The rainfall averages 12-14 inches per year, with very high variation. The rangeland ecosystem is predominantly annual grassland.

Seasonal drainages traverse the Project site, carrying water primarily during the rainy season, and drying out during the summer and fall. Perennial vegetation primarily consists of grasses and forbs. The Project site does not have any woody vegetation, which is typical for the Altamont Hills area.

The Project site is located within California's Altamont Pass Wind Resource Area and, at one time, included wind-generating turbines on much of its acreage. The wind turbines are no longer in operation and remnant structures have been removed.

Project Description

The Proposed Project will receive organic materials for composting, which will produce a compost product soil amendment for agricultural, horticultural, erosion control and land reclamation uses.

The Proposed Project would receive primarily green materials, food materials, and biosolids, but may also receive untreated scrap wood, natural fiber products, non-recyclable paper waste, and

inert material, such as sediment, gypsum, wood ash, and clean construction debris. Non-hazardous liquid wastes may also be accepted to be used as moisture conditioning in the piles to aid in efficient composting and minimize nuisance conditions.

Food materials, green materials and biosolids are defined as:

- Green Material or greenwaste, means any plant material that is separated at the point of generation, contains no greater than 1.0 percent of physical contaminants by dry weight, and meets the requirements of Section 17868.5 (14 California Code of Regulations [CCR] 17868.5). Green material includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, wood waste from silviculture and manufacturing, and construction and demolition wood waste. Green material does not include food material, vegetative food material, biosolids, mixed material, material separated from commingled solid waste collection or processing, wood containing lead-based paint or wood preservative, or mixed construction and demolition debris. (14 CCR 17852 Chapter 3.1, Article 1).
- Food Material or foodwaste, means a waste material of plant or animal origin that results from the preparation or processing of food for animal or human consumption and that is separated from the municipal solid waste stream. Food material includes, but is not limited to, food waste from food facilities as defined in Health and Safety Code section 113789 (such as restaurants), food processing establishments as defined in Health and Safety Code section 111955, grocery stores, institutional cafeterias (such as prisons, schools and hospitals), and residential food scrap collection. Food material does not include any material that is required to be handled only pursuant to the California Food and Agricultural Code and regulations adopted pursuant thereto. (CCR Title 14, Chapter 3.1, Article 1, Section 17852).
- "Biosolids" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids includes, but is not limited to, treated domestic septage and scum or solids removed in primary, secondary, or advanced wastewater treatment processes. Biosolids includes the residue solids resulting from the co-digestion of anaerobically digestible material with sewage sludge. Biosolids does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during the preliminary treatment of domestic sewage in a treatment works. (CCR Title 14, Chapter 3.1, Article 1, Section 17852).

In addition to the processing of greenwaste, foodwaste, and biosolids, other organic material feedstocks such as wood waste, wood ash and straw could be processed into a high quality compost, mulch product and/or soil amendment. Because some of these feedstocks contain a relatively high moisture content, the compost facility anticipates using a variety of dry bulking agents such as wood waste, ground brush, rice hulls and straw.

Potential greenwaste sources include local cities and waste transfer stations. Foodwaste and feedstock materials' sources include the many restaurants and supermarkets throughout the San Francisco Bay Area and neighboring jurisdictions. It is anticipated that the compost facility would receive approximately forty percent of its material as greenwaste and ten percent in the form of foodwaste. Biosolids would likely make up the remaining fifty percent of the feedstock processed at the site. The percentage of bulking agents used would vary, depending on the combination of primary waste products and resulting moisture content.

As mentioned previously, the Proposed Project would be designed to accept up to 1,000 TPD of organic feedstock at full build out. Based on the bulk density of the incoming feedstocks, the site would process approximately 2,800 cubic yards of material per day. Table 2.2-2 below shows the average and maximum quantities of individual feedstocks on a TPD basis.

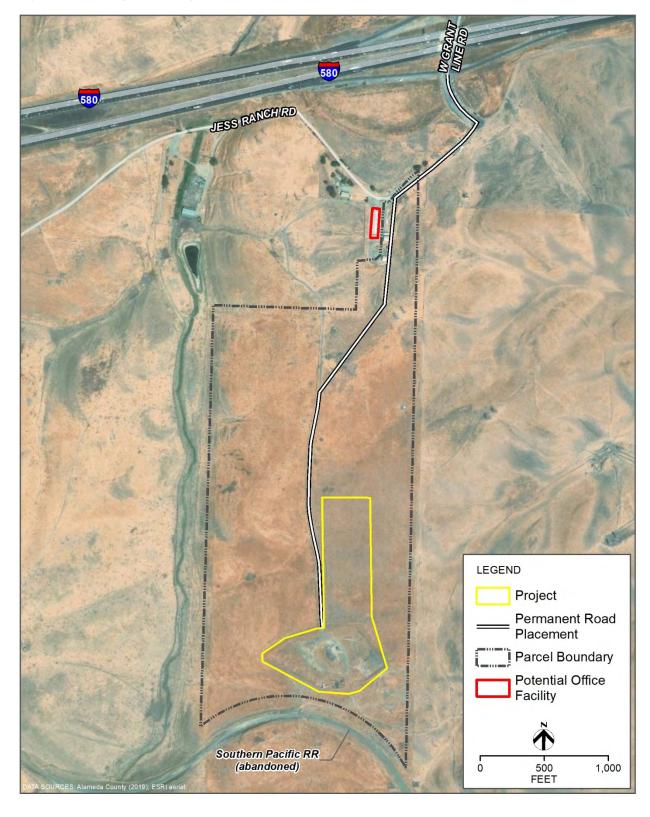
Feedstock	Average TPD	Maximum TPD
Biosolids	300	500
Greenwaste	500	800
Foodwaste	80	200
Wood Chips	70	160
Agricultural Waste	30	150
Ash	20	80
Total	1,000	

2. Table 2.2-2. Average and Maximum Daily Feedstock

TPD=tons per day

At full buildout, the Proposed Project will occupy a footprint of approximately 30 acres. Within the 30 acre footprint, the site will include a receiving and mixing building, a biofilter, active composting pads, curing pads, storm water catchment basins and perimeter drainage ditches, and circulation roads/areas. The Proposed Project would be developed in two phases. Initially, the Proposed Project would be developed to full build out, supporting a maximum throughput of up to 1,000 TPD. See Figures 2.2-3, 2.2-4, and 2.2-5)

The Proposed Project would utilize an aerated static pile (ASP) system technology for the active composting phase, using positive aeration, negative aeration or a combination of both. The Proposed Project may also utilize microporous fabric covers or biocovers placed over active composting piles to reduce odors and emissions necessary to meet the Bay Area Air Quality Management District (BAAQMD) emission requirements.





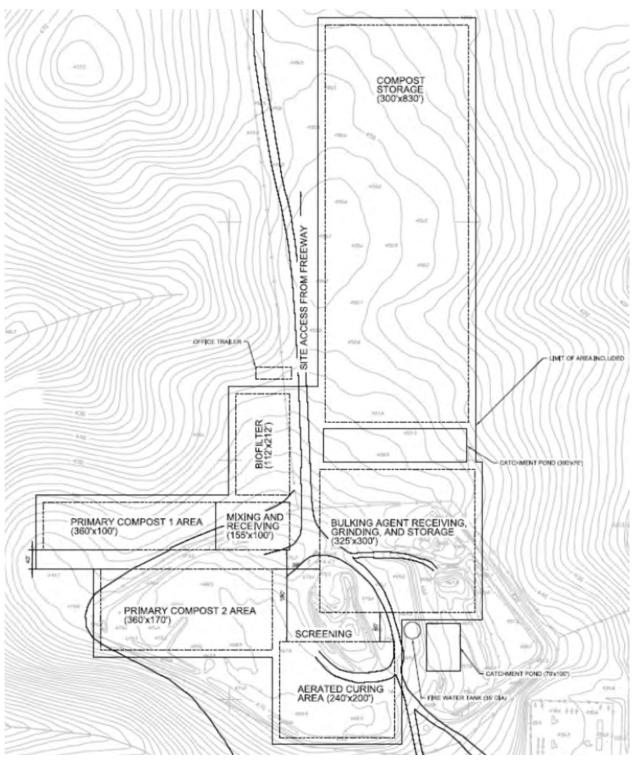
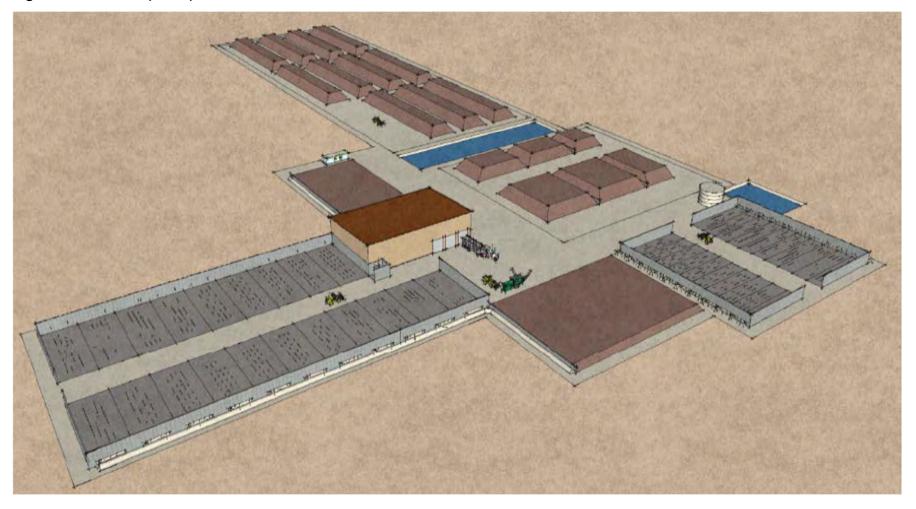


Figure 2.2-4 Site Plan (Overview)

Figure 0-5 Site Plan (Detail)



Organic feedstock materials would be delivered to the site by trucks from regional municipal solid waste collection transfer stations, wastewater treatment plants, and other sources. It is anticipated that the majority of feedstock would arrive from sources within the San Francisco Bay Area, with some feedstocks potentially coming from the Central Valley.

Under normal operating conditions, the Proposed Project would generate approximately 100 roundtrips (or 200 vehicle trips) per day for the 500 TPD facility (Phase 1) and 200 round trips (400 vehicle trips) per day for the 1,000 TPD facility at full build out (Phase 2). The vehicles would consist of trucks delivering feedstock and water, employee vehicles, trucks off-hauling finished compost products, and visitors to the site up to six days per week.

The Proposed Project would accept incoming material approximately 312 days per year (6 days per week). Operations at the Proposed Project are planned for 24 hours per day, 7 days per week. However, composting operations would occur in most instances during daylight hours. Delivery of materials would occur mostly during daytime hours, but also may be delivered during nighttime hours.

The Proposed Project would also involve the use of office space for administrative tasks. An office building located just outside of the Project Area parcel boundary at 15850 Jess Ranch Road in Tracy (APN 99B-7800-007-07) would be one of two possible locations for the Jess Ranch office facility (see Figure 2.2-3). This property is owned by Contra Costa Water District and would be leased by Denali under the Proposed Project. No changes or modifications to the existing buildings or outside areas would be proposed under this option. The second option for office space would be to employ portable buildings within the existing Project Area; details for this option are provided in the *Installation of Facilities* section below. Construction and operations of the Proposed Project are described in further detail below.

Construction of the Proposed Project

At full build-out, the Proposed Project would process up to 1,000 TPD of organic material utilizing ASP system technology. Construction of the Proposed Project would include grading the currently unimproved property, dewatering, excavation and soil removal, deposition and compaction of fill material, reuse of excavated soil as fill, transporting and installing materials and equipment, disposal of soil and construction waste, and construction of ponds and Project access roads. Construction would be completed in two phases: construction of the initial facility with a capacity of 500 TPD (Phase 1) and expansion of the facility for a capacity up to 1,000 TPD (Phase 2).

Other site improvements would include the following features, all described in further detail below:

- Entrance road with entrance/exit scale
- Arriving and departing vehicle circulation area
- Feedstock receiving and mixing area
- Bulking agent receiving, grinding, and storage area
- Aerated active composting pads with leachate collection systems
- Compost curing pads
- Potential portable modular office and administration buildings (depending on office and administration building option chosen)

- Maintenance building and storage area
- Employee parking area
- Final product (compost) storage pad
- Finished compost sales and load-out pad
- Screening area
- Stormwater catchment ponds
- Biofilters for the mixing and receiving building, and ASP composting infrastructure

Construction Methods and Activities

Construction of the Proposed Project would be completed in two phases: construction of the initial facility up to 500 TPD (Phase 1) and expansion of the facility up to a full buildout of 1,000 TPD (Phase 2). For each phase, typical construction sequencing and activities to be involved in the construction include:

- Preparation of staging areas, including transport of materials and equipment,
- Site preparation and earthwork such as grading, excavation, and backfill,
- Installation of facilities.

The following subsections describe the actions associated with each of these activities in greater detail.

Construction Staging and Access

Staging of materials and equipment would occur at key points during the construction schedule. Staging for the improvements would occur within the boundaries of the Project site, but outside of the area of key improvements. The area designated for staging would be cleared and prepared for receipt of construction equipment and building materials.

Excavated material would be reused, as possible, within the Project site for fill. During peak excavation and earthwork activities, the Proposed Project could generate up to 30 roundtrip truck trips per day for the onsite movement of material. However, during the majority of construction activities, the average daily truck trips per day would be approximately 10 to 15 round trips. Roadways that would be used by construction traffic include Jess Ranch Road, Grant Line Road and Highway I-580/Interstate 205.

Offsite road improvements for temporary access purposes during Phase 1 of construction includes Grant Line Road from the I-580 off-ramp to the termination of the road; this improvement would involve widening the existing road by 10 feet to accommodate truck traffic and vehicles parking on Grant Line Road. The offsite road shares an easement with Contra Costa Water District and would be utilized temporarily during the early portion of Phase 1 construction, until completion of the permanent two-lane entrance road.

Site Preparation and Earthwork

Site preparation and earthwork would consist of stripping the area of existing vegetation and either removing or storing the materials for later use in the finished grading phase. Grading would consist of cutting or filling the site to produce overall site gradients as specified in the final design. Surfaces

would be graded to drain to a collection system and/or perimeter drainage ditch that would deliver the runoff to the catchment basins.

Grading includes the preparation of the primary operational areas, such as the arriving and unloading area, building and maintenance areas, grinding and processing areas, active composting pads, and curing and final product storage areas.

Grading would take place in the areas of the active composting, curing, and finished product storage pads. Level building pads are also required for the Mixing and Receiving, bulking agent storage, potential portable modular office and administration buildings and Maintenance buildings. Grading of the overall site (about 30 acres) is estimated at about 91,000 cubic yards, summarized by phase and location below. The cut material would be utilized as fill required for the facility, thereby eliminating the need to export or import soil.

- Phase 1 Earthwork: It is estimated that up to 50,000 cubic yards of material would be graded (excavated and filled) for this phase of the Project.
- Phase 2 Earthwork: It is estimated that up to 30,000 cubic yards of material would be excavated for this phase of the Project.
- Access Road: It is estimated that 11,000 cubic yards of material would be excavated for the access road.
- Drainage: Additional site grading would include drainage swales to direct stormwater runoff away from the site as well as to control runoff from the active composting, curing, and finished product storage pads.

Installation of Facilities

- Permanent Main Entrance/Exit Road
 - A two lane, 25 foot wide, all-weather entrance road would be constructed from the southerly terminus of Grant Line Road to the entrance scale within the Project site (Figure 2.4-3). The entrance road would proceed westerly from Grant Line Road, and then turn south passing east of the existing windmill maintenance facility. This permanent facility access road would be constructed in accordance with Alameda County Public Works and Fire Department standards.
- Entrance Scales
 - The facility includes a truck scale station, which would weigh the trucks entering and exiting the compost facility to determine incoming and outgoing weights.
- Traffic Lanes
 - The compost facility would include internal traffic lanes (minimum of 20 feet wide) for circulation within the facility.
- Greenwaste Receiving Area
 - Clean greenwaste would be stored outside in a designated area adjacent to the processing building. Any mixed loads containing foodwaste would be placed into the processing building.
- Foodwaste/Biosolids Mixing and Receiving Building

- The Mixing and Receiving building for foodwaste and biosolids consists of an enclosed building that provides three days of storage capacity for up to 1,000 tons of mixed greenwaste/foodwaste, foodwaste and biosolids materials.
 Blending would occur in the building prior to transportation of materials to the active composting area.
- Outside of, and adjacent to, the building, front-end loaders (FELs) or other operational equipment would be stored on a hardstand located adjacent to the Mixing and Receiving Building. A small fueling tank and other hazardous materials storage containers would also be located at the hardstand site.
- Screening/Load out Area
 - The screening/load out area would be located adjacent to the finished product storage area. Compost would be screened and then loaded into transport trucks for delivery to customers.
- Conveyor System
 - A conveyor system may be installed and utilized at the site that would allow materials to be moved easily from the receiving and pre-processing area to the primary compost area, then to the curing and finished screening areas.
- Composting Pads/Working Surfaces
 - The Proposed Project includes the installation of composting pads. All working surfaces would meet the hydraulic conductivity requirements of the RWQCB, and be resistant to damage from movement of mobile operating equipment and weight of piles. Working surfaces would meet one of the following construction and material specifications in accordance with the RWQCB State General Order for Composting :
 - Soil Asphalt concrete or Portland cement concrete;
 - Compacted soils, with a minimum thickness of one foot; or
 - An equivalent engineered alternative.

In lieu of meeting the hydraulic conductivity methods, RWQCB allows Project proponents to propose implementation of a groundwater protection monitoring program; a work plan for such programs would be submitted to the RWQCB for approval prior to construction.

The active composting pads would also include a leachate collection system whereby leachate would be collected and reapplied to the compost piles or sent offsite to a wastewater treatment plant for disposal.

- Air conveyance
 - The air conveyance system would consist of a series of blowers and underground piping, which would be used to positively or negatively aerate the composting piles.
- Storage/Finished Product Loading Pad
 - The compost screening, storage and product loading pad would be constructed on approximately 8 acres.

- Greenwaste Stockpile Area
 - The greenwaste stockpile area would include storage capacity for three days of greenwaste deliveries. The piles would be up to 12 feet high, 50 feet wide and 250 feet long.
- Processing Area for Foodwaste
 - The foodwaste processing area would be contained within the mixing building and would consist of storage bays and feedstock mixers/blenders with a conveyor system.
- Bulking Agent Receiving, Grinding, and Storage Area
 - The Bulking Agent Receiving, Grinding, and Storage Area would contain grinders, conveyors and stockpiles.
- Non-compostable Residual Off-Haul Stockpile
 - It is anticipated that up to three percent of the incoming feedstock may contain non-compostable materials, which would be screened before or after the composting process. These non-compostable residual materials would be screened, stockpiled and loaded or conveyed into trailers for disposal or further processing offsite at a permitted facility.
- Maintenance Building, Storage Area, and Office and Administration Building
 - Administration and maintenance functions for the compost facility would be housed within two facilities that would include employee offices (either onsite or offsite), an onsite maintenance building, a storage area and employee parking.
 - The maintenance building would be a 1,000 square-foot fabric or metal covered structure. The maintenance building would include space for regular maintenance of operating equipment (blowers, conveyors, and pollution control equipment), fueling and storage of operating equipment, and storage of other operating supplies and spare parts.
 - The first option for an office and administration building would be to lease the existing building owned by Contra Costa Water District, located immediately adjacent to the Project Area parcel boundaries to the northwest (as shown in Figure 2.2-3). The second option for the office and administration building would consist of an approximately 800 square-foot pre-fabricated modular trailer unit located within the Project Area. The office areas would include space for managers and employees to conduct regular business activities, as well as a break/dining and restroom facilities.
 - A total of 15 parking spaces are proposed to provide parking for 10 full time employees, as well as visitors to the site. Parking areas would be constructed in accordance with Alameda County requirements with materials that provide for all-weather access.
- Catchment Ponds
 - Stormwater in the Project site would be diverted and contained onsite in engineered catchment ponds, thereby preventing any offsite discharges. Water

from the catchment ponds would be reapplied to the active compost piles or evaporate. A total of two catchment ponds would be constructed to accommodate a 25-year, 24-hour peak storm event. The total combined capacity of the ponds would be approximately 20 acre-feet. Ponds would be designed to contain all precipitation within the operational areas to prevent any overtopping or offsite flow of liquids.

All ponds would be designed and constructed with a pan lysimeter monitoring device located under the lowest point of the pond to detect potential discharge. Pond liners would meet the hydraulic conductivity requirements of the RWQCB. Catchment pond monitoring would include quarterly inspections of the pond's liner, available capacity and volume, and ancillary structures. Annual monitoring of liquid within the ponds would be conducted each spring (when there is sufficient water to sample). Pan lysimeters would be checked monthly during the wet season. If fluid is detected, the RWQCB would be contacted within 48 hours and a sample would be collected and sent for analysis.

- Perimeter Drainage Ditch
 - A perimeter drainage ditch would collect runoff from the facility and direct it to one of the two catchment ponds. Drainage ditches would be designed to convey precipitation and runoff from a 25-year, 24-hour peak storm event, and meet a hydraulic conductivity of 1.0 x10⁻⁵ cm/s or less. Ditches would be properly sloped to prevent ponding along reaches and would be kept free and clear of debris to allow for continuous flow of liquid to the catchment ponds. Ditches would be inspected and cleaned out prior to the rainy season every year.
- Perimeter Berm
 - A perimeter buffer soil berm would be located just outside of the drainage ditches and surrounding the entire perimeter of the facility. The berm would be two feet high, approximately 4 feet wide and would serve to prevent offsite discharge.
- Vegetation Screening

Trees would be planted on the western side of the facility to create a windbreak and help screen the facility from public view.

• Biofilters

The Proposed Project includes the use of at least one biofilter, which is a control device that utilizes living organisms to capture and biologically degrade volatile organic compounds generated as part of the composting process. The biofilter will be sized adequately to throughput and site needs.

Construction Equipment

Table 2.4-2 lists the types of major equipment anticipated for each of the two construction phases, and an approximate count for each type. The equipment usage may vary, based on the construction schedule, the contractor's capabilities, and the availability of equipment.

Construction Phase	Anticipated Number and Type of Equipment That May Be Utilized By the Construction Contractor*	Anticipated Duration of Phase			
Site Preparation	2 bulldozers 1 road grader 1 soil compactor 2 backhoes 1 crane	1 month			
Phase 1 Construction – 500 TPD Facility	 3 rubber-tired loaders 1 water truck 1 road grader 1 soil compactor 2 backhoes 1 crane 	4 months			
Phase 2 Construction – 1,000 TPD Facility	2 rubber-tired loaders	4 months			
Site Cleanup	1 backhoe 1 road grader 1 soil compactor	1 month			

3. Table 2.2-2. Types of Major Equipment Needed for Each Phase

*Equipment may be utilized concurrently

Construction Schedule

Grading of the site is planned to occur during non-rainy months between April 15th and October 15th. It is anticipated that construction for Phase 1 would begin in Spring 2020 and be completed in Fall 2020; construction for Phase 2 could then begin as early as Spring 2021 and be completed in Fall 2021. However, Phase 2 would not occur until the additional capacity is required for the facility, so that phase could be postponed up to 5 years following Phase 1.

It is estimated that construction activities could take place up to 10 hours per day, 6 days per week, Monday through Saturday. Construction activities would typically occur during daylight hours and as allowed by County ordinance. The specific number of hours that each piece of equipment would be used during a typical construction day is not known and would be determined by the construction contractor.

The typical crew size for each construction phase would be five to ten people, plus inspectors. It is expected that up two construction crews could be present during the most intense construction periods. Work hours would be determined by permits issued by regulatory agencies and County ordinances.

Detailed Construction Sequencing

Phase 1 construction activities are anticipated to follow the sequence outlined below:

- Site Preparation
- Grading and finishing of permanent access road (11,000 cubic yards)
- Grading of composting area (30,000 cubic yards)
- Grading of finished product storage area (10,000 cubic yards)
- Pouring foundation for primary composting and aeration area
- Pouring foundation for process building
- Installation of process building (fabric building)
- Installation of weigh scale and scale house
- Installation of electrical power
- Installation of water tank for fire storage
- Potential installation of portable modular office and administration buildings (depending on office and administration building option chosen)
- Potential installation of water line from existing well to portable modular office and administration buildings (depending on office and administration building option chosen)
- Paving of secondary composting area
- Installation of fencing
- Construction of stormwater catchment ponds, perimeter ditch and berm.
- Site Cleanup.

Phase 2 construction activities are anticipated to follow the sequence outlined below:

- Grading of composting area (40,000 cubic yards)
- Grading of finished compost storage area (10,000 cubic yards)
- Pouring foundation for primary composting and aeration area
- Paving of secondary composting area
- Construction of stormwater catchment ponds.

Operation of the Proposed Project

Days and Hours of Operation

Operations at the Proposed Project are planned for 24 hours per day, 7 days per week. However, composting operations would occur in most instances during daylight hours. Delivery of materials would occur mostly during daytime hours, but also may be delivered during nighttime hours.

Current cattle grazing activities, and operations at the Jess Ranch unrelated to the composting operation would continue to occur on the portions of the property not used for the Proposed Project.

Delivery, Reception, and Onsite Distribution

The Proposed Project would involve approximately 12 employees and 5 visitors per day. Under normal operating conditions, the site would generate approximately 100 round trips (200 vehicle trips) per day for the 500 TPD facility (Phase 1) and 200 round trips (400 vehicle trips) per day for the 1,000 TPD facility at full build out (Phase 2). The vehicles would consist of trucks delivering feedstock and water, employee vehicles, trucks off-hauling finished compost products, and visitors to the site up to six days per week. These trucks are anticipated to be end-dumps or live floor transfer type trailers that are tarped and/or sealed to prevent blowing or leaking of materials during transport to the site. The truck and trailer combinations have maximum payloads of up to approximately 25 tons. Trucks access the compost facility via an all-weather road connecting from the I-580 and Grant Line Road interchange to the site, for a distance of approximately 0.75 mile.

Composting operations would occur primarily during daylight hours; however, operations are planned for 24 hours per day, 7 days per week.

To minimize peak hour Project-related truck traffic, night delivery and unloading of organic feedstock materials may occur, as well as loading and shipping of finished compost product.

Night loading and unloading operations would be illuminated with shield light standards similar to those found on construction sites. Additionally, facilities would be provided with directional nighttime lighting for security and safety purposes. To minimize generation of fugitive light, fixtures proposed for the Proposed Project would be effectively shielded and directed inward toward the proposed facilities.

Trucks arriving to the site would be weighed at a scale located at the entrance of the facility. The vehicles would proceed to the Materials Receiving area. After unloading their contents, the trucks would be weighed again when departing. Similarly, vehicles arriving empty to purchase finished compost would be weighed when arriving and departing. Scale Attendants would conduct financial transactions for the delivery. The scale attendants would also serve as the first step in a materials screening program whereby the vehicle driver would be requested to verify the source of the materials and their appropriateness for processing at the facility.

Feedstock Receiving and Pre-Processing

Incoming feedstocks would be unloaded and consolidated in one of three receiving areas prior to being processed. All foodwaste, comingled food/greenwaste and biosolids would be received within an enclosed building. Clean greenwaste would be received outside in an open designated area. Bulking agents received at the compost facility would be processed as necessary in an outdoor area adjacent to the Mixing and Receiving Building.

The incoming feedstock would be prepared for composting using pre-processing methods such as sorting, grinding or shredding. Larger, bulkier fractions that are not suitable for composting, such as large pieces of wood, could be segregated and stockpiled for off-site use including biofuel or landscape mulch. Within the Mixing and Receiving Building, mixed feedstock materials would be loaded into pugmill mixers and combined with the amendment materials. The mixers would discharge the combined mixture onto a hardstand where it would be moved by a conveyor system or front end loader to the active composting area.

To help minimize odors, the mixing building would be under negative air pressure with internal air pressure less than exterior conditions, thereby acting to contain and control odors and emissions that may generate from within these structures. For the proposed Mixing and Receiving Building, this negative air condition would be achieved by actively drawing air from the building. Air exhausted from the Mixing and Receiving Building would be captured and directed to a biofilter. The ventilation system for this building would be designed to achieve a minimum of six (6) air changes per hour.

Processed feedstock materials may be transported onsite by front-end loaders, loaded directly into a trailer, dump truck or conveyor system for delivery to the active composting pad, or stockpiled in the processing area for a short period of time for consolidation.

Active Composting

After the feedstock is pre-processing and prepared for composting, the organic materials would be moved to the active composting pad. During the active composting phase, the feedstock will be composted using an ASP system technology for a period of approximately 14-20 days.

The active composting pads would also include a leachate collection system, where any leachate would be collected and either reapplied to the compost piles, or transported off-site to a wastewater treatment plant for disposal.

Curing

Following the active composting phase, the compost would be transferred to the curing area. The curing phase allows for the compost product to stabilize following the primary composting phase in anticipation of the final screening. Curing areas would be smaller than the primary static piles, since there is a substantial reduction of material during the active composting phase.

Monitoring and Testing

The Proposed Project would be required to comply with CCR to ensure public health and safety (Title 14, Chapter 3.1, Article 7, Section 17868.1-17868.4). The regulations require regular sampling of finished compost material for compliance with heavy metals and pathogen reduction standards. Testing methods and parameters are described in further detail in Chapter 3, Environmental Setting and Impact Analysis.

Finished Product

Once the compost has completed the curing process it would be transferred to a finished product storage area. The product would be stored in this area until it is ready to be moved out to customers.

Most, though not all of the compost, would be screened prior to sale so that it is sized to meet market requirements. Screening would be conducted using a portable screening plant such as a trommel screen. The screen separates the compost into two fractions: the unders or undersize

fraction passing through the screen and the overs, or larger fraction, or that which does not pass through the screen. The unders are typically sold as compost (3/8 inch screen size is typical but certain markets specify different screen sizes). The overs are typically used to add additional structure back into the earlier compost process; use as a biocover, sold for fuel; or sold for other uses.

The screened product would be temporarily held in an approximately eight-acre area onsite. Additional screening would occur within the finished material loading area to ensure higher end product materials, as needed.

Load-out

Finished compost (and other products) would be stockpiled onsite prior to being loaded out for delivery to end users. Load-out would include using front-end loaders to load a variety of trucks. It is anticipated that some of the finished compost would be back-hauled from the site in transfer trailers that have delivered feedstock to the facility.

Operations Equipment

The Proposed Project would utilize various pieces of equipment in order to receive and process the organic materials. Table 2.4-3 below provides a list of the equipment anticipated to operate the facility on a day-to-day basis.

Electric Equipment	Number	Horsepower
Horizontal Grinder	1	500
Organics Mixer	2	125
Aeration Blowers	22	5
Diesel Powered Equipment	Number	Horsepower
Compost Turner	1	540
Trommel Screen	1	100
10-Wheel Dump Trucks	2	200
Wheel Loaders	3	250
Mobile Cover Winder	1	75

4. Table 2.2-3. Operation Equipment

Fire Prevention

The Proposed Project will be operated in compliance with all relevant regulations for fire prevention. In accordance with CalRecycle regulations (Title 14, Chapter 3.1., Article 6, Section 17867(8)) and Section 1908.3 of Chapter 19 of the California Fire Code, facility operations will be done in such a way to provide fire prevention, protection and control measures, including but not limited to:

- Temperature monitoring and reporting of windrows and ASP systems
- Limits on sizing of composting, curing and storage piles
- Provide for adequate water supply for fire suppression
- Isolation of potential ignition sources from combustible materials
- Fire lanes at a minimum of 20 feet wide to allow fire control equipment access to all active composting areas.

Water Demand and Supply

The required water volume to serve the Proposed Project would need to accommodate an annual maximum throughput of up to 300,000 tons of material. Although the quantity of water can vary, depending on a variety of issues, such as material feedstock moisture content, wind, the use of covers, etc., a facility of this size would likely require availability of between 10,000 and 25,000 gallons of water per day. In addition, The Proposed Project includes a 120,000 gallon onsite water tank for fire suppression purposes.

Generally, composting facilities require additional moisture to be added to the composting process in order to reach an optimal moisture concentration of approximately 55 percent. The Proposed Project would utilize biosolids as one of the primary feedstocks in their process, which contain approximately 80 percent water. Because of the high moisture content of biosolids, rather than requiring additional water, drier materials would need to be added to the process in order to reduce the moisture content to optimal levels for composting. Therefore, the water demand for the Project would be lower than other composting facilities that do not process biosolids.

The primary water supply for the Proposed Project would be provided by the Byron Bethany Irrigation District (BBID). Although the Project site is outside of the boundaries of the district, BBID water is generally available for users outside of its district boundaries. BBID would supply water from their canal located approximately 2.4 miles to the north, in Contra Costa County. The water would be delivered to the facility utilizing water tanker trucks.

In the event that BBID does not have water available due to extreme drought conditions, recycled water is available from the City of Tracy's (City) wastewater treatment plant. According to the City, the use of recycled water for the Proposed Project would be consistent with the City's General Plan, which encourages the use of recycled water for industrial purposes. The wastewater treatment plant is located approximately 8 miles east of the proposed facility. The City currently produces approximately 7 million gallons per day of recycled water. In addition, the City has recently been approved for an \$18 million grant to extend its recycled water infrastructure and pipelines to the western portion of the City. Once the pipeline extension is completed (2019), recycled water would be available at approximately 4 miles from the proposed facility. This water source would be available for the foreseeable future, and water trucks would transport the recycled water to the proposed facility.

The City of Livermore also has recycled water available for the Project. According to the City, there is sufficient surplus recycled water available at several sites within the city limits and there is no restriction that the water be used within the city boundaries.

During the three wettest winter months of the year, catchment ponds constructed on the site as part of the Project's stormwater control system could provide the facility's water supply. Stored stormwater from the retention ponds would be aerated and treated/conditioned prior to its reuse for onsite purposes. It is anticipated that all of the water used on site would be directed to and retained within the catchment ponds. The catchment ponds would be designed to meet or exceed RWQCB requirements.

The combined catchment pond capacity for the Proposed Project is preliminarily sized at approximately 20 acre-feet. This estimated capacity would be enough to support average 12-month cyclical water demands of the facility, as augmented by the BBID canal water supply. Consistent with the additional storage requirements that may be included in the stormwater permit, two feet of freeboard capacity would be provided within the storage area to contain excess stormwater flows. Any excess water would be made available for irrigation of the adjacent grazing land at the site or trucked off site for disposal at a waste water treatment facility.

Additionally, about 200 gallons per day of potable water would be required to support an estimated ten full time employees and visitors. This potable supply would be provided from the existing onsite well that currently supplies water for cattle on Jess Ranch. The estimated volume of water currently produced by the well is approximately five gallons per minute, a sufficient capacity to support the existing and proposed uses.

In order to provide sufficient water for fire protection, water would be obtained from the BBID irrigation canal, the City of Tracy (recycled water), or the City of Livermore and stored onsite. A 120,000-gallon water storage tank would be is proposed for fire protection purposes (1,000 gallons per minute for 2 hours in accordance with Alameda County Fire Department regulations).

Wastewater

Primary sources of wastewater generated by the Proposed Project includes compost leachate, truck washout wastewater, and wastewater from sanitation uses. To provide for flexibility in ultimate design and operation of the Proposed Project, combined systems are proposed to address reuse, treatment and/or disposal of wastewater resulting from truck washing and leachate generated by the composting process.

All active leachate and truck washing/area wash down wastewater would be held onsite for moisture conditioning of the compost piles. The preferred option is to reuse the wastewater onsite for operations. Any wastewater that cannot be recycled within the Project site would be temporarily held in tanks onsite for ultimate offsite treatment and disposal at an approved wastewater treatment facility.

Wastewater would also be generated by sanitation uses (e.g., toilets, employee washrooms). Wastewater from these activities would be treated by a septic system, held in a holding tank for disposal or through the use of portable chemical toilets. Solids from the septic tank would be periodically removed and transported to a wastewater treatment plant by a contract operator. All such sanitary wastewater treatment/disposal systems would be reviewed and approved by the Alameda County Department of Environmental Health. If holding tanks or chemical toilets are used, they would be periodically pumped out by toilet providers and the waste disposed of at an appropriate site.

Required Discretionary Actions

A summary of the anticipated permits and approvals that are likely to be required for the Proposed Project is provided below in Table 2.5-1. Agencies with jurisdiction over those permits or approvals would consider the information provided in the Initial Study in determining under what conditions to issue permits or approvals.

Agency	Type of Approval
Federal	
United States Army Corps of Engineers	Clean Water Act Section 404 Permit
United States Fish and Wildlife Service	Section 7 Consultation for Federal Endangered Species Act compliance
State	
California Department of Fish and Wildlife	Consultation for State Endangered Species Act compliance
California Native American Heritage Commission	Consultation for effects on Native American burials or artifacts
Regional Water Quality Control Board	General Order Coverage or Waste Discharge Requirements
	National Pollutant Discharge Elimination System General Permit for Stormwater Discharge Associated with Construction Activities, and Industrial Stormwater Permit
	Clean Water Act Section 401 Water Quality Certification
CalRecycle	Solid Waste Facilities Permit
Local	
Bay Area Air Quality Management District	Authority to Construct, Pollution Control District Regulation VIII-Fugitive Dust Control, Rule 8010
	Permit to Operate
	Permit to Construct

Table 2.5-4. Summary of Anticipated Permits and Approvals

Agency	Type of Approval
Alameda County	Conditional Use Permit
	Building and Grading Permits
	Review of Stormwater Pollution Prevention Plan
Alameda County Waste Management	Determination of Conformance with County Integrated Waste Management Plan (CoIWMP)
	ColWMP Amendment (Non-Disposal Facility Element)
Alameda County Department of Environmental Health	Solid Waste Facilities Permit
(Local Enforcement Agency)	Approval and Permit for Septic System Design and Installation
	Registration with Certified Unified Program Agency (CUPA)
	Review and Approval of Vector Program
Alameda County Flood Control District, Zone 7	Approval for proposed onsite septic system

Table 2.5-4. Summary of Anticipated Permits and Approvals



Evaluation of Environmental Impacts

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

- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

I. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a)	Have a substantial adverse effect on a scenic vista?		
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?		
C)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?		
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		

Impact Analysis

a) Potentially Significant Unless Mitigation Incorporated. The Proposed Project would alter the existing visual character of the site by introducing composting operations on essentially undeveloped land. The site's existing appearance would be transformed from undeveloped grassland to an active compost processing facility. The site would be devoted primarily to composting windrows and related facilities and equipment. Several new structures are proposed on a portion of the site. In addition, paved parking and storage areas, an access road, and an area devoted to processing of material related to composting activities are also proposed.

The former Jess Ranch residence is located adjacent to and north of the Project site, and although the change to existing visual resources on the property itself would be high, the viewer response level would be considered low because the Proposed Project is not visible from the residence. Other area residents and travelers through the area would perceive changes in the visual environment attributable to Proposed Project development as adverse due to the loss of an aesthetically pleasing view, though for the most part, topography obstructs roadway views toward the site.

Based on intermittent visibility of the site from I-580, its designation as a scenic corridor in the Alameda County General Plan Scenic Route Element (see Section 3.3.1 *Regulatory Framework* of the EIR Appendix), and the potential for motorists and occupants of adjacent land uses to perceive the Project changes as a substantial degradation of the existing visual character and/or quality of the site and its surroundings, this impact is conservatively assumed to be potentially significant unless mitigation is incorporated. Implementation of Mitigation Measure AES-1 would reduce the Proposed Project's potential visual impacts to a less-than-significant-level.

- b) No Impact. The 30-acre Project site consists of undeveloped land, currently used for cattle grazing. The site is primarily grass-covered. Approximately 8 acres was previously used to store empty truck trailers and other equipment. No trees currently exist within the Proposed Project site. The elevation of the relatively flat site varies between 430 and 470 feet. There are no existing structures on the Project site and the only improvement consists of a well that provides water for the cattle operation. Further, the Proposed Project would not impact a state scenic highway.
- c) **Potentially Significant Unless Mitigation Incorporated**. See discussion under item a).
- d) Potentially Significant Unless Mitigation Incorporated. Under existing conditions, the Project site does not generate significant sources of light, glare, or light trespass into the night sky. Development of the Proposed Project would introduce nighttime light sources related to the proposed outdoor security lighting and lighting associated with the proposed buildings. In addition, even though non-reflective, non-glare finishes would be used on all facilities, some glare associated with the new buildings could occur on sunny days. Due to the relatively dark appearance of the Jess Ranch property currently, the introduction of new light sources would be noticeable to motorists on I-580. The lights would also be visible to residences with a direct line of sight to the Project area and would be perceived as a slight glow on the horizon for those residents that cannot see the facility directly. However, because lighting at the facility would not be expected to be intensive, the nighttime lighting would not be expected to diminish the visibility of stars and other features of the night sky. Implementation of Mitigation Measure AES-2 would reduce the Proposed Project's light and glare effects to a less-than-significant level.

Mitigation Measures

Mitigation Measure AES-1: Provide visual screening of Project facilities.

In order to partially screen views of the Proposed Project where it will be visible from I-580, a berm, which will be at least 4 feet tall, will surround the facility and will appear against a hillside landscape backdrop. In order to minimize glare, non-reflective, non-glare finishes shall be used for all compost facility structures. The color of proposed building facades and roofs shall be designed to minimize the potential for visual contrast between the compost facility and its natural landscape surroundings. Bright or very light colors (including white) shall be avoided. Re-contouring and revegetation of temporarily disturbed, graded areas shall be completed to provide a natural appearing landform upon completion of construction.

Mitigation Measure AES-2: Reduce light and glare effects.

In order to reduce the potential light and glare effects of the Proposed Project, the following measures shall be incorporated:

- 1. All lighting shall be focused towards the site and outdoor lighting shall be directed downward;
- 2. The design of exterior light fixtures shall incorporate shielding to prevent glare and offsite light spillage;
- 3. Outdoor Project lighting shall include non-glare fixtures; and
- 4. The Project lighting design, including the location and specific fixture types to be used, shall be subject to review by the County Planning Department.

II. Agriculture and Forestry Resources

Significant Mitigation Significant Environmental Issue Area: Impact Incorporated Impact No Impact	Environmental Issue Area:	<u> </u>			No Impact
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In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?		
C)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?		
d)	Result in the loss of forest land or conversion of forest land to non-forest use?		
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?		
c) d)	Conflict with existing zoning for agricultural use, or a Williamson Act contract? 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))? Result in the loss of forest land or conversion of forest land to non-forest use? 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		

Impact Analysis

- a) **No Impact.** The Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and such land uses would not be impacted by proposed Project activities.
- b) Less than Significant Impact. The California Department of Conservation has oversight responsibility for Williamson Act Program administration and compliance. However, local governments are authorized to adopt rules governing the administration of agricultural preserves within their jurisdiction. The Jess Ranch is currently under a Williamson Act contract. Alameda County has determined that commercial composting

is consistent with the Williamson Act contract lands. However, the commercial composting area is limited to ten acres. In order for the Proposed Project to be completed, a cancellation of 20 acres of the site's Williamson Act Contract would need to be approved by the County and California Department of Conservation.

The property owner has filed a Notice of Non-Renewal, dated October 10, 2014, with the Clerk of the Board of Supervisors. The document was recorded on November 20, 2014. The Alameda County Board of Supervisors authorized the Notice of Non-Renewal on December 16, 2014.

In addition, the property owner has prepared a Petition for Cancellation of the Williamson Act contract for twenty acres of 160-acre property (Partial Cancellation). The Petition has been reviewed by Alameda County staff and it was determined that the Petition is complete and ready for submittal to the Board of Supervisors and Department of Conservation. Pending the approval of the Petition for Partial Cancellation, impacts with respect to conflict with an existing Williamson Act contract would be considered less than significant.

- c) **No Impact.** No forest land is located within the Project Area and none would be impacted by proposed Project activities.
- d) **No Impact.** No forest land is located within the Project Area and none would be impacted by proposed Project activities.
- e) Less than Significant Impact. The Proposed Project is located on lands designated as Large Parcel Agriculture in the East County Area Plan (ECAP). The ECAP lists solid waste landfills and related waste management facilities as permitted uses for this land designation. The majority of the Project site is currently operated as a cow-calf operation. The current primary land use is for cattle grazing and breeding. The Project site does not include land being used currently or historically for active agricultural production. Implementation of the Proposed Project would result in the conversion of land zoned by Alameda County as agricultural to a non-agricultural use. However, as described above, compost facilities are permitted uses within the Agricultural zoning designation, and therefore the Proposed Project would be consistent with the Alameda County Zoning Ordinance, upon issuance of the Conditional Use Permit. Further, implementation of the Proposed Project would not remove any agricultural use would be less than significant and no mitigation would be required.

III. Air Quality

Significant Significant Potentially Unless Less Than Significant Mitigation Significant Environmental Issue Area: Impact Incorporated Impact
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Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a)	Conflict with or obstruct implementation of the applicable air quality plan?		
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		
c)	Expose sensitive receptors to substantial pollutant concentrations?		
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?		

Impact Analysis

- a) Potentially Significant Impact. Bay Area Air Quality Management District (BAAQMD) recommends that the agency approving a project where an air quality plan consistency determination is required analyze the project with respect to the following questions. If all the questions are concluded in the affirmative, and those conclusions are supported by substantial evidence, the BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.
 - 1. Does the project support the primary goals of the Air Quality Plan (AQP)?
 - 2. Does the project include applicable control measures from the AQP?
 - 3. Does the project disrupt or hinder implementation of any AQP control measures?

The BAAQMD prepared the 2017 Clean Air Plan (CAP) to address nonattainment in the SFBAAB for both the 1- and 8-hour state ozone standards. The 2017 CAP details a control strategy to address ozone and ozone precursors (ROGs and NOx), particulate matter (primarily PM_{2.5}), air toxics, and GHGs. The Proposed Project would conflict with or obstruct the 2017 CAP if construction of the Proposed Project generates criteria pollutant that exceed numerical thresholds defined by BAAQMD to attain the goals and objectives of the 2017 CAP (see Tables 3.4-2, 3.4-3, and 3.4-5 in the EIR Appendix).

The Proposed Project would exceed the BAAQMD's significance criteria for criteria air pollutant emissions during operation. Therefore, the Proposed Project would conflict with or obstruct implementation of the applicable air quality plan, impacts are anticipated to be potentially significant with Project implementation.

b) Potentially Significant Impact. With regard to regional criteria air pollutants, according to the BAAQMD, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. There are many projects throughout the San Francisco Bay area that have been identified as having significant and unavoidable operational and construction-related regional pollutant impacts. Consequently, for assessment of cumulative regional pollutant impacts, BAAQMD has developed a methodology of assessing whether a project would have a cumulatively considerable contribution.

According to the 2017 BAAQMD CEQA Guidelines, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts on the region's existing air quality conditions (BAAQMD, 2017).

The project's operational emissions would exceed the BAAQMD's thresholds of significance. As such, combining project emissions with emissions from other projects would result in cumulatively significant air quality operational impacts.

b) Less than Significant Impact.

Construction Impacts

Exposure levels of TACs generated by construction of the Proposed Project were estimated by conducting dispersion modeling (using EPA's SCREEN3 model) of potential TAC sources (diesel particulate matter (DPM) as exhaust PM_{2.5}). DPM is the only TAC associated with construction activities and it does not have an acute health impact. Therefore, only the chronic risk, increase in cancer risk, and ambient PM_{2.5} concentration risks and hazards criteria were evaluated.

The nearest receptor is the offsite residence, located northwest of the Proposed Project. The analysis was performed assuming that all of the annual emissions (obtained from the CalEEMod output) were emitted in a single year. The risks and hazards resulting from the Phase 1 and Phase 2 construction activities, evaluated at the nearest receptor, are summarized below in Table 3.4-11.

Risk/Hazard	Phase 1 Project Impact	Phase 2 Project Impact	BAAQMD Significance Threshold	Significant?
Non-Cancer Chronic (Hazard Index)	0.0	0.1	1.0	No
Increased Cancer Risk (per million)	0.1	0.1	10.0	No
Ambient PM _{2.5} (μg/m3)	0.1	0.1	0.3	No

Table 0-1. Phase 1 Risks and Hazards Evaluation and Significance Determination

As shown in the table above, the Proposed Project risks and hazards criteria during construction of both Phase 1 and Phase 2 of the Proposed Project would not exceed any of the BAAQMD threshold criteria and would therefore constitute a less than significant impact, and no mitigation would be required.

The cumulative risks and hazards were evaluated by adding the Proposed Project's impacts on those of other local sources located within the Proposed Project's zone of influence. The only existing source located within the Proposed Project's zone of influence is the eastbound lane of Highway 580. The cumulative risks and hazards resulting from the Phase 1 and Phase 2 construction activities, evaluated at the nearest receptor, are summarized below in Table 3.4-12.

Table 0-2. Phase 1 Risks and Hazards Evaluation and Significance Determination

Risk/Hazard	Phase 1 Project Impact	Phase 2 Project Impact	BAAQMD Significance Threshold	Significant?
Non-Cancer Chronic (Hazard Index)	0.1	0.1	10.0	No
Increased Cancer Risk (per million)	21	21	100	No
Ambient PM2.5 (µg/m3)	0.3	0.2	0.8	No

As shown in the table above, the cumulative risks and hazards criteria during construction of both Phase 1 and Phase 2 of the Proposed Project would not exceed any of the BAAQMD threshold criteria and would therefore constitute a less than significant impact, and no mitigation would be required.

Operation Impacts

Exposure levels of TACs generated by operation of the Proposed were estimated by conducting dispersion modeling (using EPA's SCREEN3 model) of potential TAC sources (diesel particulate matter (DPM) as exhaust PM2.5). DPM is the only TAC associated with operation and it does not have an acute health impact. Therefore, only the chronic risk, increase in cancer risk, and ambient PM2.5 concentration Risks and Hazards criteria were evaluated.

The nearest receptor is the offsite residence, located approximately 430 feet northwest of the nearest point on the property line of the Proposed Project. The analysis was performed using the annual emissions obtained from the CalEEMod output. The risks and hazards resulting from operation of the proposed facility, evaluated at the nearest receptor, are summarized in Table 3.4-13. As shown, the Project risks and hazards criteria resulting from operation of the Project (regardless of the composting process chosen) would not exceed any of the BAAQMD threshold criteria and would therefore constitute a less than significant impact, and no mitigation would be required.

The cumulative risks and hazards were evaluated by adding the Proposed Project's impacts on those of other local sources located within the Project's zone of influence. The only existing source located within the Project's zone of influence is the eastbound lane of Highway 580. The cumulative risks and hazards resulting from the operation of the Proposed Project, evaluated at the nearest receptor, are summarized in Table 3.4-14. As shown, the cumulative risks and hazards criteria resulting from operation of the Proposed Project (regardless of the composting process chosen) would not exceed any of the BAAQMD threshold criteria and would therefore constitute a less than significant impact, and no mitigation would be required.

Risk/Hazard	Cumulative Impact	BAAQMD Significance Threshold	Significant?			
Unmitigated						
Windrows						
Non-Cancer Acute (Hazard Index)	0.3	1.0	No			
Non-Cancer Chronic (Hazard Index)	0.7	1.0	No			
Increased Cancer Risk (per million)	0.2	10.0	No			
Ambient PM _{2.5} (µg/m ³)	0.2	0.3	No			
Mitigated						
Windrows with Micro-Porous Fabric Cover						
Non-Cancer Acute (Hazard Index)	0.1	1.0	No			
Non-Cancer Chronic (Hazard Index)	0.2	1.0	No			
Increased Cancer Risk (per million)	0.1	10.0	No			
Ambient PM _{2.5} (µg/m3)	0.2	0.3	No			
Positive ASP with Micro-Porous Fabric	Cover					
Non-Cancer Acute (Hazard Index)	0.1	1.0	No			
Non-Cancer Chronic (Hazard Index)	0.2	1.0	No			
Increased Cancer Risk (per million)	0.1	10.0	No			
Ambient PM _{2.5} (µg/ ^{m3})	0.2	0.3	No			
Positive ASP with biocover						

Table 0-3. Project Peak Day Operations Risks and Hazards Evaluation and Significance Determination

Risk/Hazard	Cumulative Impact	BAAQMD Significance Threshold	Significant?		
Non-Cancer Acute (Hazard Index)	0.1	1.0	No		
Non-Cancer Chronic (Hazard Index)	0.2	1.0	No		
Increased Cancer Risk (per million)	0.1	10.0	No		
Ambient PM _{2.5} (µg/m ³)	0.2	0.3	No		
Negative ASP Vented to Biofilter					
Non-Cancer Acute (Hazard Index)	0.1	1.0	No		
Non-Cancer Chronic (Hazard Index)	0.2	1.0	No		
Increased Cancer Risk (per million)	0.1	10.0	No		
Ambient PM _{2.5} (µg/m ³)	0.2 0.3		No		
Rotating Drum Vented to Biofilter					
Non-Cancer Acute (Hazard Index)	0.1	1.0	No		
Non-Cancer Chronic (Hazard Index)	0.2	1.0	No		
Increased Cancer Risk (per million)	0.1	10.0	No		
Ambient PM _{2.5} (µg/m ³)	0.2	0.3	No		

 Table 0-3. Project Peak Day Operations Risks and Hazards Evaluation and Significance

 Determination

 Table 0-4. Cumulative Peak Day Operations Risks and Hazards Evaluation and

 Significance Determination

Risk/Hazard	Cumulative Impact	BAAQMD Significance Threshold	Significant?				
Unmitigated							
Windrows							
Non-Cancer Acute (Hazard Index)	0.4	10.0	No				
Non-Cancer Chronic (Hazard Index)	0.8	10.0	No				
Increased Cancer Risk (per million)	20.9	100	No				
Ambient PM _{2.5} (µg/m ³)	0.4	0.8	No				
Mitigated							
Windrows with Micro-Porous Fabric Co	ver						
Non-Cancer Acute (Hazard Index)	0.1	10.0	No				
Non-Cancer Chronic (Hazard Index)	0.2	10.0	No				
Increased Cancer Risk (per million)	20.8	100	No				
Ambient PM _{2.5} (µg/m3)	0.4	0.8	No				

Risk/Hazard	Cumulative Impact	BAAQMD Significance Threshold	Significant?				
Positive ASP with Micro-Porous Fabric Cover							
Non-Cancer Acute (Hazard Index) 0.1 10.0							
Non-Cancer Chronic (Hazard Index)	0.2	10.0	No				
Increased Cancer Risk (per million)	20.8	100	No				
Ambient PM _{2.5} (µg/ ^{m3})	0.4	0.8	No				
Positive ASP with biocover							
Non-Cancer Acute (Hazard Index)	0.1	10.0	No				
Non-Cancer Chronic (Hazard Index)	0.2	10.0	No				
Increased Cancer Risk (per million)	20.8	100	No				
Ambient PM _{2.5} (µg/m ³)	0.4	0.8	No				
Negative ASP Vented to Biofilter							
Non-Cancer Acute (Hazard Index)	0.1	10.0	No				
Non-Cancer Chronic (Hazard Index)	0.3	10.0	No				
Increased Cancer Risk (per million)	20.8	100	No				
Ambient PM _{2.5} (µg/m ³)	0.4	0.8	No				
Rotating Drum Vented to Biofilter							
Non-Cancer Acute (Hazard Index)	0.1	10.0	No				
Non-Cancer Chronic (Hazard Index)	0.3	10.0	No				
Increased Cancer Risk (per million)	20.8	100	No				
Ambient PM _{2.5} (µg/m ³)	0.4	0.8	No				

 Table 0-4. Cumulative Peak Day Operations Risks and Hazards Evaluation and

 Significance Determination

d) Less than Significant Impact. Odor can be generated during the initial mixing process, depending on the feedstock and the time over which incoming feedstock materials have been stored prior to mixing. For example, grass cuttings decay rapidly, and if stored prior to mixing, may emit ammonia and other types of sharply odorous compounds. Consequently, it is important for odor control that such incoming feedstock be mixed as soon as possible upon arrival at the site.

Processing, grinding, and conveying the materials to the windrows also have the potential to generate odors, especially for putrescible materials such as grass clippings and food waste. Odors can be carried in the dust generated during the conveyance and grinding processes.

Newly formed windrows containing fresh organic material can potentially generate odors when improperly managed. Odors produced at this stage are principally the result of the decomposition or breakdown of proteins and fats that contain sulfur and nitrogen compounds. These compounds generally break down during the first 6-14 days of the active composting phase, and odor generation is significantly reduced after this initial stage of decomposition. Forced aeration helps to add aeration to the windrow as well as help break down the organic feedstock, minimizing odor event potential. However, if improperly managed, portions of the pile can become anaerobic, and may result in the release of odors because some of the organic material within the pile may be in an anaerobic state. Compounds formed under anaerobic

conditions and their characteristic odors may include hydrogen sulfide (rotten egg), carbon disulfide (disagreeable sweet), dimethyl sulfide (rotten cabbage), and ammonia (pungent, sharp).

When the windrows are torn down, the potential for odors is considerably lower than for the initial composting process, because the compost has become more stable with time. The rate of decomposition is less and many of the odor-producing compounds have already broken down. There is less potential for odor generation during the final (curing) stage of composting, since organic compounds have already been degraded and curing piles require relatively infrequent turning. In addition, odors from finished compost are usually not considered to be offensive, unlike fresh composting feedstocks.

Odor levels are generally minimal during final loading of the finished compost product for shipment offsite, and the characteristics of the odor from this process is that of an earthy, soil-like material.

The nearest receptor is located approximately 2,500 feet north of the operations area of the Proposed Project. This receptor is located within the BAAQMD's 1 mile screening distance for composting facilities listed in Table 3.4-4. When the owners accepted biosolids for land application in the past, no odor complaints were recorded. Any odors that may have occurred at the Project site were quickly dissipated due to the frequent winds in the Altamont Pass area. Any odors generated during operation of the Proposed Project would be minimized by proper management and housekeeping, the composting option(s) used and would also be dissipated by these frequent winds. As a result, no odor complaints are anticipated to result from Proposed Project operation, and the Proposed Project would meet the BAAQMD threshold. Implementation of the minimization measures outlined below would further reduce odor related impacts on nearby receptors as a result of Proposed Project operation.

The following composting option(s) that would be used at the proposed facility to minimize VOC emissions would also minimize odors:

- Windrow composting (represents the worst-case, unmitigated emissions)
- Windrows with micro-porous fabric cover (mitigated)
- Positive ASP with micro-porous cover (mitigated)
- Positive ASP with biocover (mitigated)
- Negative ASP vented to biofilter (mitigated)
- Rotating drum vented to biofilter (mitigated)

In addition, the receiving and processing of incoming foodwaste and biosolids inside a building, with negative air conveyed to a biofilter, will help to minimize potential odors from the receiving of potentially odorous feedstock.

As required by CalRecycle, the proposed facility would also develop and implement an OIMP that would include procedures to establish fence line odor detection thresholds. Therefore, impacts related to the creation of objectionable odors during operation would be less than significant, and no mitigation would be required.

IV. Biological Resources

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

Impact Analysis

a) Potentially Significant Unless Mitigation Incorporated. The species or species groups identified below were determined to have the potential to be significantly impacted by Project-related activities, either directly or through habitat modification. Impacts on these species would be considered a potentially significant impact. The following general avoidance and minimization measures would be implemented to reduce effects on special-status species, in accordance with the requirements of the East Alameda County Conservation Strategy (EACCS).

Special-Status Plants

Suitable habitat for up to 18 species of special-status plant species occurs in the Project area. These plants could occur throughout the Project area; therefore, implementation of Project-related activities may result in adverse impacts on these species should they be present in areas proposed for disturbance, which would be considered a potentially significant impact. In addition to the general mitigation measures outlined above, implementation of mitigation measures BIO-24 and BIO-25 is recommended to further minimize the potential for adverse effects on special-status plant species.

Special-status Amphibians and Reptiles

California red-legged frogs and California tiger salamanders were documented by WRA (2016) in a pool approximately 200 feet northwest of the Project area, and small mammal burrows in the Project area could provide upland refugia for these species. In addition, the California glossy snake and San Joaquin coachwhip have the potential to occur in the Project area. Lastly, USFWS designated critical habitat for California red-legged frog overlaps the Project area. As a result, ground disturbing activities within Project area would result in temporary and permanent impacts on suitable habitat for these species, which would be considered a potentially significant impact. In addition to the general mitigation measures outlined above, implementation of mitigation measures BIO-26 through BIO-29 is recommended to further minimize and mitigate potential adverse effects on the California red-legged frog, California tiger salamander, California glossy snake, and San Joaquin coachwhip.

Migratory Birds and Raptors

The Project area may provide nesting, wintering and/or foraging habitat for grasshopper sparrows, burrowing owls, northern harriers, loggerhead shrikes, as well as nesting, other migratory birds and raptors not identified in Appendix D. All native breeding birds (except game birds during the hunting season), regardless of their listing status, are protected under California Fish and Game Code 3503. Ground disturbance, as well `as vegetation clearing during the nesting season could result in direct impacts on nesting birds should they be present in or adjacent to construction disturbance areas. Furthermore, noise and other human activity may result in nest abandonment if nesting birds are present within 200 feet (500 feet for raptors) of a work site. In addition to the general mitigation measures outlined above, implementation of mitigation measures BIO-30 and BIO-31 is recommended to further minimize and mitigate potential adverse effects on the migratory birds and raptors.

San Joaquin Kit Fox and American Badger

Surveys conducted by WRA (2016) did not reveal the presence of potential den sites for either the San Joaquin kit fox or American badger. However, the presence of documented occurrences for these species within 5 miles of the Project area and suitable grassland habitats onsite, results in the potential for these species to become established in the Project area. As a result, Project-related activities have the potential to result in adverse effects on San Joaquin kit fox and American badger. In addition to the general mitigation measures outlined above, implementation of mitigation measures BIO-32 through BIO-35 is recommended to further minimize and mitigate potential adverse effects on these species.

b) Potentially Significant Unless Mitigation Incorporated. Implementation of Project activities would result in the loss of riparian vegetation, aquatic or wetland habitat, and/or sensitive natural communities, which would be considered a potentially significant impact. Sensitive habitats include (a) areas of special concern to resource agencies; (b) areas protected under CEQA; (c) areas designated as sensitive natural communities by the CDFW; (d) areas outlined in FGC Section 1600; (e) areas regulated under Clean Water Act Section 404; and (f) areas protected under local regulations and policies. Annual grassland and ruderal/developed areas are not considered to be natural communities of special concern; however, annual grassland may provide potential habitat for special-status species, which is discussed under significance criteria (a) above. The Project area contains two aquatic resource classes: seasonal wetlands and an ephemeral drainage.

All aquatic resources in the Project area are considered sensitive natural communities. Impacts on aquatic resources as a result of Project-related activities have not been quantified; however, the Proposed Project, would be designed to avoid impacts on these resources, where feasible. Despite this, there is the potential for Project activities to impact sensitive communities should they occur in or near the final Project footprint, including temporary and permanent access roads. Impacts on sensitive natural communities would be minimized through the implementation of aforementioned general avoidance, minimization, and mitigation measures, as well as Mitigation Measure BIO-36.

c) **Potentially Significant Unless Mitigation Incorporated.** Implementation of Project-related activities would result in the permanent loss of state or federally protected wetlands, which would be considered a

potentially significant impact. As stated under significance criteria b) above, impacts on state/federally protected aquatic resources as a result of Project-related activities have not been quantified. The Proposed Project would be designed to avoid impacts on these resources, where feasible. Despite this, there is the potential for Project activities to impact aquatic resources should they occur in or near the final Project footprint, including temporary and permanent access roads. Impacts on aquatic resources would be minimized through the implementation of aforementioned general avoidance, minimization, and mitigation measures, as well as Mitigation Measure BIO-36 to reduce impacts on state or federally protected wetlands to a less than significant level. No additional mitigation measures are proposed.

- d) Less than Significant Impact. Implementation of the Proposed Project would not substantially interfere with the movement of native resident or migratory wildlife species. The review of available data layers for the Bay Area Linkage Network revealed the presence of core habitat for California tiger salamander (*Ambystoma californiense*), northern harrier (*Circus hudsonius*), loggerhead shrike (*Lanius ludovicianus*), and American badger (*Taxidea taxus*) as defined in the. In addition, the Project area intersects patch habitats for San Joaquin coachwhip (*Masticophis flagellum ruddocki*) and San Joaquin kit fox (*Vulpes macrotis mutica*). The Proposed Project has largely been sited to impact mustard and ruderal/developed habitats that do not provide high value movement corridors or habitat for the aforementioned species. In addition, the Proposed Project is not anticipated to significantly alter the permeability of the site and or adjacent properties for wildlife movement. As a result, no impact is anticipated, and no additional avoidance and minimization measures are proposed.
- e) Less than Significant Impact. Implementation of Project activities would not conflict with local policies and ordinances. The ECAP has two policies centered on the preservation of areas known to support special-status species, and encourage no net loss of riparian and seasonal wetlands. Project-related impacts on special-status species and sensitive communities have been analyzed under significance criteria (a) and (b) above. As a result, there would be no conflict with any local policies and no impact is anticipated. No additional avoidance, minimization, and/or mitigation measures are proposed.
- f) Less than Significant Impact. Implementation of the Proposed Project would not 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 Proposed Project is within conservation zone 10 of the EACCS; however, the impacts analyzed under significance criteria (a) and (b) above, and the avoidance and minimization measures presented in this section are consistent with those outlined in the EACCS and PBO. As a result, there would be no conflict with any adopted conservation plan and no impact is anticipated. No additional avoidance, minimization, and/or mitigation measures are proposed.

Mitigation Measures

Mitigation Measure BIO-1: Prior to construction, a construction employee education program would be conducted in reference to special-status species onsite. At minimum, the program would consist of a brief presentation by persons knowledgeable in endangered species biology and legislative protection to explain avoidance and minimization Measures (AMMs) that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities. The program would include: a description of the species and their habitat needs; any reports of occurrences in the Project area; an explanation of the status of each listed species and their protection under the Act; and a list of measures being taken to reduce effects to the species during construction and implementation. Fact sheets conveying this information and an educational brochure containing color photographs of all listed species in the work area(s) would be prepared for distribution to the above-mentioned people and anyone else who may enter the Project area. A list of employees who attend the training sessions would be maintained by the applicant to be made available for review by the Service upon request. Contractor training would be incorporated into construction contracts and would be a component of weekly Project meetings.

Mitigation Measure BIO-2: Environmental tailboard trainings would take place on an as-needed basis in the field. The environmental tailboard trainings would include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects to these species during construction activities. Directors, Managers, Superintendents, and the crew foremen and forewomen would be responsible for ensuring that crewmembers comply with the guidelines.

Mitigation Measure BIO-3: Contracts with contractors, construction management firms, and subcontractors would obligate all contractors to comply with these requirements, AMMs.

Mitigation Measure BIO-4: A qualified biological monitor would remain onsite during all construction activities in or adjacent to habitat for special-status species. The biological monitor(s) would be given the authority to stop any work that may result in the take of listed species. If the biological monitor(s) exercises this authority, the appropriate resource agencies would be notified by telephone and electronic mail within one working day. The biological monitor would be the contact for any employee or contractor who might inadvertently kill or injure a listed species or anyone who finds a dead, injured, or entrapped individual.

Mitigation Measure BIO-5: Prior to the initiation of ground clearing activities, the construction area would be delineated with high visibility temporary fencing at least 4 feet in height, flagging, or other barrier to prevent encroachment of construction personnel and equipment outside of the construction area. Such fencing would be inspected and maintained daily until completion of the Proposed Project. The fencing would be removed only when all construction equipment is removed from the site.

In places where wildlife exclusionary fencing is necessary, as determined by the biological monitor(s), silt fencing or other appropriate wildlife exclusion fencing materials would be used in place of the high visibility temporary construction fencing to prevent listed species from entering the Project area. Exclusion fencing would be at least 3 feet high and the lower 6 inches of the fence would be buried in the ground to prevent animals from crawling under. The remaining 2.5 feet would be pulled taut at each support to prevent folds or snags. Fencing would be installed and maintained in good condition during all construction activities. Such fencing would be inspected and maintained daily until completion of the construction for the Proposed Project. The fencing would be removed only when all construction equipment is removed from the site.

Mitigation Measure BIO-6: All construction activities must cease one half hour before sunset and should not begin prior to one half hour after sunrise. There would be no nighttime construction.

Mitigation Measure BIO-7: Grading would be restricted to the minimum area necessary and be limited to the dry season, typically April-October.

Mitigation Measure BIO-8: Significant earth moving-activities would not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).

Mitigation Measure BIO-9: Pipes, culverts and similar materials greater than four inches in diameter, would be stored so as to prevent covered wildlife species from using these as temporary refuges, and these materials would be inspected each morning for the presence of animals prior to being moved.

Mitigation Measure BIO-10: Erosion control measures would be implemented to reduce sedimentation in wetland habitat occupied by covered animal and plant species when activities are the source of potential erosion problems. Plastic mono-filament netting (erosion control matting) or similar material containing netting would not be used at the Proposed Project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

Mitigation Measure BIO-11: All vegetation which obscures the observation of wildlife movement within the affected areas containing or immediately adjacent aquatic habitats would be completely removed by hand just prior to the initiation of grading to remove cover that might be used by special-status species. The biological monitor(s) would survey these areas immediately prior to vegetation removal to find, capture and relocate any observed listed species, as approved by the appropriate resource agencies.

Mitigation Measure BIO-12: All trash and debris within the work area would be placed in containers with secure lids before the end of each work day in order to reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left onsite. Containers would be emptied as necessary to prevent trash overflow onto the site and all rubbish would be disposed of at an appropriate off-site location.

Mitigation Measure BIO-13: Stockpiling of material would occur such that direct effects on covered species are avoided. Stockpiling of material in riparian areas would occur outside of the top of bank, and preferably outside of the outer riparian dripline and would not exceed 30 days.

Mitigation Measure BIO-14: To prevent the accidental entrapment of listed species during construction, all excavated holes or trenches deeper than 6 inches would be covered at the end of each work day with plywood or similar materials. Foundation trenches or larger excavations that cannot easily be covered would be ramped at the end of the work day to allow trapped animals an escape method. Prior to the filling of such holes, these areas would be thoroughly inspected for listed species by Service-approved biologists. In the event of a trapped animal is observed, construction would cease until the individual has been relocated to an appropriate location.

Mitigation Measure BIO-15: The following would not be allowed at or near work sites for covered activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets (except for safety in remote locations).

Mitigation Measure BIO-16: Vehicles and equipment would be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.

Mitigation Measure BIO-17: Off-road vehicle travel would be minimized.

Mitigation Measure BIO-18: Vehicles would not exceed a speed limit of 15 mph on unpaved roads within natural land-cover types, or during off-road travel.

Mitigation Measure BIO-19: Vehicles or equipment would not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area is constructed.

Mitigation Measure BIO-20: Vehicles would be washed only at approved areas. No washing of vehicles would occur at job sites.

Mitigation Measure BIO-21: To discourage the introduction and establishment of invasive plant species, seed mixtures/straw used within natural vegetation would be either rice straw or weed-free straw. Any invasive mustard (family Brassicaceae) identified within the project area will be removed prior or during construction of the facility.

Mitigation Measure BIO-22: Project sites would be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan would be included with the Project proposal for review and approval by USACE, USFWS, and/or CDFW as appropriate. Such a plan must include, but not be limited to, location of the restoration, species to be used, restoration techniques, time of year the work would be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.

Mitigation Measure BIO-23: Special-status species translocation would be approved on a project specific basis. The applicant would prepare a translocation plan for the Project to be reviewed and approved by the appropriate resource agencies prior to Project implementation. The plan would include trapping and translocation methods, translocation site, and post translocation monitoring.

Mitigation Measure BIO-24: A qualified botanist would be retained to perform focused surveys to determine the presence/absence of special-status plant species with potential to occur in and adjacent to (within 100 feet, where appropriate) the proposed impact area, including new construction access routes. These surveys would be conducted in accordance with CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (2009). These guidelines require that rare plant surveys be conducted at the proper time of year when rare or endangered species are both evident and identifiable. Field surveys would be scheduled to coincide with known flowering periods, and/or during appropriate developmental periods that are necessary to identify the plant species of concern.

Mitigation Measure BIO-25: If any state listed, federally listed, and/or CNPS List 1 or CNPS List 2 plant species are found within 100 feet of proposed impact areas during the surveys, these plant species would be avoided to the greatest extent possible and the following would be implemented:

Before the approval of grading plans or any ground-breaking activity within Project work areas, a mitigation plan would be submitted concurrently to CDFW and USFWS (if appropriate) for review and comment. The plan would include mitigation measures for the population(s) directly or indirectly affected. Possible mitigation for impacts on special-status plant species can include implementation of a program to transplant, salvage, cultivate, or re-establish the species at suitable sites (if feasible), or through the purchase of credits from an approved mitigation bank, if available. The actual level of mitigation may vary depending on the sensitivity of the species, its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival. The final mitigation strategy for directly impacted plant species would be determined by CDFW and USFWS (if appropriate) through the mitigation plan approval process.

Any special-status plant species that are identified adjacent to Project work areas, but not proposed to be disturbed by the Project, would be protected by barrier fencing to ensure that construction activities and material stockpiles do not impact any special-status plant species. These avoidance areas would be identified on Project plans.

Mitigation Measure BIO-26: A qualified biologist would survey the work site immediately prior to construction activities. If any life stages of California red-legged frog, California tiger salamander, California glossy snake, and/or San Joaquin coachwhip are found, the biologist would contact the appropriate resource agencies to determine if moving any of the life-stages is appropriate. In making this determination the resource agencies would consider if an appropriate translocation site exists as provided in the translocation plan. If the resource agencies approve moving animals, a qualified biologist would be allowed sufficient time to move individuals from the work site before ground disturbing activities begin. Only resource agency-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs and/or California tiger salamanders.

Mitigation Measure BIO-27: Bare hands would be used to capture California red-legged frog, California tiger salamander, California glossy snake, and/or San Joaquin coachwhip. Biologists would not use soaps, oils, creams, lotions, repellents, or solvents of any sort on their hands within 2 hours before and during periods when they are capturing and relocating individuals. To avoid transferring disease or pathogens of handling of the amphibians, biologists would follow the Declining Amphibian Populations Task Force's Code of Practice.

Mitigation Measure BIO-28: If ground disturbing activities would occur within the typical dispersal distance (contact USFWS/CDFW for latest research on this distance) and/or within 500 feet of suitable aquatic habitat for California red-legged frogs and California tiger salamanders, a qualified biologist would stake and flag an exclusion zone prior to initiation of ground disturbing activities. The exclusion zone would be fenced with orange construction zone and erosion control fencing (to be installed by construction crew), in accordance with MM BIO-5. The exclusion zone would encompass the maximum practicable distance from the work site and at least 500 feet from the aquatic feature wet or dry. Barrier fencing would be removed within 72 hours of completion of work.

Mitigation Measure BIO-29: Mitigation for permanent impacts on California red-legged frog and California tiger salamander habitat would be provided at a minimum 3:1 ratio. Mitigation can include onsite restoration, in-lieu fee payment, or purchase of mitigation credits at a USFWS approved mitigation bank. Mitigation as required in regulatory permits issued through the USFWS and/or USACE may be applied to satisfy this measure.

Mitigation Measure BIO-30: If clearing and/or construction activities occur during the migratory bird nesting season (March 15 to September 1), then preconstruction surveys to identify active migratory bird and/or raptor nests, including burrowing owl burrows, would be conducted by a qualified biologist within 14 days of construction initiation. Focused surveys must be performed by a qualified biologist for the

purposes of determining presence/absence of active nest sites or burrowing owl burrows within the proposed work area, including construction access routes and a 500-foot buffer, where feasible.

Mitigation Measure BIO-31: If an active nest is identified near a proposed work area, work would be conducted outside of the nesting season (March 15 to September 1), if feasible. If an active nest is identified near a proposed work area and work cannot be conducted outside of the nesting season, a no-activity zone would be established by a qualified biologist. The no-activity zone would be large enough to avoid nest abandonment and would at a minimum be 250-foot radius from the nest. If burrowing owls are present at the site during the non-breeding period, a qualified biologist would establish a no-activity zone of at least 150 feet.

If an effective no-activity zone cannot be established in either case, a qualified biologist would develop a site-specific plan (i.e., a plan that considers the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the birds, and the dissimilarity of the proposed activity with background activities) to minimize the potential to affect the reproductive success of the nesting birds.

Mitigation Measure BIO-32: Prior to implementation of Project-related activities, a qualified biologist would be retained to determine if active dens for San Joaquin kit fox and/or American badger occur within 500 feet of the proposed work areas, including construction access routes. Surveys would be conducted in accordance with current resource agency protocols.

Mitigation Measure BIO-33: If potential dens are present, their disturbance and destruction would be avoided. If potential dens are located within the proposed work area and cannot be avoided during construction, qualified biologist would determine if the dens are occupied or were recently occupied using methodology coordinated with USFWS and CDFW. If unoccupied, the qualified biologist would collapse these dens by hand in accordance with current USFWS procedures.

Mitigation Measure BIO-34: Exclusion zones would be implemented following current USFWS procedures or the latest USFWS procedures available at the time. The radius of these zones would follow current standards or would be as follows: Potential Den – 50 feet; Known Den – 100 feet; Natal or Pupping Den – to be determined on a case-by-case basis in coordination with USFWS and CDFW.

Mitigation Measure BIO-35: Mitigation for permanent impacts on San Joaquin kit fox habitat would be provided at a minimum 3:1 ratio. Mitigation can include on-site restoration, in-lieu fee payment, or purchase of mitigation credits at a USFWS approved mitigation bank. Mitigation as required in regulatory permits issued through the USFWS and/or USACE may be applied to satisfy this measure.

Mitigation Measure BIO-36: Mitigation for permanent impacts on sensitive communities would be provided at a minimum 1:1 ratio. Mitigation can include on-site restoration, in-lieu fee payment, or purchase of mitigation credits at a USACE approved mitigation bank. Mitigation as required in regulatory permits issued through the USACE and/or CDFW may be applied to satisfy this measure.

V. Cultural Resources

Enviroi	nmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would	the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

Impact Analysis

- a) Potentially Significant Unless Mitigation Incorporated. Implementation of the Proposed Project is not anticipated to result in disturbance of eligible/significant cultural resources. No cultural resources were identified within the Proposed Project's Area of Potential Effect (APE). Nonetheless, while unlikely, buried or previously unidentified cultural resources could exist. Record search and survey results indicate that there are no significant cultural resources on the surface of the APE, and there are few known cultural resources in the immediate area. While the surface of the Project area has been altered through previous agricultural use, prehistoric and historic period archaeological sites could occur in buried contexts. Thus, the potential exists that buried resources could be discovered during construction. Implementation of Mitigation Measure CR-1 outlined below would reduce potential Project impacts related to unknown cultural resources to a less-than-significant level.
- b) **Potentially Significant Unless Mitigation Incorporated**. See response to item a).
- c) Potentially Significant Unless Mitigation Incorporated. No evidence of human remains or recorded cemeteries were found in documentary research and during the intensive field investigation. However, future ground-disturbing activities in the Project area could adversely affect presently unknown prehistoric burials. California law recognizes the need to protect interred human remains, particularly Native American burials, and associated items of patrimony, from vandalism and inadvertent destruction. In light of the potential to uncover unknown or undocumented Native American burials, this impact would be potentially significant. Implementation of Mitigation Measure CR-2 would reduce this impact to a less-than-significant level.

Mitigation Measures

Mitigation Measure CR-1: Halt Construction Activities if Any Cultural Materials Are Discovered.

Prior to construction, construction personnel shall be briefed regarding the proper procedure in the event buried cultural materials are encountered. If previously undocumented archaeological materials are encountered during Project construction, all ground-disturbing activity shall be suspended temporarily within an appropriate distance determined by a qualified professional archaeologist based on the potential for disturbance of additional resource-bearing soils. The qualified professional archaeologist shall identify the materials, determine their possible significance, and formulate appropriate mitigation measures. Appropriate mitigation may include no action, avoidance of the resource, and/or potential data recovery. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

Mitigation Measure CR-2: Halt Construction Activities if Any Human Remains Are Discovered.

If human remains are uncovered during Project construction, all ground-disturbing activities shall immediately be suspended within an appropriate distance determined by a qualified professional archaeologist based on the potential for disturbance of additional remains. The Alameda County Coroner, and a qualified professional archaeologist, if one is not already on-site, shall be notified. The coroner shall examine the discovery within 48 hours. If the Coroner determines that the remains are those of a Native American, he or she shall contact the NAHC by phone within 24 hours. The NAHC shall contact the most likely descendant of the remains. The most likely descendant shall be consulted regarding the removal or preservation and avoidance of the remains, and the parties shall rebury or preserve the remains as appropriate. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

VI. Energy

Environmental Issue Area: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? 				
 b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? 				

Impact Analysis

- a) Less than Significant Impact. The Proposed Project would require limited amounts of energy during construction for the operation of construction equipment. Phase 1 of construction activities would include the installation of electrical power at the Project site. Electrical power is typically needed for process equipment such as grinders and pumps, site lighting, scale houses, lighting in processing and storage buildings, and overall machinery operation and maintenance. Electricity is also necessary to operate blowers for ASP systems and to run certain material handling equipment like mixers and conveyors. Frontend loaders that are used to build and take down the compost piles and to load product for shipping offsite would require diesel fuel storage facilities. An on-site septic system or holding tank and telephone service would also be required for a fully functional facility. Electric and diesel powered equipment types, quantity and associated horsepower are shown in Table 2.4-2 of the EIR Appendix. PG&E would provide energy services for the Proposed Project. The Proposed Project would not use energy in a wasteful, inefficient, or unnecessary manner. Rather, energy used during construction and operation of the Proposed Project would be necessary, conserved when not in use, and would independently stress energy resources provided by PG&E. Therefore impacts would be less than significant.
- b) Less than Significant Impact. The Proposed Project would not conflict with a state or local plan for renewable energy or energy efficiency such as the Community Climate Action Plan Integration Resolution and State Climate Change Scoping Plan. The Proposed Project would require energy usage for the activities described under item a). Energy usage under the Proposed Project would be consistent with that of other compost facilities in the region and would implement energy conservation and efficiency measures to the extent feasible. Equipment requiring energy would also be turned off when not in use. As a result, impacts on a local or state renewable energy or energy plan would be less than significant.

VII. Geology and Soils

	acology and cons					
Enviror	nmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact	
Would	Would the project:					
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:					
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?					
	ii. Strong seismic ground shaking?					
	iii. Seismic-related ground failure, including liquefaction?					
	iv. Landslides?			\boxtimes		
b)	Result in substantial soil erosion or the loss of topsoil?					
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?					
d)	Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risk to life or property?					
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					

Impact Analysis

ai) Less than Significant Impact. Most sites in the Bay Area could be affected by ground shaking in the event of a major earthquake. The amount of ground shaking depends on the magnitude of the earthquake, the distance from the epicenter, and the type of rock and soil materials between the epicenter and the areas affected. Violent to very violent ground shaking could occur on the Project site during large magnitude earthquakes on the Greenville and other regional faults.

However, due to the relatively low-intensity uses proposed on the Project site, the potential for substantial building damage or injury to workers would be low. The Proposed Project would not create new residences or a large number of jobs that would draw more people to the Project site. Onsite workers would primarily be working outside within the compost facility's receiving, processing, and curing areas with few to no overhead hazards. The administrative and maintenance buildings and facility infrastructure to be constructed on the site would conform to the seismic requirements identified in the CBC for the Project area. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC, which identifies seismic factors that must be considered in structural design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, and Appendix Chapter A33 regulates grading activities, including drainage and erosion control and construction on unstable soils, such as expansive soils and areas subject to liquefaction. With adherence to these standards, the potential impacts on structures, facilities, and workers as a result of seismic hazards would be considered less than significant, and no mitigation would be required.

- aii) Less than Significant Impact. See discussion under item ai).
- aiii) Less than Significant Impact. See discussion under item ai).
- aiv) Less than Significant Impact. See discussion under item ai).
- b) Less than Significant Impact. Construction activities often increase the runoff potential of disturbed areas. During construction, clearing, grubbing, and grading activities would remove ground cover, and expose and disturb soil. Exposed and disturbed soils are vulnerable to erosion from runoff during construction. Altered drainage patterns as a result of construction could also cause redirection and concentration of runoff, potentially further exacerbating erosion.

As part of the Proposed Project, coverage under the NPDES Construction General Permit would be obtained from the SWRCB. As described above, this permit requires implementation of a SWPPP to control stormwater runoff within the Project area, thus minimizing soil erosion to the extent possible. The Proposed Project would also comply with the Alameda County grading ordinance, which requires that a valid grading permit be obtained from the Public Works Agency and that mitigation for potential grading-related impacts be implemented.

BMPs for erosion and runoff, as outlined in the SWPPP and grading permit would be implemented during construction to minimize erosion and sediment migration from the construction and staging areas. These erosion and storm water pollution control measures would be consistent with the NPDES requirements, and would be included in the site specific SWPPP. With implementation of the SWPPP and the BMPs, erosion and sediment-related effects would be less than significant and no mitigation would be required.

c) Potentially Significant Unless Mitigation Incorporated. Site grading would consist of a balanced cut and fill that would remove soil material from higher areas and relocate it to lower areas. The maximum vertical cut (to approximately 15 feet below ground level) would occur along the western side of the site at the location of an existing hill with a mound with a peak elevation of approximately 478 feet above mean sea level. The maximum fill thickness (approximately 20 feet above ground level) would occur along the eastern edge of the site within an existing draw. Areas of fill would be graded at a minimum of a 2:1 slope to prevent soil movement or landslides. The entire site may be disturbed during grading, as material either would be removed (cut) or placed (fill).

Soils underlying portions of the compost facility site, as discussed in Section 3.5.2 Environmental Setting of the EIR Appendix, are mapped as having high shrink/swell potential, having good water holding capacity and cracking when they dry. In addition, the Project site includes an area mapped as very low to moderate for liquefaction potential; this area underlies the Proposed Projects' compost windrows. Failure of the sediments beneath the composting pad could cause a break in the pad surface. Maintaining the integrity of the composting pad is important to protect groundwater quality, as the low-permeability pad prevents leachate from seeping into groundwater from the base of the compost piles. The issue of compost pad maintenance, including repair of cracks in the pad, is further discussed in Section 3.7 Hydrology and Water Quality of the EIR Appendix. The potential for adverse impacts related to shrink-swell potential and/or settlements of soil associated with expansive soils and liquefaction potential would be considered potentially significant. With implementation of Mitigation Measure GEO-1, impacts associated with expansive soils and liquefaction on the Project site would be reduced to a less-than-significant level.

- d) Potentially Significant Unless Mitigation Incorporated. See discussion under item c).
- e) Less than Significant Impact. Implementation of the Proposed Project would require the installation of a septic tank system to accommodate the employee facility wastewater needs. Solids from the septic tank would be periodically removed and transported to a wastewater treatment facility by a contract operator. All proposed wastewater treatment and disposal systems would be reviewed and approved by the Alameda County Department of Environmental Health. Types of soils underlying the site would be factored into the engineering design of the proposed septic system to confirm the soils ability to provide adequate stability and support. As a result, impacts would be less than significant.
- f) Potentially Significant Unless Mitigation Incorporated. According to the University of California Museum of Paleontology database, paleontological resources are known to exist in Alameda County near the Project area in Livermore, California. Construction activities requiring ground disturbance such as, clearing, grubbing, and grading activities would remove ground cover, and have the potential to impact undiscovered paleontological resources, if present. In the event that paleontological resources are discovered during implementation of the Proposed Project, application of the Society of Vertebrate Paleontological Resources Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (Mitigation Measure GEO-2) would reduce impacts to a less than significant level.

Mitigation Measures

Mitigation Measure GEO-1: Perform geotechnical investigation and reporting.

Prior to initiation of grading, a design-level geotechnical investigation and report shall be prepared that includes measures to ensure potential damages related to expansive soils, non-uniformly compacted fill, and liquefiable sediments are minimized. Measures may range from complete removal of the problematic soils during grading operations, to conditioning the soils, or designing and constructing improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements. In addition, the following measures shall be incorporated into the Project: 1) all soil handling and conditioning measures, and structural foundations shall be designed by a licensed professional engineer; 2) all designs shall be submitted to, and approved by, the Alameda County Public Works Department prior to implementation; and 3) on-site soil management and/or conditioning activities shall be conducted under the supervision of a licensed Geotechnical Engineer or Certified Engineering Geologist.

In addition, the condition of all surfaces related to operations on the site, including at the active composting pad, curing area and storage pads, shall be inspected on a monthly basis (the condition of the catchment basin liner shall be inspected on an annual basis). The results of the inspections shall be recorded on an appropriate data form. Any cracking in pavements or liners, potholes, wheel ruts, or other conditions that could cause ponding on the active surfaces, lead to damage to facilities or structures, or allow infiltration of runoff into the subsurface shall be noted and corrective action initiated within seven days.

Mitigation Measure GEO-2: Follow the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts on Paleontological Resources

Temporary and permanent impacts on a unique paleontological resource or site during construction and ground disturbance would be mitigated by implementing the following measures:

- 1. Conduct an intensive field survey and surface salvage prior to earth moving, if applicable;
- 2. Hire a qualified paleontological resource monitor to monitor excavations in previously disturbed rock units;
- 3. Salvage unearthed fossil remains and/or traces (for example, tracks, trails, burrows, etc.;
- 4. Wash screens to recover small specimens, if applicable;
- 5. Prepare salvaged fossils to a point of being ready for curation (that is, removal of the enclosing matrix, stabilization and repair of specimens, and construction of reinforced support cradles where appropriate);
- 6. Identify, catalog, curate, and provide for repository storage of prepared fossil specimens; and
- 7. Prepare a final report of the finds and their significance.

VIII. Greenhouse Gas Emissions

mental Issue Area: he project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Impact Analysis

a) Less than Significant Impact. GHG emissions would be generated by the combustion of fuel in off-road equipment and on-road vehicle engines and through the decomposition of the compost. The GHG emissions estimated for operation of the Proposed Project are summarized in Table 3.4-15 of the EIR Appendix (shown below). As shown, the GHG emissions resulting from operation of the Proposed Project (regardless of the composting process chosen) would not exceed any of the BAAQMD threshold criteria and would therefore constitute a less than significant impact, and no mitigation would be required.

Activity	Project Impact	BAAQMD Significance Threshold	Significant?
Area	0.0102		
Energy	391		
Mobile	3,257		
Off-groad	658		
Waste	64		
Water	11		
Composting Off-Gas	3,484		
TOTAL	7,865	10,000	No

Table 0-5. Operations GHG Evaluation and Significance Determination (MTCO₂e)

b) Less than Significant Impact. As indicated under item a), the Proposed Project's long-term operational emissions would not exceed the BAAQMD's significance thresholds. Therefore, the Proposed Project would not conflict with the GHG reduction goals of AB 32 and would therefore constitute a less than significant impact, and no mitigation would be required.

IX. Hazards and Hazardous Materials

Enviroi	nmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would	the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
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?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				

Impact Analysis

a) Less than Significant Impact. During excavation, grading, and other construction activities for the Proposed Project it is anticipated that limited quantities of miscellaneous hazardous substances (such as petroleum-based products/fluids, solvents, and oils) would be employed in the Project and staging areas. As with any liquid or solid, the potential for an accidental release exists during handling and transfer from one container to another. Depending on the relative toxicity of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction employees and the environment, resulting in a significant impact.

Hazardous materials would also be used, stored, and disposed of during operation of the Proposed Project. These materials include fuels, lubricants, antifreeze, and other materials used for vehicles and heavy machinery, and pesticides used to control vectors. Waste oil and other hazardous wastes are likely to be generated at the Project site due to routine equipment maintenance and facility cleaning, and hazardous materials could potentially affect facility worker health and the environment.

The applicant shall prepare and implement a SWPPP, which is discussed in detail in Chapter X. Hydrology and Water Quality and included in a corresponding Mitigation Measure (HWQ-1) in that section (also see Section 3.7 of the EIR Appendix). Among other things, the SWPPP shall include BMPs for site housekeeping practices, hazardous material storage, inspections, maintenance, worker training in pollution prevention measures, and containment of releases to prevent run off into existing storm drains and sewers. Although designed primarily to protect water quality in local waterways, the SWPPP would also serve to minimize the number and severity of potential hazardous material releases that could affect construction workers.

The Proposed Project would comply with all relevant federal, State, and local statutes and regulations related to transport, use, and disposal of hazardous materials. Therefore, impacts related to these activities would be reduced to less than significant.

- b) Less than Significant Impact. The operation and storage of construction equipment on the Project site has the potential to result in accidental or inadvertent release of oil, grease, or fuel. However, spill prevention measures as outlined in Mitigation Measure HWQ-1 would be implemented during construction and operation of the Proposed Project to address the accidental or inadvertent release of oil, grease, or fuel. Such measures may include storing fuel and refueling of construction equipment within designated construction and staging areas, and routine inspection of vehicles for oil and fuel leaks. Therefore, impacts related to accidental release of hazardous materials into the environment would be less than significant.
- c) **No Impact**. The Proposed Project is not located within one-quarter mile of an existing or proposed school.
- d) **No Impact**. The Proposed Project is not located on a site included on a list of hazardous materials sites.
- e) No Impact. The Proposed Project is not located within an airport land use plan.
- f) **No Impact**. The Proposed Project is not located within the boundaries of an emergency response or evacuation plan area.
- g) Less than Significant Impact. Construction activities for the Proposed Project include the use of mechanized construction equipment and vehicles that contain flammable fuels. During construction, equipment and vehicles may come in contact with vegetated areas and may accidentally spark and ignite the vegetation. A wildland fire that starts on a nearby parcel may spread to the Project site and endanger workers and structures. In addition, composting material may spontaneously combust at high temperatures and low moisture content, and could create a wildland fire that could endanger persons and structures near the Project site. The temperature in the composting material can be kept at safe levels by limiting the height of compost piles, by monitoring and controlling moisture content, and by turning the compost when temperatures reach a designated level.

The Proposed Project has been designed to provide access for emergency equipment. The main entrance would provide access to a perimeter road that surrounds the entire facility. Each of the rows of composting windrows would also be accessible via travel lanes. Also, the Proposed Project includes the installation of a fire suppression water tank.

The Proposed Project would comply with State regulatory requirements for the proposed facility, as specified in the CCR Titles 14 and 22, as well as the County Fire Department requirements for facility design and fire safety. To reduce the danger of fire, implementation of fire protection standards in accordance with the regulatory requirements would be required, including establishment of an emergency response plan. Implementation of these measures and installation of fire suppression systems (sprinklers, alarms, etc.) would minimize the risk of wildland fire. Staging areas or other areas slated for construction using spark-producing or intense heat-producing equipment are to be cleared of dried vegetation or other materials that could serve as fire fuel. The contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Any construction equipment and vehicles that normally include a spark arrester shall be equipped with an arrester in good working order. This impact would be less than significant, and no mitigation would be required.

X. Hydrology and Water Quality

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless 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 ground water quality? 					
 b) Substantially decrease groundwater supplies or inter substantially with groundwate recharge such that the project impede sustainable groundwate management of the basin? 	r t may				
 c) Substantially alter the existing drainage pattern of the site of area, including through the alteration of the course of a stream or river or through the addition of impervious surface a manner which would: 					
 result in substantial erosi siltation on- or off-site; 	on or 🛛				
 substantially increase the or amount of surface run a manner which would re in flooding on- or offsite; 	off in				
 create or contribute runo water which would excee capacity of existing or planned stormwater drain systems or provide substantial additional sou of polluted runoff; or 	ed the nage				
iv. impede or redirect flood flows?					
 In flood hazard, tsunami, or s zones, risk release of pollutar due to project inundation? 					
e) Conflict with or obstruct implementation of a water qu control plan or sustainable groundwater management pla					

Impact Analysis

a) Potentially Significant Unless Mitigation Incorporated.

Degradation of Water Quality during Construction and Operation

Grading, earthmoving, roadway excavation, and facility construction would disturb the existing vegetative cover, soil, and drainage characteristics of the Project site. By removing the existing vegetative cover, the proposed construction activities would expose the site's soils to wind and storm water erosion. Construction activities could result in substantial storm water discharges of suspended solids and other pollutants into local drainage channels from the Project construction site. In addition, intense rainfall and associated storm water runoff could result in short periods of sheet erosion within areas of exposed or stockpiled soils. The potential for chemical releases from construction equipment and materials is also a concern at construction sites. Once released, substances such as fuels, oils, paints, and solvents could be transported to surface waters and/or groundwater in storm water runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters. Therefore, construction impacts on water quality would be potentially significant. Implementation of Mitigation Measure HWQ-1 would reduce this impact to less than significant.

During operation, the primary sources of wastewater generated by the Proposed Project would be leachate from the composting piles; truck washout wastewater; and any wastewater from sanitation uses. To provide for flexibility in ultimate design and operation of the Project, combined systems are proposed to address treatment/disposal of wastewater resulting from truck washing and leachate generated by the active composting processes. All leachate and truck washing/area wash down wastewater would be held onsite for use in reapplication of the compost piles. Any wastewater not recycled within the Project site would be temporarily held onsite for periodic removal and transportation to an approved, offsite wastewater treatment facility.

All Project area storm water runoff would be diverted and contained onsite in catchment basins, thereby preventing any offsite discharges. Water in the catchment basins would be reapplied to the active compost piles or evaporate. Up to two, lined catchment basins would be constructed to accommodate a 25-year, 24hour storm event on the active composting areas. The total combined capacity of the ponds would be approximately 20 acre feet. A perimeter drainage ditch would collect runoff from the facility and direct it to the catchment basins. Ditches would be properly sloped to prevent ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches would be inspected and cleaned out prior to the rainy season every year. Water within the basins would be managed to prevent the overtopping or overflow of liquids. A Water Management Plan would be prepared and provided to the RWQCB for review and approval, and which would describe how the water in the ponds would be managed to prevent discharge. The Proposed Project would also include a buffer berm around the entire perimeter of the facility external to the drainage ditches to ensure that storm water, process water, and any compost leachate be contained onsite. Although the Proposed Project would generate a new source of storm water requiring drainage, storm water runoff would be managed through careful facility design and operation. Implementation of Mitigation Measure HWQ-1 would further reduce the Proposed Project's operational impacts on water quality. Therefore, the Proposed Project's impact related to operational impacts on water quality would be less than significant.

Degradation of Groundwater Quality during Operation

Degradation of groundwater quality during operation would be less than significant. The Proposed Project would process a variety of organic feedstock materials, including, but not limited to, greenwaste, foodwaste and biosolids, but would also receive untreated scrap wood, natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash, and clean construction debris. Feedstocks would be delivered to the receiving/pre-processing area and subsequently transported to the active compost pad to be placed in windrows and later to the product storage pad.

Drainage from the pads would be collected and directed to the two catchment basins, which would be lined to prevent contents from percolating to the groundwater. The contact and runoff water collected in the basins would be periodically removed and reused in operations for reapplication to the windrows or evaporated. No discharge from the recycling basin system would be allowed by the RWQCB.

The incoming waste processing area and active composting pad would be constructed of concrete, asphalt or compacted cement treated base soil that would be meet RWQCB requirements for permeability and provide a hard surface for composting operations equipment. This low permeability composting pad would cause storm and operational waters to flow off the pad to the perimeter drainage ditch. This would minimize the amount of water on the composting pad area that could potentially percolate below the pad to groundwater. Given the low permeability of the site soils and the construction of a low permeability composting pad surface, the potential for percolation is negligible. Further, general water quality WDRs or composting facilities' General Order WDRs for this facility would include site design requirements and/or a water quality monitoring program. Therefore, through site design and operational standards, impacts of the Proposed Project on groundwater quality would be less than significant and no mitigation would be required.

b) Less than Significant Impact. Water is needed at the Project site for basic sanitary services, fire protection, pile moisture content, and dust control. The volume of water needed for the composting process depends on the raw materials as well as climate. The required water volume to serve the Proposed Project would need to accommodate an annual throughput of up to 300,000 tons of material.

The primary water supply for the Proposed Project would be water supplied by the BBID. BBID would supply water from their canal located approximately 2.4 miles to the north, in Contra Costa County. The water would be delivered to the facility utilizing water tanker trucks.

During the three wettest winter months of the year, catchment basins constructed on the site as part of the Proposed Project's stormwater control system could provide the facility's water supply. Collected and stored stormwater in the catchment basins would be aerated and treated/conditioned prior to its reuse for on-site purposes. It is anticipated that all of the water used on site would be directed to and retained within the catchment basins. The combined catchment basin capacity for the Proposed Project is preliminarily sized at approximately 20 acre-feet. The estimated capacity is necessary to support the average 12-month cyclical water demands of the Project, as augmented by the BBID canal water supply.

An existing groundwater well that currently supplies water for cattle on the site would be used as an alternate water supply source. The use of the well would be limited to employee domestic uses only. The estimated volume of water currently produced by the well is approximately 5 gallons per minute. Additionally, the addition of impervious surfaces associated with the Proposed Project would not substantially reduce groundwater recharge.

Although the Project site is not served by a public water supply, adequate water supply sources, and conservation/reuse methods are available to serve the Proposed Project, and groundwater resources would not be depleted. Therefore, impacts related to groundwater supplies and groundwater recharge would be less than significant and no mitigation would be required.

ci) Less than Significant Impact. Seasonal drainages traverse the Project site, carrying water primarily during the rainy season, and drying out during the summer and fall. Construction of the Proposed Project would introduce new structures and features to the Project site which would alter the existing drainage pattern. However, the Proposed Project has been designed to divert and contain all Project generated storm water runoff, thereby preventing any offsite discharges.

As described in Impact HWQ-1, although the Proposed Project would generate a new source of storm water requiring drainage, storm water runoff would be managed through a network of catchment basins, and perimeter drainage ditches and external berms. Therefore, the Proposed Project's impact related to alteration of the existing drainage pattern would be less than significant, and no mitigation would be required.

Altered drainage patterns as a result of construction could cause redirection and concentration of runoff, potentially further exacerbating erosion. Additionally, construction activities often increase the runoff potential of disturbed areas. During construction, clearing, grubbing, and grading activities would remove ground cover, and expose and disturb soil. Exposed and disturbed soils are vulnerable to erosion from runoff during construction.

As part of the Proposed Project, coverage under the NPDES Construction General Permit would be obtained from the SWRCB. This permit requires implementation of a SWPPP to control stormwater runoff within the Project area, thus minimizing soil erosion to the extent possible. As a result, impacts would be less than significant.

- cii) Less than Significant Impact. See discussion under item ci).
- ciii) Less than Significant Impact. See discussion under item ci).
- civ) Less than Significant Impact. See discussion under item ci).
- d) **No Impact.** The Proposed Project is not located within a seiche, tsunami, or mudflow hazard area, and therefore would not increase exposure of people or structures to increased risks from these conditions.
- e) Potentially Significant Unless Mitigation Incorporated. As discussed under item a), construction impacts on water quality would be potentially significant. As a result, water quality impacts during construction may conflict with implementation of a water quality control plan. Implementation of Mitigation Measure HWQ-1 would reduce water quality impacts during construction to less than significant level. Surface water and groundwater quality impacts during operation would be less than significant.

Mitigation Measures

Mitigation Measure HWQ-1: Prepare and implement a SWPPP

As required by the County, a grading permit application shall be prepared and submitted to the County for review and approval prior to initiation of any earthwork at the site. The grading permit application shall include measures to control storm water drainage from the site and to minimize the potential for sediment discharges from the site. In addition, the applicant shall prepare a SWPPP designed to reduce potential

impacts on surface water quality during construction. The SWPPP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with implementation of the proposed composting facility.

The SWPPP shall include specific and detailed BMPs designed to mitigate construction-related pollutants. At a minimum, BMPs shall include practices to minimize the contact of construction and operation materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with receiving waters.

An important component of the storm water quality protection effort is construction workers' knowledge of the site. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP. The SWPPP shall also specify a routine monitoring program to be implemented by the construction contractor.

XI. Land Use and Planning

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
 Physically divide an established community? 				
 b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? 				

Impact Analysis

- a) No Impact. There are no established communities located in the Project area.
- b) Less than Significant Impact. There are two regulations from agencies with jurisdiction over the Project which apply to the Proposed Project—the Large Parcel Agriculture land use designation as defined by the ECAP, and the Agricultural (A-District) zoning designation as defined by the Title 17 Zoning Ordinance of the Alameda County Code of Ordinances.

The Proposed Project is located on lands designated as Large Parcel Agriculture in the ECAP. The ECAP lists solid waste landfills and related waste management facilities as permitted uses for this land designation.

The Proposed Project fits two of these permitted uses, as it would be considered a related waste management facility, as well as an agricultural processing facility. As a related waste management facility, it would help manage waste by processing organic materials from regional municipal solid waste collection transfer stations and other sources, diverting this waste from landfills. This waste would be converted into compost, which would then be applies a soil conditioner and fertilizer to gardens, crops, and rangelands, making it a beneficial resource for agricultural lands throughout Alameda Counties and other nearby counties.

As stated in the Environmental Setting section above, The Alameda County zoning designation for the Project area is Agricultural or A District. Composting facilities are not one of the permitted uses for A District land; however, it is a conditionally allowed use as stated in Code 17.06.035:

The following are conditional uses and shall be permitted in an A district only if approved by the planning commission, sitting as a board of zoning adjustments.

- A. Sanitary landfill not to include processing salvaged material;
- B. Flight strip;
- C. Cemetery;
- D. Composting facility. Title 17 Zoning Ordinance (Alameda County 2015).

The Project Applicant is requesting a Conditional Use Permit be issued by the County for the operation of a compost facility on the Project site. Because compost facilities are permitted uses within the Agricultural zoning designation, the Proposed Project would be consistent with the Alameda County Zoning Ordinance upon issuance of the Conditional Use Permit.

XII. Mineral Resources

Environmental Issue Area: Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
 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? 				
 Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? 				

- a) **No Impact**. There are no known mineral resources near the Project area and none would be affected by proposed Project activities.
- b) No impact. See discussion under item a).

XIII. Noise

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

Impact Analysis

a) Less than Significant Impact.

Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity during Construction

For the Proposed Project, which would generate altered noise conditions during Project construction activities, the Alameda County Noise Ordinance (described above) is the applicable local noise standard. Construction activities for the Proposed Project would occur during the daytime, would last between 8 and 10 hours per day, and would not occur during the noise-sensitive hours designated by the County.

Construction activity noise levels associated with the Proposed Project would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. In addition, construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. Development of the compost facility, including construction of the onsite access road, would require the use of heavy construction equipment for site grading activities. Proposed construction activities by phase are provided in Chapter 2 Project Description.

Equipment anticipated to be used for construction of the Proposed Project would include bulldozers, rubbertired loaders, trucks with end-dump trailers, a water truck, a road grader, a soil compactor, backhoes, and a crane. The typical noise levels produced by various types of construction equipment are shown in Table 3.12-2 of the EIR Appendix (shown below).

Table 0-6. Typical Noise Levels from Construction Equipment A-weighted Sound PressureLevel, dB re: 20 micropascals

Construction Equipment	Noise Level (dBA, Leq at 50 feet)
Truck	88
Air Compressor	81

Table 0-6. Typical Noise Levels from Construction Equipment A-weighted Sound Pressure Level, dB re: 20 micropascals

Construction Equipment	Noise Level (dBA, Leq at 50 feet)
Grader	85
Dozer	85
Generator	81
Loader	85

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006

The applicant has proposed grading plans, which consist mainly of leveling the site to accommodate buildings, stormwater catchment basins and windrow areas. The nearest residence is located approximately 2,500 feet from the proposed facility. Noise associated with the grading activities would increase the hourly A-weighted noise levels at the nearest residence from the existing range of 58 to 63 dB to approximately 64 dB. The earth removed during grading activities would be taken to other parts of the site and used as fill. Equipment used would include bulldozers, scrapers, loaders, trucks, and similar heavy machinery. The A-weighted noise level from the combined operation of this equipment is estimated to be 90 dB at 50 feet. The majority of the construction grading operations would occur at more than 2,500 feet from the nearest residence. Maximum combined earth-moving equipment noise would be approximately 64 dB at the nearest noise sensitive receptor. For residences located further from the site, construction noise would generate an hourly average A-weighted level less than 60 dB. After grading and paving is completed, compost equipment would be installed and buildings erected. These construction activities would occur 2,500 feet or more from the nearest residence and would generate noise levels less than 55 dB.

Based on the distance between the Proposed Project and sensitive receptors, construction activities are not anticipated to cause groundborne vibration impacts.

Since construction equipment would cause less than a three dB increase in the ambient noise level at any noise-sensitive receptor, increases in ambient noise levels would be less than significant; therefore, no mitigation would be required.

Permanent Increase in Ambient Noise Levels in the Project Vicinity due to Operations at the Compost Facility

Future noises generated by operations at the Proposed Project were estimated by using data measured at another compost facility in the Bay Area. The noise levels were then projected to the locations of noise-sensitive receivers near the Proposed Project. The contributions from each noise source were combined to determine the total noise emitted from the site. Table 3.12-3 in the EIR Appendix (shown below) shows the types and numbers of operational equipment anticipated for use onsite.

Electric Equipment	Number	Horsepower
Horizontal Grinder	1	500
Organics Mixer	1	75
Aeration Blowers	20	5
Diesel Powered Equipment	Number	Horsepower
Compost Turner	1	540
Trommel Screen	1	50
10-Wheel Dump Trucks	2	200
Wheel Loaders	3	250
Mobile Cover Winder	1	75

Table 0-7. Operation Equipment

The following material discusses the composting processes and the corresponding equipment usage.

Aerated Static Pile

The composting process to be used at the proposed facility is a covered ASP. The process involves three discrete noise-generating equipment items including a pre-screener/horizontal shredder, a trommel screen, and a compost turner (the latter being a mobile, self-powered machine).

The distance between the Project site and the offsite Altamont Pass Road residence is approximately 4,500 feet. At this distance, the projected A-weighted noise level of the combined trommel screen, prescreener/horizontal shredder, and tumbler assembly would be 39 dB. Similarly, the compost turner is projected to generate an A-weighted noise level of 36 dB.

The distance between the Project site and the offsite Midway Road residence is approximately 6,000 feet. At this distance, the combination of all engine-powered equipment would generate an A-weighted noise level of less than 35 dB. Based on these projections, the combined operation of this engine-powered equipment would have a negligible effect upon the existing noise environment at the two closest noise-sensitive, off-site locations (i.e., the increase in the existing noise level would be a fraction of a dB, a change in loudness that is barely detectable, even under laboratory conditions).

The approximate distance between the future engine-powered composting equipment and the offsite residence is approximately 2,500 feet. At this distance, the projected hourly average, A-weighted noise level of the equipment would be less than 50 dB. Considering that the existing DNL at the offsite residence is 63 dB, the operation of the facility would have no impact on the existing noise environment at this residence.

Air Circulation

In addition to the engine-powered equipment described above, the ASP technique involves a series of smallsized blowers (less than 5 horsepower) to help circulate air through the composting piles. It is anticipated that approximately 32x, blowers will be used at the site, one for each aerated compost pile, and would operate 80 percent of the time.

The A-weighted noise level generated by each blower is estimated to be 75 dB at five feet. This information was corroborated by independent calculations based on generic blower noise data; thus the blower noise level is calculated to be 40 dB when projected to a 500-foot distance.

The blowers are also estimated to generate a noise level of 30 dB at the offsite residence, assuming the closest blower is located at least 2,000 feet away. The projected fan noise level at the closest offsite residence (Altamont Pass Road residence) is also less than 30 dB, well below the existing background noise level. Therefore, operation of the blowers would not have an acoustical impact on either the onsite or offsite residential receptors.

Movement of Materials

Another Project-related noise source is the diesel-powered bulldozer that would be used to move material within the compost area. Noise levels generated by the bulldozer during operation would be similar to levels generated during construction. Assuming a worst-case scenario for operation activities, the bulldozer would generate an A-weighted noise level of 90 dB at 50 feet. The bulldozer would be operating approximately 3,000 feet from the nearest receptor (the offsite residence), resulting in a projected noise level of less than 55 dB. Given the intermittent operational nature of the bulldozer's diesel engine, the increase in the hourly average, A-weighted noise level is estimated to be less than one dB at this receptor.

Summary

Composting operations are projected to generate an hourly average, A-weighted noise level of 39 dB at the nearest offsite residence with all equipment operating. Since the operational noise level near the site would be significantly less than the existing ambient noise levels, the Proposed Project would not cause a permanent increase in environmental noise. In summary, no further noise mitigation would be required since there would be a less-than-significant impact.

A new potential noise source for the nearby residences would be the haul truck traffic along Jess Ranch Road, which would enter and depart the Proposed Project near the existing maintenance facility. At the point of entry to the facility access road, the trucks would be within 500 feet of the nearest sensitive receptor, the offsite residence. The peak haul truck volume is estimated to be 10 per hour (based on the ultimate material flow of 1,000 TPD). Based on information from the United States Traffic Noise Model, the hourly average, A-weighted noise level generated by the haul trucks is estimated to be less than 52 dB at the offsite residence. This projection is 6 dB below the existing hourly average noise level generated by vehicular traffic on I-580.

The Proposed Project would contribute a negligible amount of traffic to I-580. Peak haul truck volume was estimated to be 10 per hour (based on the ultimate material flow of 1,000 TPD). At the time the noise

assessment was prepared, peak hourly traffic on I-580 was estimated to be 7,700 vehicles with a daily volume of 140,000 vehicles. The Proposed Project's traffic would represent approximately 0.25 percent of the peak hour traffic on I-580 and less than 0.3 percent of the total daily traffic. The increase in freeway noise associated with the Proposed Project would be substantially less than one dB and, therefore, imperceptible. The noise caused by traffic associated with the Proposed Project would not exceed the existing noise environment by more than a fraction of a decibel, which is similar to the significance threshold of three dB. In summary, no noise mitigation would be required since there would be a less-than-significant impact.

- b) Less than Significant. Activities with the potential to cause groundborne vibration and groundborne noise during construction include grading to accommodate building and stormwater catchment basins and use of bulldozers, scrapers, loaders, trucks, and similar heavy equipment. Composting operations are projected to generate an hourly average, A-weighted noise level of 39 dB at the nearest offsite residence with all equipment operating, which would be significantly less than the existing ambient noise levels. Additionally, based on the distance between the Proposed Project and sensitive receptors, construction and operational activities are not anticipated to cause groundborne vibration or noise impacts, and impacts would be less than significant.
- c) **No Impact.** The Proposed Project is not located within the vicinity of a private airstrip or an airport land use plan. Additionally, the Project is not located within two miles of a public airport or public use airport.

XIV. Population and Housing

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

- a) **No Impact.** The Proposed Project does not provide for new housing or demolish any existing residences, and would not affect regional or local population projections. The Proposed Project would not affect the location, distribution, density, or growth rate of the population in the surrounding area or the region.
- b) No Impact. See discussion under item a).

XV. Public Services

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless 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, 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: 				
i. Fire Protection?			\boxtimes	
ii. Police Protection?			\boxtimes	
iii. Schools?				\boxtimes
iv. Parks?				\boxtimes
v. Other public facilities?				\boxtimes

Impact Analysis

- ai) Less than Significant Impact. Construction and operation of the Proposed Project is not anticipated to increase the demand for police protection and emergency medical services substantially above current conditions, and is not anticipated to require the construction or alteration of police protection facilities. The Proposed Project is generally consistent with the land use designations and zoning for the site. Workers that would be employed during construction and operation of the Proposed Project are anticipated to reside locally or regionally, and therefore would be included with the existing regional demand for police protection and emergency medical services. Therefore, impacts on police protection and emergency medical services would be less than significant and no mitigation would be required.
- aii) Less than Significant Impact. Construction and operation of the Proposed Project is not anticipated to increase the demand for fire protection services substantially above current conditions, and is not anticipated to require the construction or alteration of fire protection facilities. Composting facilities in California are required to comply with CalRecycle compost facility regulations (Title 14, Chapter 3.1), which requires compost operations to provide fire prevention, protection and control measures.

Given the nature of the facility, storing large quantities of potentially combustible materials, site specific fire mitigations and safety features would likely be developed as part of the Conditional Use Permit process and the Solid Waste Facility Permit process. Fire prevention controls incorporated into the Proposed Project would also reduce risks from fire to less than significant. Wildland fire risks are discussed in further detail in Chapter IX. Hazards and Hazardous Materials (Section 3.6 Hazards and Human Health of the EIR Appendix). Therefore, impacts on fire protection services would be less than significant and no mitigation would be required.

- aiii) **No Impact**. The Proposed Project would not include new housing and would not generate students or increase demands for schools, parks, or other public facilities.
- aiv) No Impact. See discussion under item aiii).
- av) No Impact. See discussion under item aiii).

XVI. Recreation

Enviror	nmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would	the project:				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				

- a) **No Impact.** There are no recreational facilities on or near the Proposed Project, and the Proposed Project would not generate a demand for recreational facilities or services.
- b) No Impact. See discussion under item a).

XVII. Transportation

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

- a) Less than Significant Impact. The unique characteristics and remote location of the Proposed Project limits the effective adoption of multimodal transportation plans prevalent in both local and regional jurisdictions. There are no transit, pedestrian, and bicycle facilities available on the Project access route and in the Project vicinity including Grant Line Road, Altamont Pass Road, and I 580. Therefore, the operation and construction activities associated with the Proposed Project compost facility is not expected to conflict with either local or regional multimodal plans and programs. The Proposed Project would have a less-than-significant impact with respect to policies, plans, and programs supporting alternative modes of transportation.
- b) **Less than Significant Impact**. The criteria used for analyzing transportation impacts is not in conflict with or inconsistent with CEQA Guidelines section 15064.3 (b).
- c) Less than Significant Impact. The Proposed Project would be located approximately 500 feet south of the existing windmill farm maintenance building on Jess Ranch Road. In addition, a new 20 feet wide main access road would be constructed to support the Proposed Project. The main access road would have one access connection onto Jess Ranch Road, a road shared with the windmill farm maintenance building and windmill access. The main access road would be built to Alameda County design standards to ensure emergency access and other safety requirements. Furthermore, the Proposed Project would not require any modification to the existing transportation network in the surrounding areas. Therefore, the Proposed Project would not include transportation hazards.
- d) Less than Significant Impact. Emergency vehicles would primarily enter the Project site through the main Project entrance located along the northern side on Jess Ranch Road. The main access road would be built to Alameda County design standards to ensure emergency access requirements are met. Although there is only one entrance to the Proposed Project, there are no other developments adjacent to the Project site and access through the unpaved field is possible in case the main access road is blocked. The Project site is under protection of Battalion 3 in Alameda County Fire Department, which is mostly based in Livermore and Dublin and Cal Fire Santa Clara Unit. The nearest Alameda County Fire Department fire station is Station 8 located in Livermore 9 miles away, and the nearest Cal Fire station is Station 26 Castle Rock located 5 miles east of the Project. Furthermore, the Mountain House Fire Station No.1 is located in the Mountain House community 5 miles northeast of the Project site.



XVIII. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		
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?		

Impact Analysis

a) Potentially Significant Unless Mitigation Incorporated. under subheading Assembly Bill 52, a TCR is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources, or if Alameda County, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resources as a TCR.

As discussed in Section 3.4.3 of the EIR Appendix under impact discussions CR-1 and CR-2, impacts from the Proposed Project could impact unknown archaeological resources including Native American artifacts and human remains. These artifacts, sites, and remains may also be, by extension, considered tribal cultural resources. Impacts would be reduced to a *less-than-significant* level with implementation of Mitigation Measures CR-1 and CR-2.

Therefore, compliance with existing federal, State, and local laws and regulations, and the Alameda County ECAP policies (detailed and in Section 3.4 of the EIR Appendix), would protect unrecorded TCR's on the Project site by providing for the early detection of potential conflicts between development and resource protection, and by preventing or minimizing the material impairment of the ability of archaeological deposits to convey their significance through excavation or preservation. Furthermore, implementation of Mitigation Measures CR-1 and CR-2 would reduce any impacts on a TCR discovered on the Project site as a result implementation of the Proposed Project.

b) **Potentially Significant Unless Mitigation Incorporated**. See discussion under item a).

Mitigation Measures

Mitigation Measure TCR-1: Implement Mitigation Measures CR-1 and CR-2

MM CR-1: Prior to construction, construction personnel shall be briefed regarding the proper procedure in the event buried cultural materials are encountered. If previously undocumented archaeological materials

are encountered during Project construction, all ground-disturbing activity shall be suspended temporarily within an appropriate distance determined by a qualified professional archaeologist based on the potential for disturbance of additional resource-bearing soils. The qualified professional archaeologist shall identify the materials, determine their possible significance, and formulate appropriate mitigation measures. Appropriate mitigation may include no action, avoidance of the resource, and/or potential data recovery. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

MM CR-2 If human remains are uncovered during Project construction, all ground-disturbing activities shall immediately be suspended within an appropriate distance determined by a qualified professional archaeologist based on the potential for disturbance of additional remains. The Alameda County Coroner, and a qualified professional archaeologist, if one is not already on-site, shall be notified. The coroner shall examine the discovery within 48 hours. If the Coroner determines that the remains are those of a Native American, he or she shall contact the NAHC by phone within 24 hours. The NAHC shall contact the most likely descendant of the remains. The most likely descendant shall be consulted regarding the removal or preservation and avoidance of the remains, and the parties shall rebury or preserve the remains as appropriate. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

XIX. Utilities and Service Systems

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

Impact Analysis

a) Less than Significant Impact.

Stormwater drainage requiring the construction of drainage facilities

All Project area stormwater runoff would be diverted and contained onsite in catchment basins, thereby preventing any offsite discharges. Water in the catchment basins would be reapplied to the active compost piles or evaporated. Provisions would also be made to recycle any leachate generated for process water makeup (including biofilter irrigation), dust control, or other onsite irrigation uses.

A total of up to two lined catchment basins would be constructed to accommodate a 100-year storm event. The total combined capacity of the ponds would be approximately 20 acre-feet. A perimeter drainage ditch would collect runoff from the facility and direct it to the catchment basins. Drainage ditches would be designed to convey all precipitation and runoff from a 25-year, 24-hour peak storm event. Ditches would be properly sloped to prevent ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches would be inspected and cleaned out prior to the rainy season every year and managed to prevent the overtopping or overflow of liquids during storm events. A Water Management Plan would be prepared

and provided to the RWQCB for review and approval; the plan would describe, among other things, how water in the ponds would be managed to prevent discharge.

The Proposed Project would also include a buffer berm around the entire perimeter of the drainage ditches to ensure that stormwater, process water, and leachate be contained onsite. Berms would prevent run-on to and runoff from a 25-year, 24-hour peak flow storm event.

Although the Proposed Project would generate a new source of stormwater requiring drainage, stormwater runoff can be managed through careful facility design and operation. Water quality for stormwater drainage is discussed in further detail in Chapter X. Hydrology and Water Quality (Section 3.7 Hydrology and Water Quality of the EIR Appendix). In the case of the Proposed Project, construction of onsite catchment basins and stormwater drainage facilities would reduce any potential impact on offsite public stormwater drainage facilities. Therefore, the Proposed Project's impact related to construction of new stormwater drainage facilities would be less than significant and no mitigation would be required.

Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities

Construction and operation of the Proposed Project is not anticipated to require or result in the relocation or construction of new or expanded electric power natural gas, or telecommunications facilities. The Proposed Project would be constructed entirely on a field zoned for agricultural purposes, where electric power, natural gas, and telecommunications facilities are not present. As a result, none would be disturbed or relocated as a result of implementation of the Project.

Electric power and natural gas would be required on a temporary, intermittent basis during construction during use of construction vehicles and equipment. The Proposed Project would also require electric, natural gas and telecommunications services during operations. The Proposed Project would utilize various pieces of equipment in order to process the organic material and transport it through the series of composting processes. Electric equipment utilized during operations includes a horizontal grinder, organics mixers, and aeration blowers. The composting facility would be operated 24 hours per day and 7 days per week; however most composting operations would occur during daylight hours. Electric power and natural gas services are provided by PG&E and the Proposed Project would not independently stress these resources, requiring new or expanded facilities. Similarly, the Proposed Project would not independently stress telecommunications services provided by private companies. As a result, impacts on electric power, natural gas, and telecommunications facilities would be less than significant.

b) **Less than Significant Impact**. Water is needed for the Proposed Project for basic sanitary services, fire protection, pile moisture content, and dust control. The volume of water needed for the composting process depends on the raw materials as well as climate. The required water volume to serve the Proposed Project would need to accommodate an annual throughput of up to 300,000 tons of material.

Although the quantity of water needed can vary depending on a variety of issues such as material feedstock moisture content, wind, the use of covers, etc. a facility of this size would require approximately 10,000-25,000 gallons per day. In addition, a 120,000 gallon water tank for fire suppression purposes would be located on site. Water demands for the Proposed Project are based on estimates from similar uses in other settings, as well as use of standard professional practices for estimating water needs. Estimates were determined based off of assumed feedstock moisture content and the amount of water needed to keep the compost piles sufficiently moist for the composting process. The numbers were compared to other compost facility operations and found to be consistent with those facilities.

The primary water supply for the Proposed Project would be water supplied by the BBID. BBID would supply water from their canal located approximately 2.4 miles to the north, in Contra Costa County. The water would be delivered to the facility utilizing water tanker trucks.

In the event that BBID does not have water available due to extreme drought conditions, recycled water is available from the City of Tracy's wastewater treatment plant. The treatment plant is located approximately 8 miles east of the proposed facility. The City currently produces approximately 7 million gallons per day of recycled water. In addition, the City has recently been approved for an \$18 million grant to expand its recycled water infrastructure and pipelines to the western portion of the city. Once the pipeline expansion is completed (2020) recycled water would be available for the Project approximately 4 miles from the proposed facility.

During the three wettest winter months of the year, catchment basins constructed on the site as part of the Proposed Project's stormwater control system could provide the facility's water supply. Collected and stored stormwater in the catchment basins would be aerated and treated/conditioned prior to its reuse for on-site purposes. It is anticipated that all of the water used on site would be directed to and retained within the catchment basins. The combined catchment basin capacity for the Proposed Project is preliminarily sized at approximately 20 acre-feet. The estimated capacity is necessary to support the average 12-month cyclical water demands of the Proposed Project, as augmented by the BBID canal water supply.

An alternate water supply source would include the existing well that currently supplies water for cattle on the site, the use of which would be limited to employee domestic uses only. The estimated volume of water currently produced by the well is approximately five gallons per minute.

Although the Project site is not served by a public water supply, adequate water supply sources and conservation/reuse methods are available to serve the Proposed Project. Therefore, impacts related to sufficient water supplies to serve the Proposed Project would be less than significant and no mitigation would be required.

c) Less than Significant Impact. Primary sources of wastewater generated by the Proposed Project would be leachate generated by the composting process; truck washout wastewater; and any wastewater from sanitation uses. To provide for flexibility in ultimate design and operation of the Project, combined systems are proposed to address treatment/disposal of wastewater resulting from truck washing and leachate generated by the active composting processes.

All active compost leachate and truck washing/area wash down wastewater would be held onsite for use in irrigation of the compost piles. The preferred operating mode under this general concept provides for recycling and reuse of wastewater in operations. Any remaining wastewater not recycled within the Project site would be temporarily held onsite for periodic removal and transportation to an approved, offsite wastewater treatment facility.

Wastewater would also be generated by sanitation uses, i.e., toilets, employee washrooms, etc. Wastewater from these activities would be treated by an onsite septic system. Solids from the septic tank would be periodically removed and transported to a wastewater treatment facility by a contract operator. All proposed wastewater treatment and disposal systems would be reviewed and approved by the Alameda County Department of Environmental Health.

The Proposed Project is not anticipated to generate a significant amount of wastewater that would be treated by public wastewater treatment facilities, and as such, is not anticipated to result in a determination by the wastewater treatment provider which may serve the Proposed Project that it does not have adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments. Further, the wastewater generated by the Proposed Project is not anticipated to exceed the RWQCB wastewater treatment requirements. This impact would be less than significant. No mitigation would be required.

- d) Less than Significant Impact. The Proposed Project's primary source of solid waste requiring disposal would be residual waste which cannot be composted. Because these wastes are currently sent to regional landfills, they do not represent a new waste stream. However, employees would generate a minor amount of new waste which would require disposal. Both of the Alameda County active landfills have capacity through at least 2022, and this minor addition to the waste stream is not anticipated to result in exceeding capacity at either landfill. Solid waste generated by the Proposed Project would not be in excess of State or local standards. In addition, the Proposed Project would be required to comply with CalRecycle regulations regarding composting operations found at Title 14. Therefore, this impact would be less than significant and no mitigation would be required.
- e) Less than Significant Impact. See discussion under item d).

XX. Wildfire

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?				
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?				
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?				
Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				
	emergency response plan or emergency evacuation plan? 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? 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? Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability,	emergency response plan or emergency evacuation plan?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?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?Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability,	emergency response plan or emergency evacuation plan?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?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?Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability,	emergency response plan or emergency evacuation plan?Image: Comparison of the second

- a) **No Impact.** According to the Cal Fire Alameda County Fire Hazard Severity Zones Map, the Proposed Project is located in a Moderate Fire Hazard Severity Zone of an SRA (Cal Fire 2007). The Project Area is not located in the direct vicinity of very high fire hazard severity zones. As a result, there would be no impact on wildfires under items a through d; therefore, no further analysis has been conducted.
- b) No Impact. See discussion under item a).
- c) No Impact. See discussion under item a).
- d) No Impact. See discussion under item a).

XXI. Mandatory Findings of Significance

Environmental Issue Area: Would the project:		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
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)?				
c)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?				

Impact Analysis

a) Potentially Significant Unless Mitigation Incorporated. As discussed in Chapter IV. Biological Resources, The Proposed Project could impact a variety of special-status plants, special-status amphibians and reptiles, migratory birds and raptors, the San Joaquin Kit Fox, and the American Badger through direct impacts or habitat modifications. Implementation of Mitigation Measures BIO-1 through BIO-35 would reduce these impacts to a less than significant level. Additionally, implementation of Project activities would result in the loss of riparian vegetation, aquatic or wetland habitat, and/or sensitive natural communities, which would be considered a potentially significant impact. These impacts could be reduced to a less than significant level through implementation of Mitigation Measure BIO-36. Proposed project activities would not cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community. Further, the Proposed Project would not substantially interfere with the movement of native resident or migratory wildlife species.

The Proposed Project would not eliminate examples of the major periods of California history or pre-history. As discussed in Chapter V. Cultural Resources, implementation of the Proposed Project is not anticipated to result in disturbance of eligible/significant cultural resources. No cultural resources were identified within the Proposed Project's APE. Nonetheless, while unlikely, buried or previously unidentified cultural resources could exist. Record search and survey results indicate that there are no significant cultural resources on the surface of the APE, and there are few known cultural resources in the immediate area. While the surface of

the Project area has been altered through previous agricultural use, prehistoric and historic period archaeological sites could occur in buried contexts. Thus, the potential exists that buried resources could be discovered during construction. Implementation of Mitigation Measure CR-1 would reduce potential Project impacts related to unknown cultural resources to a less-than-significant level.

- b) Potentially Significant Impact. Implementation of the Proposed Project, as well as other future development projects in the area, would result in an increase in emissions of criteria pollutants over the identified thresholds. These thresholds represent the maximum emissions a project may generate before contributing to a cumulative impact on regional air quality. Therefore, projects that would result in an increase in criteria pollutants of more than their respective thresholds would also be considered to contribute to a significant cumulative impact. Operation of the Proposed Project would also result in a new source of criteria pollutants, which are projected to exceed emissions thresholds and result in a significant and unavoidable air quality impact. Therefore, cumulative operation impacts would also be significant and unavoidable.
- c) **Potentially Significant Impact.** The Proposed Project could have environmental effects which could cause substantial adverse effects on human beings as it relates to air quality. The Proposed Project would conflict with or obstruct the 2017 CAP if construction of the Proposed Project generates criteria pollutant that exceed numerical thresholds defined by BAAQMD to attain the goals and objectives of the 2017 CAP (see Tables 3.4-2, 3.4-3, and 3.4-5 of the EIR Appendix). The Proposed Project would exceed the BAAQMD's significance criteria for criteria air pollutant emissions during operation. Therefore, the Project would conflict with or obstruct implementation of the applicable air quality plan, impacts are anticipated to be significant and unavoidable with Project implementation. After implementation of mitigation measures, all other significant impacts associated with the Proposed Project would be reduced to a less than significant level, and no other resources would likely have a substantial adverse effect on human beings.