RECOLOGY VALLEJO
SOLID WASTE FACILITY PERMIT (SWFP)
Initial Study/Mitigated Negative Declaration

Prepared for:

County of Solano
Environmental Health Services Division
Department of Resource Management

April 2014

RECOLOGY VALLEJO
SOLID WASTE FACILITY PERMIT (SWFP)

Initial Study/Mitigated Negative Declaration

Prepared for:

April 2014

County of Solano
Department of Resource Management
Environmental Health Division

Prepared by:

RCH Group
11060 White Rock Road, Suite 150-A
Rancho Cordova, CA 95670
916.782.4427

TABLE OF CONTENTS

Recology Vallejo
Solid Waste Facility Permit (SWFP)
Initial Study/Mitigated Negative Declaration

Appendices

List of Tables

List of Figures

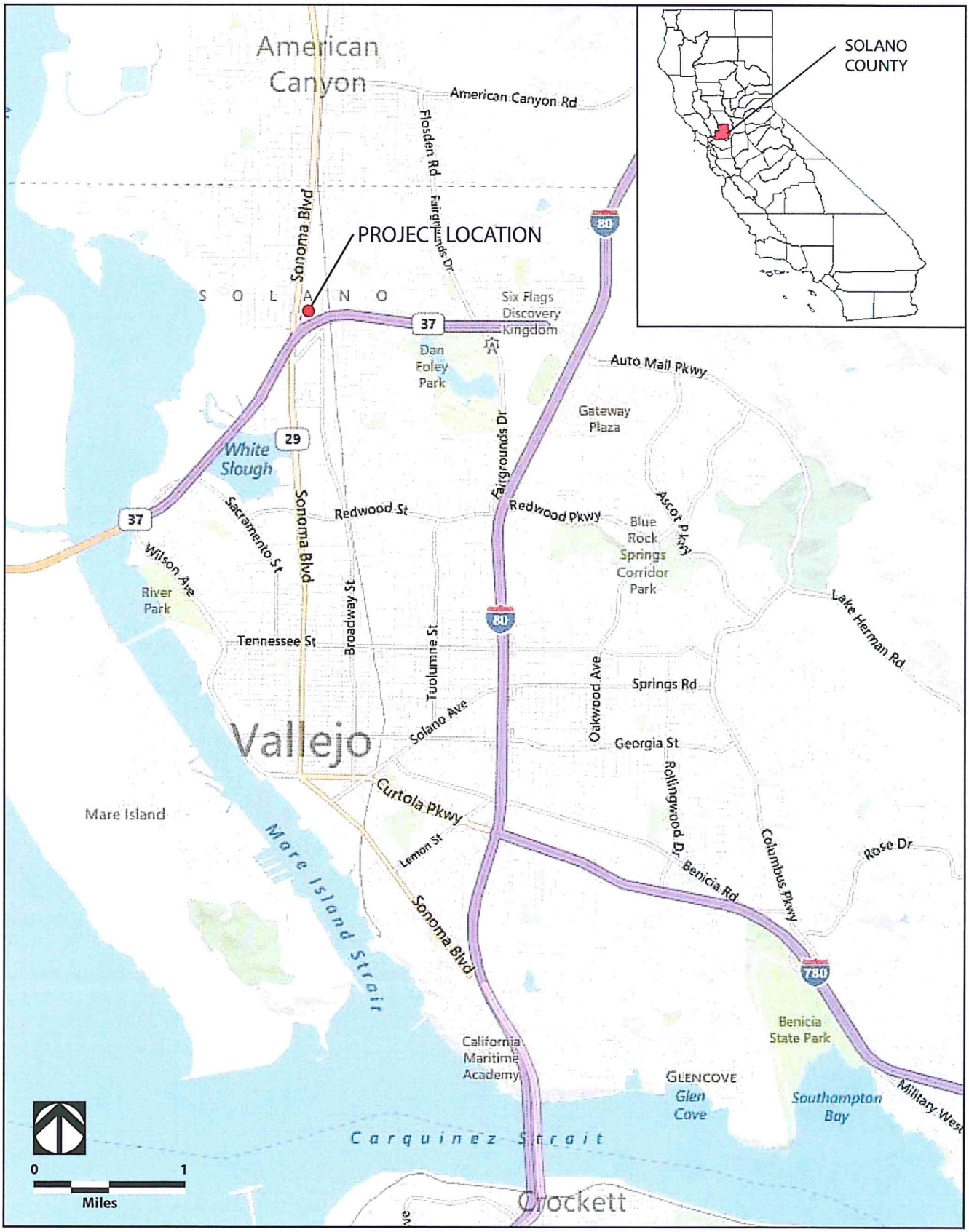
ENVIRONMENTAL CHECKLIST
Initial Study/Mitigated Negative Declaration

1. Project Title:	Recology Vallejo Facility SWFP
2. Lead Agency Name and Address:	County of Solano Environmental Health Services Division Department of Resource Management
3. Contact Person and Phone Number:	Marcy L. Hannum (707) 784-6765
4. Project Location:	Recology Vallejo Facility 2021 Broadway Street Vallejo, CA 94589
5. Project Sponsor's Name and Address:	Recology Vallejo Tom Phillips, General Manager 2021 Broadway Street Vallejo, CA 94589
6. General Plan Designation(s):	Commercial-Retail
7. Zoning Designation:	Intensive Use

8. Description of Project and Existing Setting:

Introduction

The Recology Vallejo facility is seeking to obtain a Solid Waste Facility Permit (SWFP) for a large-volume transfer station, which would allow the operator to increase its permitted daily processing capacity to 300 tons per day of mixed recyclables and organics. The facility currently processes approximately 177 tons per day of mixed recyclables and organics. The proposed project would also allow for the inclusion of food waste into the existing green waste collection service. The SWFP would apply to the entire 9.36-acre property and would include both the recycling and food/green waste activities. **Figure 1** shows the regional location of the facility and **Figure 2** shows the Site Plan of the facility.

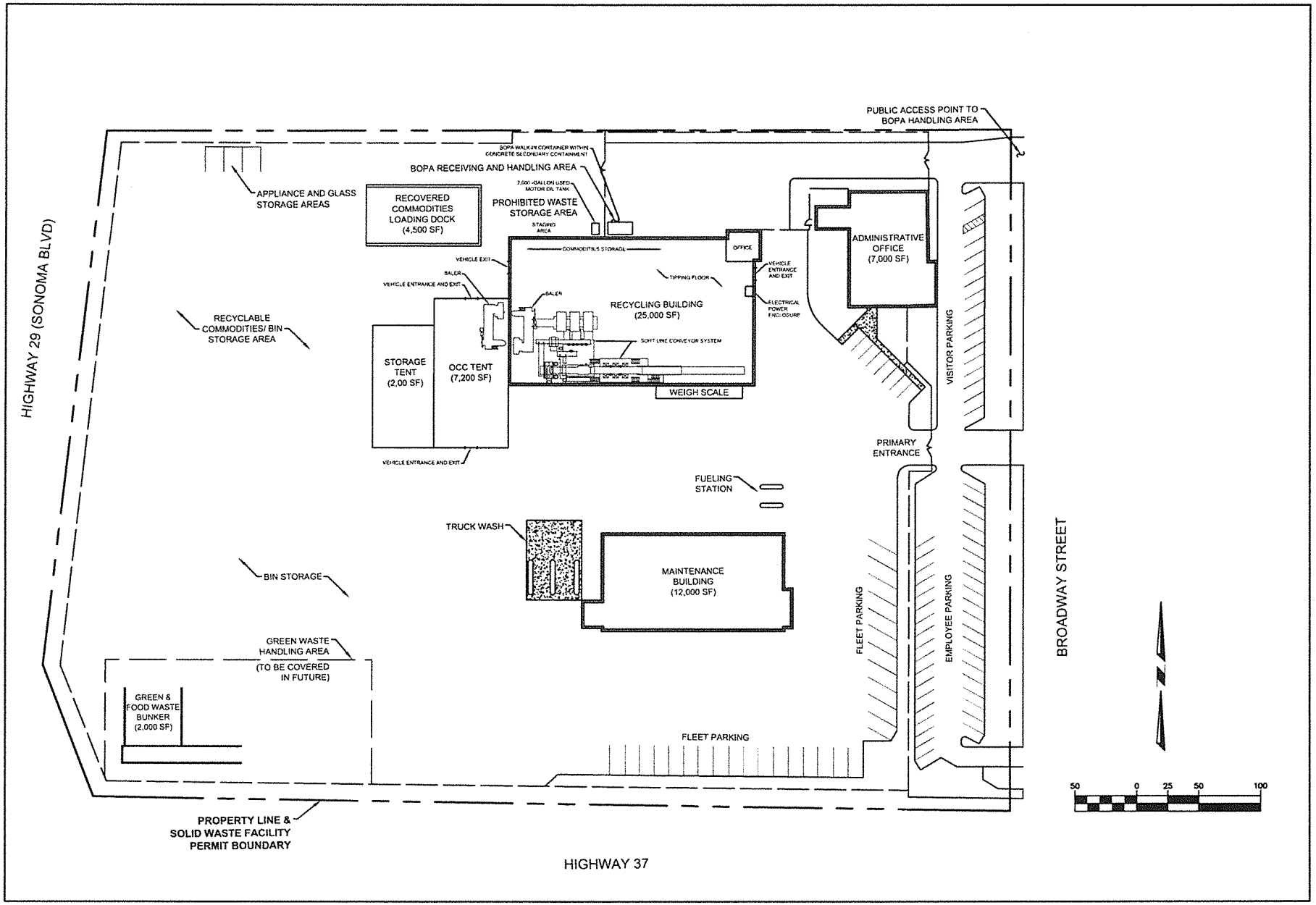


SOURCE: Bing Maps; RCH Group, 2013

Recology Vallejo, SWFP

Figure 1

Regional Locator Map



SOURCE: EBA Engineering; RCH Group, 2013

Recology Vallejo, SWFP

Figure 2

Site Plan

The facility currently operates as a recycling collection facility under a conditional use permit (CUP) with the City of Vallejo (for recyclable materials) and under a Notification Tier permit through CalRecycle for green waste collection. The City of Vallejo granted the CUP for the existing facility in August of 1987. Prior to issuance of the CUP, an Environmental Assessment was prepared in May of 1987 for the facility (which consolidated operations formerly located at several other sites in Vallejo).[1] The CUP was subsequently amended in April of 2013 to allow for the inclusion of food waste in the current green waste collection.

The proposed project would increase the permitted tons per day received at the facility up to a maximum of 300 tons per day that includes both incoming recyclables and organics. There is currently no daily tonnage limit on recyclables that are received at the facility; however, non-recyclable residuals[2] are limited to 10 percent (by weight) of incoming recyclables. The SWFP would allow for more flexibility for existing recycling activities with regard to the amount of residuals brought into the facility. In 2012, the facility received an average of approximately 177 tons per day (103 tons of recyclables and 74 tons of green waste).Compared to 2012 records, the proposed project would result in an increase of up to approximately 123 tons per day above the average incoming materials.

The proposed project also includes the addition of food waste as an approved feedstock into the existing green waste collection program from both residential and commercial sources. The Notification for green waste has a daily limit of 100 tons. The City of Vallejo has already approved addition of food waste collection at the facility in Resolution No. PC 13-04, an amendment to the existing CUP (CUP #87- 27) and is included in Appendix A.

The increase to 300 permitted tons per day would account for any additional tonnage that may come in through the food waste collection program (anticipated up to an additional 40 tons per day) and approximately an additional 100 tons per day to account for fluctuations in various materials handled at the facility. The 300 permitted tons per day is within the design capacity of the facility, which is 514 tons per 12-hour workday (144 tons of recyclables plus 370 tons of compostable materials (green waste and food waste)).

The proposed project would not be permitted to receive Municipal Solid Waste (MSW) or construction and demolition (C&D) materials.

Operational Changes

The only material handling change would be the addition of food waste as a feedstock in the existing green waste collection program, which has been approved by the City of Vallejo. The collection of food waste is expected to begin in 2014 after a public information/education effort by the City. To minimize any potential nuisance issues (e.g. odor, vectors, birds, and storm water contamination) associated with food waste collection, Recology would install a cover over the Green and Food Waste Bunker to direct all storm water runoff into the existing storm drainage system. All leachate from the Green and Food Waste Bunker would be directed into the existing underground Continuous Deflective

1 EIP Associates, *Vallejo Garbage Service Solid Waste Facilities and Transfer Station Environmental Assessment*, Prepared for City of Vallejo, May 1987.

2 Residual wastes are solid waste materials that are non-compostable and non-recyclable. Residuals are normally sent to a landfill for disposal.

Separation (CDS) unit through the drain to the CDS unit located on the western side of the Bunker. The leachate stored in the CDS unit would be pumped frequently, especially prior to storm events. Once pumped, if the leachate meets pH requirements it could then go through the oil/water separator and be disposed through the on-site connection to the sanitary sewer system. Any leachate that does not meet pH requirements would be taken off-site for disposal. The addition of food waste to the existing green waste collection program would not result in an increase in trips or traffic, as the material would be collected as part of existing routes. **Figure 3** shows how the green and food waste materials would be handled with the proposed project; no change from how the green materials are handled in receiving and transferring now.

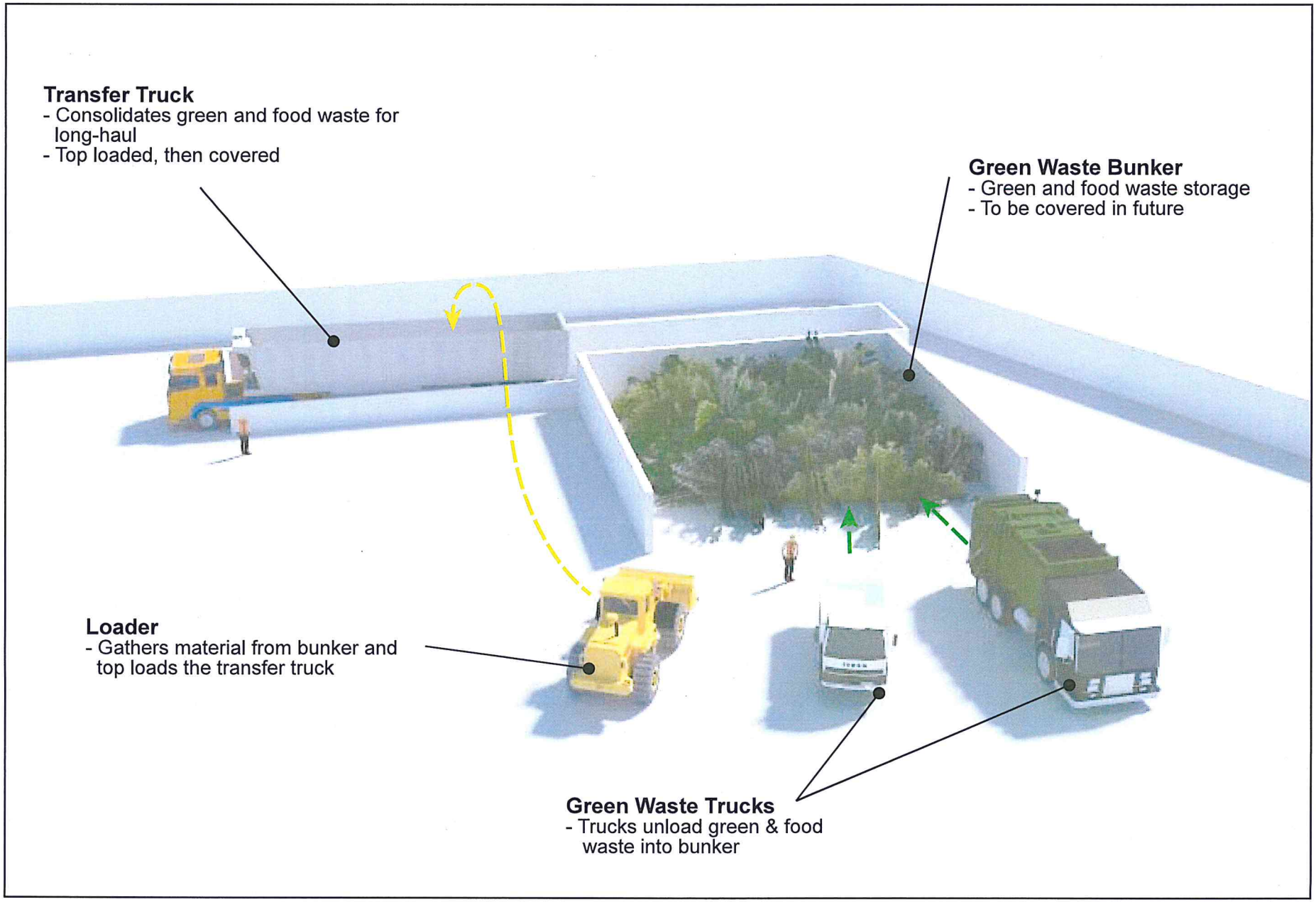
As mentioned above, the SWFP would allow for more flexibility for the existing recycling activities with regard to the amount of residuals brought into the facility. Currently the amount of recyclables being processed is limited by a residual restriction of 10 percent through regulation for recycling centers. The SWFP would not have this restriction. There may be some increase in the residuals brought in with the organics due to the addition of food waste (which can include paper and plastics packaging materials). The food waste public information/education campaign will help minimize any increase in the volume of residuals due to the introduction of food waste as a feedstock.

The SWFP would require monthly inspections by the Solano County Department of Resource Management as Local Enforcement Agency (LEA) for CalRecycle. These inspections address all operational requirements for the facility's SWFP as required by California Public Resources Code 44001 and Title 14 of the California Code of Regulations, Division 7, Chapter 3, Article 6.0, and Chapter 5, Article 2.2. The LEA would review the site for conditions regulated under the SWFP and Title 14, including litter, odors, pests, hazards, nuisances, noise, dust, traffic control, fire prevention, leachate control, record keeping and personnel health and safety.

Existing Facilities and Operations

Recology trucks carrying recyclables enter the property from Broadway Street using the central driveway on the east side of the property (see **Figure 2**), proceed west to the Weigh Scale on the south side of the recycling facility for measuring, and then enter the recycling facility to deposit their loads onto the tipping floor. The trucks leave the site through the same central driveway.

At the recycling facility, materials dumped onto the tipping floor are either loaded onto the sort line's infeed conveyor for mechanical and hand processing or placed directly into the baler. As it moves across the sort line, the material is segregated (sorted) by machine and by hand into commodities for either baling or direct shipment off-site. Residual wastes, designated for disposal, are segregated, loaded into a debris box or transfer vehicle and shipped to a permitted off-site disposal facility within 48 hours of processing. Depending on recyclable content, this material may be diverted back to the sort line or off-site to another recycling vendor for further processing. Old Corrugated Cardboard (OCC) removed through sort line operations is transported by forklift or bucket loader to the adjacent OCC Tent for subsequent baling. Additionally, inbound commercial loads of source separated OCC are diverted directly to the OCC Tent for baling following initial weighing at the Weigh Scale, using the central driveway on Broadway mentioned above.



SOURCE: RCH Group, 2013

Recology Vallejo, SWFP
Figure 3
Green & Food Waste Bunker

Baled commodities may be temporarily stored within the recycling facility or, if OCC, in the OCC Tent. Additional bale storage takes place within the Recyclable Commodities/Bin Storage Area located west of the recycling facility. Loading of all baled commodities in preparation for shipment occurs at the Recovered Commodities Loading Dock located in the northwest of the recycling facility. Bales are shipped off-site to various recycling facilities.

In addition to the baled commodities mentioned above, appliances and electronic products brought in through curbside collection programs are temporarily stored on-site in the northwest portion of the Recyclable Commodities/Bin Storage Area. Appliances are removed from the site on a regular basis by a licensed California Appliance Recycler (CAR). Removal and management of all materials requiring special handling (MRSH), including freon and other refrigerant gases, compressor oil, ballasts or capacitors, and mercury switches, are performed off-site at a CAR facility. Electronic waste and cathode ray tubes (CRTs) are stored separately in this area according to Department of Toxic Substances Control (DTSC) regulations and are removed on a regular basis for off-site recycling.

Mixed glass removed by recycling sort line operations is also temporarily stored in a bunker located in the Recyclable Commodities/Bin Storage Area. Mixed glass is loaded from the storage bunker into contract hauler trailers on a regular basis for shipment to a recycling facility.

The BOPA (batteries-oil-paint-antifreeze) and E-waste Receiving and Handling Area are used for the management of selected waste materials brought in by the public. Materials accepted through the BOPA Program are lead-acid batteries, latex paint, used motor oil and fuel filters, antifreeze, universal wastes (electronics, household batteries, fluorescent tubes and other mercury containing lamps) and used cooking oil. A separate entrance from Broadway Street for public deliveries of BOPA materials is located along the northern property boundary, north of the administrative office. BOPA materials received from the public are packaged and stored in a metal walk-in container set within a concrete secondary containment. Handling protocols include the following procedures:

- Antifreeze is consolidated into separate 55-gallon steel drums;
- Oil and fuel filters are crushed in a dedicated crushing machine and packaged in 55-gallon steel drums;
- Used motor oil is consolidated into a 2,000-gallon aboveground storage tank located west and adjacent to the walk-in container/concrete secondary containment;
- Batteries are sorted and contacts taped according to recycler requirements and placed in drums;
- Mercury-containing lamps, including fluorescent tubes, are packaged in fiber drums or boxes;
- Electronic wastes are palletized and shrink wrapped or placed in cubic yard boxes on pallets; and
- Used cooking oil is transferred into a dedicated grease recycling bin.

Removal of the materials described above is coordinated by Recology Vallejo through appropriately licensed contractors who transport the materials off-site for subsequent processing, recycling and/or disposal. The BOPA Receiving and Handling Area is regulated

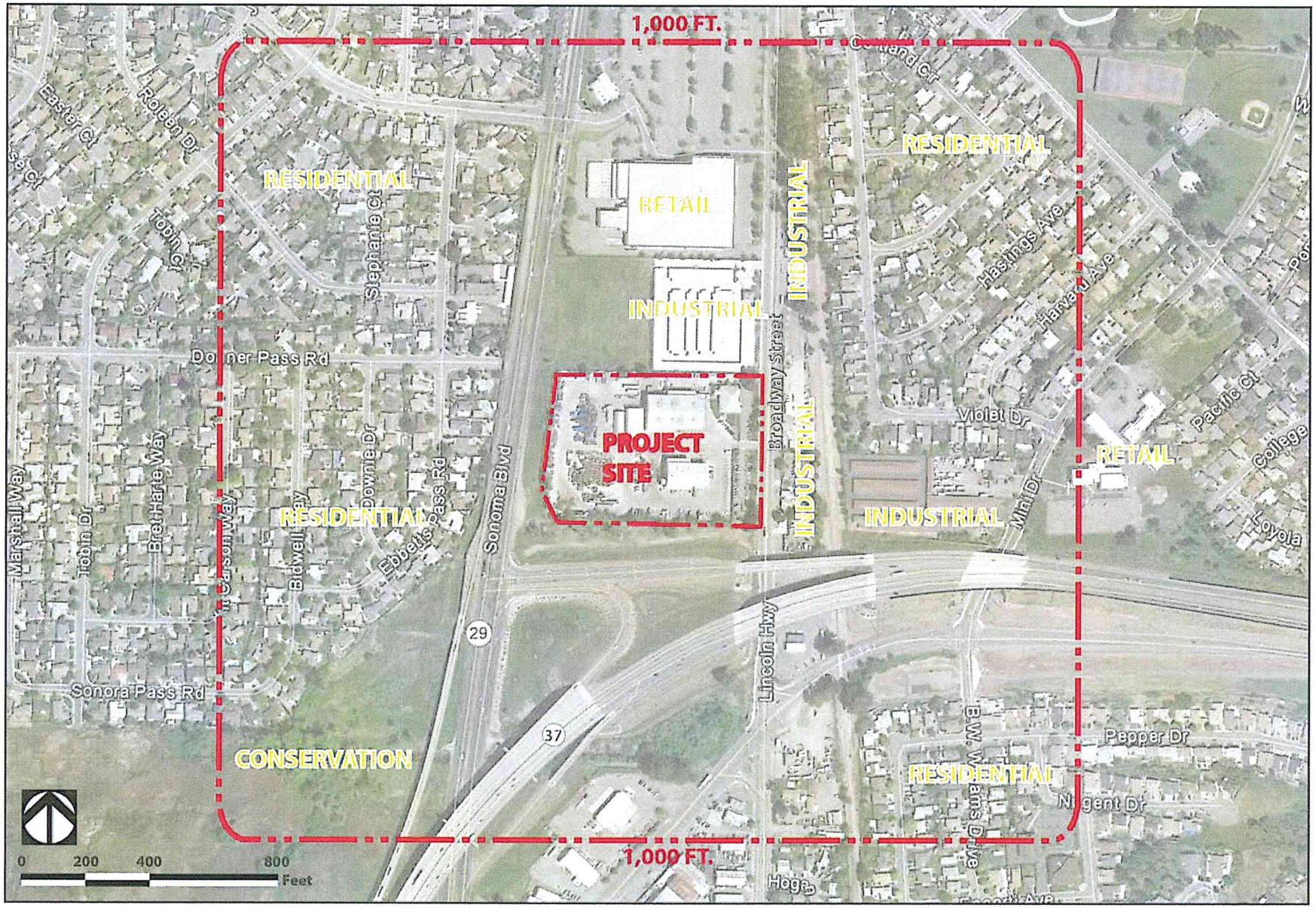
separately by the local Certified Unified Program Agency (i.e., Solano County Department of Environmental Management).

The facility receives green waste collected from residential curbside carts, which is source separated at the point of generation. Collection trucks enter the facility through the central driveway on Broadway Street, are weighed, and then unload the green waste material into a designated bunker. The material is reloaded into transfer trucks and removed from the site within 48 hours of receipt to a permitted composting operation. The Recology Vallejo operation handles compostable materials but does not produce compost.

The Vallejo facility is permitted to operate 24 hours per day, seven days per week, under a Conditional Use Permit issued by the City of Vallejo. All waste receipt and sort line operations generally occur between 5:00 a.m. and 5:00 p.m., 5 days per week, Monday thru Friday. The recyclable sort line may work additional hours depending on the volume of recyclable material on-site that requires processing. Source separated recyclables delivery, facility cleaning and equipment maintenance may occur anytime throughout the 24-hour cycle, seven days per week. The BOPA and E-waste Receiving and Handling Area is open to the public on Thursdays through Saturdays from 8:00 a.m. to 4:00 p.m. Green waste operations generally occur between 5:00 a.m. and 5:00 p.m., five days per week, Monday thru Friday.

9. Surrounding Land Uses and Setting:

The project would be located at the existing Recology Vallejo facility. The existing facility is bordered on the west by Sonoma Boulevard (SR 29) with a single-family residential neighborhood beyond, on the south by SR 37 and an off-ramp connecting to Sonoma Boulevard, on the east by Broadway Street with a parking area, single railroad track, and single-family residential neighborhood and public storage facility beyond, and on the north by a public storage facility, light industrial uses and vacant land (see **Figure 4**). The closest residences are located approximately 200 feet from the facility, directly to the west of the site across Sonoma Boulevard.



SOURCE: Google Maps; RCH Group, 2013

Recology Vallejo, SWFP

Figure 4

Adjacent Land Uses

10. Project Objectives:

The project's overall objective is to promote sustainability in the community, while addressing global environmental concerns through the following actions:

- Implement the City of Vallejo's Resolution No. PC 13-04 allowing food scrap collection at the Vallejo Recology facility.
- Assist the City of Vallejo in increasing the volume of waste diverted from landfill and complying with the City's waste diversion requirements of AB 939.
- Assist in meeting CalRecycle's Strategic Directive 6.1: Reduce the amount of organics in the waste stream by 50 percent by 2020.
- Support mandated commercial recycling pursuant to AB 341 and local government plans.
- Continue to comply with the Local Enforcement Agency (LEA) and CalRecycle's regulatory requirements.

11. Other Public Agencies

The following permits and regulations are applicable to the proposed project and involve other public agencies whose approval may be required:

- Conditional Use Permit, City of Vallejo (amended April 2013)
- Certified Unified Program Agency (CUPA) Permit to Operate, Solano County Department of Environmental Management (April 2004)
- National Pollutant Discharge Elimination Permit (NPDES) General Permit for Industrial Dischargers of Storm Water, San Francisco Bay Regional Water Quality Control Board (March 1992 and May 1997)
- Bay Area Air Quality Management District, Spray Booth Permit (expires December 2013)

Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology, Soils and Seismicity
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Land Use Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☒ Utilities and Service Systems	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

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

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

☐ 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, no further environmental documentation is required.

Bill Emlen — Signature

5/1/14 — Date

Bill Emlen — Printed Name

For

Environmental Checklist

Aesthetics

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
1.	**AESTHETICS — Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Discussion

The environmental checklist issues are discussed below.

a) **No Impact.** The project site is located within an urbanized area and would not involve construction of new structures, except for the cover over the Green and Food Waste Bunker, which would not substantially change the industrial appearance of the site. Therefore, the proposed project would have no impact on scenic vistas.

b) **No Impact.** The project site is not located within or near a designated state scenic highway. There are no scenic resources such as trees, rock outcroppings, or historic buildings on the site. Therefore, the proposed project would have no impact on scenic resources.

c) **Less than Significant.** The proposed project would involve limited operational changes at an existing recycling facility located in an urbanized area. There would be no construction or alteration of structures or other changes that could affect the existing visual character, except for the cover over the Green and Food Waste Bunker, which would not substantially change the existing industrial appearance of the site. The impact on the visual character or quality of the site and its surroundings would be less than significant and no mitigation is required.

d) **No Impact**. The proposed project's operational changes would not change current lighting practices at the existing facility, which is located in an urbanized area. There would be no new sources of light and glare. Food and green waste would typically be handled during daytime hours. In the event that they would be delivered after daylight hours, the perimeter lights would provide adequate lighting to the Green and Food Waste Bunker area. The perimeter lights are on a timer that goes on at sunset and automatically turn off at sunrise. Hence, the proposed project would not create a new source of

substantial light or glare and would not adversely affect daily or nighttime views in the area.

References

California Department of Transportation, *California Scenic Highway Mapping System, Solano County,* available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways, accessed 27 August 2013.

Agricultural and Forest Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
2. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. 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?	☐	☐	☐	☒

Discussion

a) **No Impact.** There is no farmland located on or near the project site. The proposed project would have no impact on farmland.

b) **No Impact.** The project site is not zoned for agricultural use and is not subject to a Williamson Act contract. There would be no impact.

c) **No Impact.** The project site is not zoned for forest land or timberland. There would be no impact.

d) **No Impact.** There is no forestland located on or near the project site. The proposed project would have no impact on forest land.

e) **No Impact.** The proposed project would not involve other changes in the existing environment that, 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. There would be no impact.

Air Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
3.	**AIR QUALITY —** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

Discussion

a) **Less than Significant.**

Background:

Criteria Pollutants

The Bay Area Air Quality Management District (BAAQMD) monitors and regulates air quality pursuant to the Federal Clean Air Act, as amended, and the 1988 California Clean Air Act. The BAAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs. Other District responsibilities

include monitoring air quality, preparation of clean air plans, and responding to citizen air quality complaints.

Air Quality Significance Criteria

In 1999, the BAAQMD adopted the BAAQMD CEQA Guidelines to assist lead agencies with CEQA impact analyses (BAAQMD, 1999). The guidelines were revised in 2010, and included new impact significance thresholds; however, the BAAQMD's 2010 significance thresholds were challenged in a lawsuit, and on March 5, 2012, the Alameda County Superior Court issued a judgment finding that BAAQMD had failed to comply with CEQA when it adopted the thresholds. The court issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD complies with CEQA.

In May 2012, to comply with the court's order, the BAAQMD updated its CEQA Air Quality Guidelines to include no reference of the BAAQMD's adopted 2010 thresholds (BAAQMD, 2012). The revised 2012 guidelines indicate that lead agencies should examine substantial evidence in determining appropriate air quality thresholds, and identify the BAAQMD's 1999 Thresholds of Significance (BAAQMD, 1999) as a source of information for thresholds of significance. In reviewing the basis for the BAAQMD 1999 Thresholds, the lead agency has found that the BAAQMD daily thresholds were based on the federal limits in the New Source Review (NSR) standards. Congress established the New Source Review (NSR) permitting program as part of the 1977 Clean Air Act Amendments. NSR is a preconstruction permitting program that serves two important purposes.

- First, it ensures that air quality is not significantly degraded from the addition of new and modified factories, industrial boilers and power plants. In areas with unhealthy air, NSR assures that new emissions do not slow progress toward cleaner air. In areas with clean air, especially pristine areas like national parks, NSR assures that new emissions do not significantly worsen air quality.
- Second, the NSR program assures people that any large new or modified industrial source in their neighborhoods will be as clean as possible, and that advances in pollution control occur concurrently with industrial expansion.

Thus, the BAAQMD 1999 Thresholds were based on New Source Review levels appropriate for the background air quality in the air basin and they have been used for more than a decade on a variety of projects without any major controversy about their appropriateness. Given this information, the lead agency has determined that the BAAQMD's 1999 Thresholds of Significance are supported by substantial evidence and therefore can be used as significance thresholds for this project.

The 1999 BAAQMD CEQA Guidelines do not require quantification of construction emissions and comparison to thresholds, but instead rely upon inclusion of feasible control measures for PM10 (fugitive dust). The analysis of operational impacts for this

project is not necessary because the 1999 Guidelines indicate that the District (BAAQMD) does not recommend a detailed air quality analysis for projects generating less than 2,000 vehicles per day, unless warranted by the specific nature of the project or project setting. The proposed project would not generate 2,000 vehicles per day and the nature of the project does not warrant a detailed air quality analysis.

Discussion of Consistency Impact

The project site is within the San Francisco Bay Area Air Basin (Bay Area), which is currently designated as a nonattainment area for state and federal ozone standards, for the state particulate matter (PM10 and PM2.5) standards, and the national 24-hour PM2.5 standard. The BAAQMD's 2010 Clean Air Plan is the applicable Clean Air Plan that has been prepared to address ozone and particulate matter nonattainment issues.

If a City's General Plan is consistent with the most recently adopted Clean Air Plan, a project that is consistent with the General Plan's land use designation is considered consistent with applicable air quality plans and policies.

As stated in Section 10, Land Use and Planning, the proposed project would be consistent with the General Plan land use designations and zoning for the project site. In addition, the City's General Plan is consistent with the Clean Air Plan because data and projections from the General Plan are incorporated into the Clean Air Plan. Development of the proposed project would not interfere with population and vehicle-miles-traveled (VMT) projections used to develop the 2010 Clean Air Plan planning projections as it would not increase the population of the area and any change in VMT traveled would be negligible. Therefore, the proposed project would result in **a less-than-significant** impact because it would not substantially conflict with the region's air quality management plan.

b) **Less than significant.**

Air quality impacts are generally associated with both construction and operation of a project. This project would have minimal air quality construction impacts and minimal operational impacts.

Construction Impacts

The proposed project includes minor construction of a cover over the Green and Food Waste Bunker. However, the construction is expected to be very limited and short in duration. The emissions generated from these construction activities are expected to be insignificant, but could include dust (including PM10 and PM2.5) and ozone precursors (ROG and NO_x). BAAQMD rules and regulations govern certain aspects of the construction phase of projects. BAAQMD regulations applicable to the construction of the proposed project relate to portable equipment (e.g., gasoline- or diesel-powered engines used for power generation, pumps, compressors, and cranes), architectural coatings, fugitive dust, and paving materials. Project construction impacts are expected to be minimal and would be required to comply with any relevant BAAQMD regulations.

Thus, construction impacts would be **less than significant**.

Operational Impacts

The primary operational impact on air quality would be the number of trips by transfer trucks, collection trucks and other trucks using the facility at the peak capacity of 300 TPD. According to the Transportation and Traffic Discussion, the proposed project would require an additional 37 transfer and collection trucks and generate 74 additional truck trips. The BAAQMD generally recommends a detailed air quality analysis for projects generating more than 2,000 vehicle trips per day. Regardless, an air quality emissions evaluation has been conducted (the results are presented below) to determine whether the proposed project would exceed the significance criteria identified in the *BAAQMD CEQA Guidelines*.

The Thresholds of Significance from the *1999 BAAQMD CEQA Guidelines* for project operations are:

- Reactive Organic Gases (ROG) - 80 lbs/day
- Nitrogen Oxides (NO_X) - 80 lbs/day
- Respirable Particulates (PM10) - 80 lbs/day

Table 1 shows project related emissions from operations as described above. No substantial increases in area source emissions are included in the project description so increases in area emissions are not included in the estimates in **Table 1**.

Table 1: Criteria Air Pollutant Emissions from Operations

Emissions	Criteria Air Pollutants (Pounds Per Day)			
	ROG	CO	NO_X	PM10
Operational (Vehicular) Emission Estimates	<1	1	4	<1
BAAQMD Thresholds	80	550	80	80
Significant Impact?	No	No	No	No
Assumptions included 37 new heavy and medium duty trucks per day at maximum capacity of 300 TPD (74 new truck trips per day). EMFAC-2011 2014 year emission rates were used with a roundtrip distance of 20 to 70 miles depending upon the truck type and route. Source: RCH Group 2013				

Because the proposed project would not exceed BAAQMD thresholds for daily operational (vehicular) emissions, operational impacts would be considered **less than significant**.

c) **Less than significant.**

The 1999 BAAQMD CEQA Guidelines state that for any project that does not individually have significant air quality impacts, the determination of a significant cumulative impact can be determined based on consistency of the project with the local general plan and of the general plan with the regional air quality plan. As disclosed in this air quality analysis, with mitigation, the proposed project would not result in individual significant air quality impacts. Therefore, the proposed project would not generate cumulatively considerable air emissions and the cumulative impact would be **less than significant**.

d) **Less than significant.**

The nearest residences are approximately 200 feet west of the Recology Vallejo facility. As noted in b), operation of the proposed project would not generate substantial pollutant concentrations and thus would not expose sensitive receptors to substantial pollutant concentrations. Construction activities would comply with relevant BAAQMD and State regulations, therefore emissions would be less than significant.. Toxic air contaminants (TACs) could potentially be generated by the use of diesel-fueled construction equipment. Diesel particulate matter emissions can be carcinogenic over long exposure durations (i.e., most analyses consider exposure periods of 10 to 70 years). However, for this construction, nearby receptors would be exposed to construction emissions for a very short period of time and construction equipment emissions would be dispersed by various wind patterns; thus further limiting exposure of any individual residential receptors. Thus, this impact would also be **less than significant**.

e) **Less than significant with mitigation.**

The BAAQMD defines public exposure to offensive odors as a potentially significant impact. In general, the types of land uses that pose potential odor problems include refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations. The proposed project includes the storage and transfer of green waste and food waste materials that could be potential sources of odor at the adjacent land uses.

Without adequate procedures and controls, the decomposing green waste and food waste materials could generate very strong odors. Notably, BAAQMD has several rules regarding odors (Regulation 1-301 (Public Nuisance) and Regulation 7 (Odorous Substances)) that the project must meet.

The Recology Vallejo Facility has provided an Odor Impact Minimization Plan (OIMP). The OIMP (see Appendix B) includes a Protocol for handling odor complaints, which describes the appropriate procedures to follow upon receiving an odor complaint. The

protocol also includes additional measures for staff/management to identify any on-site odors and provides storage and transport guidelines to reduce odors. Implementation of **Mitigation Measure AQ-1** would apply odor control measures to the proposed project, which would reduce impacts to a less-than-significant level after mitigation.

Mitigation Measure AQ-1

Recology Vallejo shall develop and comply with an OIMP consistent with the requirements of the California Code of Regulations, Title 14, Division 7, Chapter 3.1, Article 3, Section 17863.4 as appropriate for operations at the Recology Vallejo facility.

References

Bay Area Air Quality Management District (BAAQMD), December 1999, *BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans.*

Bay Area Air Quality Management District (BAAQMD), 2010. *Bay Area 2010 Clean Air Plan*, adopted September 15, 2010. Available at http://www.baaqmd.gov.

Bay Area Air Quality Management District (BAAQMD), May 2012. *BAAQMD CEQA Air Quality Guidelines*. Available at http://www.baaqmd.gov.

California Integrated Waste Management Board (CIWMB), 2007. *Emissions Testing of Volatile Organic Compounds from Greenwaste Composting at the Modesto Compost Facility in the San Joaquin Valley.* October 31, 2007, revised May 2008.

Biological Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4. BIOLOGICAL RESOURCES — 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, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

a) **No Impact.** Most of the project site is paved or covered with structures, and does not support candidate, sensitive or special-status species. The frontage of the site on Broadway Street along the eastern boundary is landscaped with trees and grass, and trees line most of the southern, western and northern borders of the site. This landscaping, and any habitat value that it may have, would not be affected by the construction of the cover over the Green and Food Waste Bunker or the operational changes of the proposed project. There would be no impact on candidate, sensitive or special-status species.

b) **No Impact.** There is no riparian habitat or other sensitive natural community on the project site. The trees and grass along the borders of the site, and any habitat value that it may have, would not be affected by construction of the cover over the Green and Food Waste Bunker or the operational changes of the proposed project. There would be no impact on riparian habitat or other sensitive natural communities.

c) **No Impact.** There are no wetlands on the project site. There would be no impact.

d) **Less than Significant.** The ability of wildlife species to move or migrate in the project area would not be affected by the operational changes of the proposed project, which would not involve any new structures or barriers, except for the cover over the Green and Food Waste Bunker, which would not substantially affect wildlife movement. There are no watercourses or native wildlife nursery sites on the project site. There would be a less-than-significant impact on movement of native species and no mitigation is required.

e) **No Impact.** The project site has little to no biological resource value. No trees would be removed. The proposed project, therefore, would not conflict with any local policies or ordinances protecting biological resources. Implementation of the proposed project would have no impact.

f) **No Impact.** At the time this Initial Study was prepared, the Solano County Multispecies Habitat Conservation Plan was being prepared but had not been adopted. Thus, the project site is not covered by a Habitat Conservation Plan or Natural Community Conservation Plan. In any case, operation of the proposed project would not conflict with the provisions of the unadopted draft Solano County Multispecies Habitat Conservation Plan. Therefore, the proposed project would not result in impacts related to this criterion.

Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion

a) **No Impact.** There are no historical resources on the project site. There would be no impact on historical resources

b) **Less than Significant.** There are no known aboveground archaeological resources on the project site. The cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the bunker. Because this area was previously disturbed and the below-ground portions of the anchors would be minimal, no

substantial effect on subsurface archaeological resources would occur. The operational changes of the proposed project would not affect subsurface archaeological resources, if any exist on the site. There would be a less-than-significant impact on archaeological resources.

c) **Less than Significant.** There are no unique geological features on the project site. The cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the bunker. Because this area was previously disturbed and the below-ground portions of the anchors would be minimal, no substantial effect on subsurface paleontological resources would occur. The operational changes of the proposed project would not affect subsurface paleontological resources, if any exist on the site. There would be a less-than-significant impact on unique geological features and paleontological resources.

d) **Less than Significant.** The cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the bunker. Because this area was previously disturbed and the below-ground portions of the anchors would be minimal, there would be no substantial effect on buried human remains, if any exist on the site. The operational changes of the proposed project would not affect buried human remains. There would be a less-than-significant impact on buried human remains.

Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the project:				
a) Expose people or structures to 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?	☐	☐	☐	☒
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 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion

ai) **No Impact.** The site is located in a seismically-active region of California that is part of the Coast Ranges geomorphic province. This region is characterized by northwest trending valleys and mountain ranges running subparallel to the San Andreas Fault Zone. The closest active fault to the project site is the Green Valley fault, which is located approximately six miles to the east (County of Solano, 2008). The Green Valley fault, San Andreas fault, and other regional active faults, including the Hayward and Calaveras faults, pose the greatest threat of significant damage in the Bay Area.

The Alquist-Priolo Earthquake Fault Zoning Act requires the delineation of zones by the California Department of Conservation, Geological Survey (CGS, formerly known as the California Division of Mines and Geology [CDMG]) along sufficiently active and well-

defined faults.[3] The purpose of the Act is to restrict construction of structures intended for human occupancy along traces of known active faults. Alquist-Priolo Zones are designated areas most likely to experience surface fault rupture, although fault rupture is not necessarily restricted to those specifically zoned areas. The project site is not located in an Alquist-Priolo Earthquake Fault Zone nor is it located on or immediately adjacent to an active or potentially active fault. The active fault nearest to the project site is the Green Valley fault, located approximately six miles east of the project site. As the project site is not located in an Alquist-Priolo Earthquake Fault Zone and is not located on or immediately adjacent to an active fault, there would be no impact related to fault rupture hazards.

aii, aiii) **Less than Significant.** The project site is located in a seismically-active region. Recent studies by the United States Geological Survey (USGS) indicate there is a 63 percent likelihood of a Richter magnitude 6.7 or higher earthquake occurring in the Bay Area in the next 30 years (USGS, 2008). The project site could experience a range of ground shaking effects during an earthquake on one of the aforementioned Bay Area faults.[4] Depending on a variety of factors such as distance to the epicenter, magnitude of the event, and behavior of underlying materials, ground shaking could be significant. Seismic shaking of this intensity can also trigger ground failures caused by liquefaction, potentially resulting in foundation damage, disruption of utility service and roadway damage.[5]

The proposed project would not include the construction of any structures, except for the cover over the Green and Food Waste Bunker. The addition of this structure would not substantially change the existing level of risk due to seismic activity at the site. Although seismic ground shaking or liquefaction may occur at the site, the operational changes of the proposed project would not change the existing level of risk at the site. This impact would be less than significant.

a.iv) **No Impact.** The project site has a relatively level topography, which would not be subject to slope failure. Additionally, there are no adjacent slopes that could affect the project site. Therefore, the proposed project would not be adversely affected by potential impacts associated with seismically induced landslides.

b) **No Impact.** The project site is covered by impervious paved surfaces, buildings, and landscaped areas. The cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the bunker. Because this area is paved

[3] An active fault is defined by the State of California is a fault that has had surface displacement within Holocene time (approximately the last 11,000 years). A potentially active fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. Sufficiently active is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 1997).

[4] Shaking intensity is a measure of ground shaking effects at a particular location, and can vary depending on the overall magnitude of the earthquake, distance to the fault, focus of earthquake energy, and type of underlying geologic material. The Modified Mercalli (MM) intensity scale is commonly used to measure earthquake effects due to ground shaking. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total).

[5] Liquefaction is the process by which saturated, loose, fine-grained, granular, soil, like sand, behaves like a dense fluid when subjected to prolonged shaking during an earthquake.

and the ground disturbance of the anchors would be negligible, there would be no effect on erosion. The operational changes of the proposed project would not involve any ground disturbance, changes in existing surfaces, or other changes that could create erosion. Therefore, the proposed project would have no impact on erosion.

c) **Less than Significant.** As discussed in criterion 6.a.iv, above, the project site is not subject to landslides. The cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the bunker. This area is paved and the ground disturbance of the anchors would be negligible. There would be no substantial change in the existing level of risk related to unstable soils, lateral spreading, subsidence, liquefaction, or collapse at the site. The operational changes of the proposed project would not involve any ground disturbance, changes in existing surfaces, or other changes that would change the existing level of risk related to unstable soils, lateral spreading, subsidence, liquefaction, or collapse at the site. There would be a less-than-significant impact associated with soil stability and collapse.

d) **Less than Significant.** The cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the bunker, using separate anchors rather than a continuous foundation. This area is paved and the ground disturbance of the anchors would be minimal. There would be no substantial change in the existing level of risk to life and property related to expansive soil. The operational changes of the proposed project would not involve any ground disturbance, changes in existing surfaces, or other changes that would change the existing level of risk related to expansive soils. There would be a less-than-significant impact associated with expansive soil.

e) **No Impact.** The proposed project does not require the use of septic tanks or any other alternative wastewater disposal system. Therefore, the proposed project would have no impact related to the support of septic systems.

References

County of Solano, *Solano County General Plan*, November 2008, Chapter 5 Public Health and Safety, available at: http://www.co.solano.ca.us/depts/rm/planning/general_plan.asp, accessed 28 August 2013

Hart, E.W. and W.A. Bryant, *Fault Rupture Hazard Zones in California: Alquist-Priolo Special Studies Zones Act of 1972 with Index to Special Studies Zone Maps*. California Division of Mines and Geology, Special Publication 42, 1990. Revised and updated 1997.

United States Geological Survey (USGS) Working Group on California Earthquake Probabilities (WG07), *Fact Sheet 2008-3027, Forecasting California's Earthquakes – What Can We Expect in the Next 30 Years?*, http://pubs.usgs.gov/fs/2008/3027/fs2008-3027.pdf, 2008.

Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion

a-b) **Less than Significant.**

Greenhouse Gas Setting

Gases that trap heat in the atmosphere are referred to as greenhouse gas (GHG) emissions because they capture heat radiated from the sun as it is reflected back into the atmosphere, similar to a greenhouse. The accumulation of GHG emissions has been implicated as a driving force for Global Climate Change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and the impact of human activities that alter the composition of the global atmosphere. Both natural processes and human activities result in the generation of GHG emissions.

The major concern is that increases in GHG emissions are causing Global Climate Change. Global Climate Change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, the vast majority of the scientific community now agrees that there is a direct link between increased GHG emissions and long term global temperature increases. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, more drought years, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

In California, GHGs are defined to include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and hydrofluorocarbons. To account for the warming potential of GHGs, GHG emissions are quantified and reported as CO_2 equivalents (CO_2e). The effects of GHG emission sources (i.e., individual projects) are reported in metric tons per year of CO_2e.

Regulatory Framework

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., also known as AB 32), which requires the California Air Resources Board (CARB) to design and implement emission limits, regulations, and other measures, such that statewide GHG emissions will be reduced to 1990 levels by 2020.

In June, 2008, CARB published its Climate Change Draft Scoping Plan (CARB, 2008a). The Climate Change Draft Scoping Plan reported that CARB met the first milestones set by AB 32 in 2007: developing a list of early actions to begin sharply reducing GHG emissions; assembling an inventory of historic emissions; and establishing the 2020 emissions limit. CARB adopted the plan in December (CARB, 2008b).

The Climate Change Proposed Scoping Plan includes recommended actions that were developed to reduce GHG emissions from key sources and activities while improving public health, promoting a cleaner environment, preserving our natural resources, and ensuring that the impacts of the reductions are equitable and do not disproportionately impact low-income and minority communities. These measures, shown below in **Table 2** by sector, also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. These measures were presented to and approved by CARB on December 11, 2008.

TABLE 2
LIST OF RECOMMENDED GHG REDUCTION ACTIONS BY SECTOR

Measure No.	Measure Description	GHG Reductions (Annual Million Metric Tons CO_2e)
Transportation		
T-1	Pavley I and II – Light Duty Vehicle Greenhouse Gas Standards	31.7
T-2	Low Carbon Fuel Standard (Discrete Early Action)	15
T-3[1]	Regional Transportation-Related Greenhouse Gas Targets	5
T-4	Vehicle Efficiency Measures	4.5
T-5	Ship Electrification at Ports (Discrete Early Action)	0.2
T-6	Goods Movement Efficiency Measures. • Ship Electrification at Ports • System-Wide Efficiency Improvements	3.5
T-7	Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	0.93
T-8	Medium- and Heavy-Duty Vehicle Hybridization	0.5
T-9	High Speed Rail	1
Electricity and Natural Gas		
E-1	Energy Efficiency (32,000 GWh of Reduced Demand) • Increased Utility Energy Efficiency Programs • More Stringent Building & Appliance Standards Additional Efficiency and Conservation Programs	15.2
E-2	Increase Combined Heat and Power Use by 30,000 GWh (Net reductions include avoided transmission line loss)	6.7
E-3	Renewables Portfolio Standard (33% by 2020)	21.3
E-4	Million Solar Roofs (including California Solar Initiative, New Solar Homes Partnership and solar programs of publicly owned utilities) • Target of 3000 MW Total Installation by 2020	2.1
CR-1	Energy Efficiency (800 Million Therms Reduced Consumptions) • Utility Energy Efficiency Programs • Building and Appliance Standards • Additional Efficiency and Conservation Programs	4.3
CR-2	Solar Water Heating (AB 1470 goal)	0.1
Green Buildings		
GB-1	Green Buildings	26
Water		
W-1	Water Use Efficiency	1.4†
W-2	Water Recycling	0.3†
W-3	Water System Energy Efficiency	2.0†

Measure No.	Measure Description	GHG Reductions (Annual Million Metric Tons CO_2e)
W-4	Reuse Urban Runoff	0.2†
W-5	Increase Renewable Energy Production	0.9†
W-6	Public Goods Charge (Water)	TBD†
Industry		
I-1	Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	TBD
I-2	Oil and Gas Extraction GHG Emission Reduction	0.2
I-3	GHG Leak Reduction from Oil and Gas Transmission	0.9
I-4	Refinery Flare Recovery Process Improvements	0.3
I-5	Removal of Methane Exemption from Existing Refinery Regulations	0.01
Recycling and Water Management		
RW-1	Landfill Methane Control (Discrete Early Action)	1
RW-2	Additional Reductions in Landfill Methane • Increase the Efficiency of Landfill Methane Capture	TBD†
RW-3	High Recycling/Zero Water • Commercial Recycling • Increase Production and Markets for Compost • Anaerobic Digestion • Extended Producer Responsibility • Environmentally Preferable Purchasing	9†
Forests		
F-1	Sustainable Forest Target	5
High Global Warming Potential (GWP) Gases		
H-1	Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Services (Discrete Early Action)	0.26
H-2	SF_6 Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	0.3
H-3	Reduction of Perfuorocarbons in Semiconductor Manufacturing (Discrete Early Action)	0.15
H-4	Limit High GWP Use in Consumer Products Discrete Early Action (Adopted June 2008)	0.25
H-5	High GWP Reductions from Mobile Sources • Low GWP Refrigerants for New Motor Vehicle Air Conditioning Systems • Air Conditioner Refrigerant Leak Test During Vehicle Smog Check • Refrigerant Recovery from Decommissioned Refrigerated Shipping Containers • Ban on Refrigerant Release during Servicing or Dismantling of Motor Vehicle Air Conditioning Systems	3.3

Measure No.	Measure Description	GHG Reductions (Annual Million Metric Tons CO_2e)
H-6	High GWP Reductions from Stationary Sources • High GWP Stationary Equipment Refrigerant Management Program: o Refrigerant Tracking/Reporting/Repair Deposit Program o Specifications for Commercial and Industrial Refrigeration Systems • Foam Recovery and Destruction Program • SF Leak Reduction and Recycling in Electrical Applications • Alternative Suppressants in Fire Protection Systems • Residential Refrigeration Early Retirement Program	10.9
H-7	Mitigation Fee on High GWP Gases	5
Agriculture		
A-1	Methane Capture at Large Dairies	1.0†

[1] This is not the SB 375 regional target. CARB will establish regional targets for each Metropolitan Planning Organization (MPO) region following the input of the regional targets advisory committee and a consultation process with MPO's and other stakeholders per SB 375.

† GHG emission reduction estimates are not included in calculating the total reductions needed to meet the 2020 target.

It is important to evaluate the air quality and public health benefits of the Scoping Plan in the context of the State's on-going air quality improvement efforts. California's long-standing air pollution control programs have substantially improved air quality in the state and will continue to do so in the future. By 2020, these programs will deliver reductions in statewide NOx emissions of 441 tons per day and direct fine particle emission reductions of 34 tons per day. Through 2020, three key ARB efforts will deliver deep reductions in air pollutant emissions despite continuing growth:

1. Diesel Risk Reduction Plan
2. Goods Movement Emission Reduction Plan
3. 2007 State Implementation Plan

Measures in these plans will result in the accelerated phase-in of cleaner technology for virtually all of California's diesel engine fleets including trucks, buses, construction equipment, and cargo handling equipment at ports. Adoption and implementation of these and other measures are critical to achieving clean air and public health goals statewide.

The Solano County Climate Action Plan covers a variety of topics, including waste reduction and recycling. The proposed project would be consistent with the waste

reduction and diversion objectives in the Climate Action Plan. In fact, the first waste reduction strategy listed in the Climate Action Plan is:

1) Expand organics collection to include food waste and soiled paper.

GHG Emissions Impacts

Significance Criteria

As stated in the Air Quality Discussion, the BAAQMD's 2010 significance thresholds were challenged in a lawsuit due to the BAAQMD's failure to comply with CEQA. The court issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD complies with CEQA. The BAAQMD developed the GHG significance thresholds based on achieving emission reductions consistent with the AB32 target. Although the court ordered the 2010 significance thresholds be set aside, the BAAQMD 2010 GHG significance threshold of 1,100 metric tons of CO_2e per year for land development projects will be used in this analysis. It is important to note that this significance threshold is only applicable to the project's operational impacts, as the BAAQMD's guidelines do not identify any significance thresholds for construction-related activities or a need to quantify construction-related GHG emissions. This analysis will offer a very conservative approach because the BAAQMD's 2010 GHG significance threshold is considered one of the strictest thresholds adopted in the California.

Potential GHG emission impacts from the proposed project are mainly related to operational activity, as the additional tonnage handled at the facility would increase the number of trips by transfer trucks, collection trucks and other trucks using the facility. According to the Transportation and Traffic Discussion, the proposed project would require an additional 37 transfer and collection trucks and generate 74 additional truck trips. The increased operational CO_2e emissions were conservatively estimated using the EMFAC-2011 2014 emission rates. The estimate was approximately 703 pounds per day (ppd) of CO_2, which equates to approximately 116 metric tons per year.

The estimated operational CO_2 emissions from the proposed project only accounts for roughly 10 percent of the acceptable threshold of 1,100 metric tons of CO_2e per year. Operational emissions would be greater than 116 metric tons per year if increased electricity from the Recycling Building and the increased front end loader activity was accounted quantified. However, due to the scope of the project, the addition of those emissions to the 116 metric tons per year would be negligible and would not increase emissions to levels near the BAAQMD's significance threshold of 1,100 metric tons of CO_2e per year. Therefore, the proposed project impacts on GHG emissions would be **less-than-significant impact**.

References

Alameda County. 2011. *Community Climate Action Plan (Final Draft)* June 2011.

Association of Environmental Professionals (AEP), 2007. *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents.*

Bay Area Air Quality Management District (BAAQMD), December 1999. *BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans.*

Bay Area Air Quality Management District (BAAQMD), May 2012. *BAAQMD CEQA Air Quality Guidelines.*

California Air Pollution Control Officers Association (CAPCOA), 2008. CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.

California Air Resources Board (CARB), 2008a. *Climate Change Draft Scoping Plan.* June 2008, Discussion Draft.

California Air Resources Board (CARB). 2008b. *Climate Change Scoping Plan.* December 2008.

County of Solano, Climate Action Plan, 2011.

Hazards and Hazardous Materials

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
8.	**HAZARDS AND HAZARDOUS MATERIALS — Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 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 for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

a, b) **Less than Significant.** Construction of the proposed project would not involve the use of substantial quantities of hazardous materials such as fuels, oils, lubricants, and solvents. The operational changes of the proposed project would introduce the storage, handling, and transport of food waste, but this type of waste would not contain substantial amounts of hazardous materials. The proposed project would not change the hazardous materials, including BOPA (batteries-oil-paint-antifreeze) and E-waste that are currently processed at the facility.

In any case, numerous laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials to reduce the potential hazards associated with these

activities. Cal/OSHA is responsible for developing and enforcing workplace safety standards, including the handling and use of hazardous materials. Transportation of hazardous materials is regulated by the DOT and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release. Therefore, the existing transport, use, storage, handling and disposal of hazardous materials is adequately controlled through existing regulatory requirements, and would continue to be controlled under the proposed project.

On September 18, 2013, RCH Group observed the standard operations of what was then only a Green Waste Bunker. No birds or other vectors were observed in the Green Waste Bunker area. The continuous use of heavy equipment in this area would be an ongoing deterrent to any birds or other vectors. Additionally, after each transfer truck was loaded, the front-end loader would use the bucket loader to scrape the concrete area clean – all areas except for those that were still covered with green waste (which is to be removed within 48 hours). With the addition of food waste, the Green and Food Waste Bunker would continue to be an active area that would not be attractive for birds and other vectors that might otherwise be attracted to solid waste facilities.

The Green and Food Waste Bunker would be covered by a cover, which would further control potential disease vectors such as birds. An outside firm is currently employed to monitor pest populations on a regular basis and to provide traps and spraying as needed. They would continue to provide these services under the proposed project. There would be no increase in the potential for vector-borne disease under the proposed proejct.

For these reasons, there would be a less-than-significant impact due to the routine transport, use, or disposal of hazardous materials, or reasonably foreseeable upset and accident-prone conditions involving the release of hazardous materials into the environment.

c) **No Impact.** There are no schools located within one-quarter mile of the proposed project. Therefore, there would be no impact related to potential exposure of hazardous emissions or acutely hazardous materials, substances, or wastes within one-quarter mile of a school.

d) **No Impact.** The project site is not included on the databases maintained by the Department of Toxic Substances Control (Envirostor) and the State Water Resources Control Board (Geotracker) (DTSC, 2013 and SWRCB, 2013).

e) **No Impact.** The proposed project is not located within two miles of a public airport. The nearest airport, Napa County Airport, is approximately four miles north of the project site.

f) **No Impact.** There are no known private airstrips within two miles of the proposed project site. There would be no impact related to private airstrips.

g) **No Impact.** The proposed project would not interfere with emergency response plans or evacuation plans. The proposed project would not impede or require diversion of rescue

vehicles or evacuation traffic in the event of a life-threatening emergency. There would be no impact on emergency response and access.

h) **No Impact.** The project site is located in an urbanized area of Vallejo. The project site is not located in the vicinity of a wildland area susceptible to wildland fires. No impact would occur.

References

Department of Toxic Substances Control (DTSC), *DTSC's Envirostor Database*, http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST, accessed 28 August 2013.

State Water Resources Control Board (SWRCB), *Geotracker*, http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=2021+broadway+street+vallejo+ca, accessed 28 August 2013.

Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a) **Less than Significant with Mitigation.** The Clean Water Act (CWA) has nationally regulated the discharge of pollutants to waters of the U.S. from any point source since 1972. In 1987, amendments to the CWA added section 402(p), which established a framework for regulating non-point source storm water discharges under the National Pollutant Discharge Elimination System (NPDES). The NPDES storm water program is implemented in California by the State Water Resources Control Board (SWRCB).

SWRCB Water Quality Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS 000001 (General Permit), Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (Excluding Construction Activities), dated April 17, 1997, regulates storm water discharges from industrial facilities such as the Recology Vallejo facility. The Order contains prohibitions on non-storm water discharges, effluent limitations, and receiving water limitations, and requires development and implementation of Storm Water Pollution Prevention Plans (SWPPPs) and a monitoring program.

The SWPPP for the Recology Vallejo facility has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the Facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges (Geomatrix Consultants, Inc. 2008 and Recology Vallejo 2013a).

Non-structural Best Management Practices (BMPs) identified in the SWPPP that are applicable to green waste processing include load checking and regular cleaning. Under current procedures, the area surrounding the Green and Food Waste Bunker is swept daily with the sweeper truck and with brooms, and the drain to the CDS unit at the west (downslope) side of the Green and Food Waste Bunker is cleaned on a weekly basis (Recology Vallejo 2013b). Drivers of trucks bringing in green and food materials are required to comply with loadchecking procedures to minimize any contamination to the best of their ability and trash receptacles are available for the drivers to dispose of any contamination. Once green and food materials have been unloaded into the Green and Food Waste Bunker, personnel, including supervisors, routinely inspect the Bunker for contamination that may have surfaced. Drivers of transfer trucks, taking the green and food materials off-site, are also required to comply with loadchecking procedures to the best of their ability.

Structural Best Management Practices (BMPs) identified in the SWPPP that are applicable to green waste processing include a Continuous Deflective Separation (CDS) and Filtration System installed down gradient of the drain to the CDS unit at the Green Waste Storage Area. This system removes solids from storm water collected within the Green Waste catchment area, but does not capture oil and grease. Absorbent pellets are currently used in the CDS unit to reduce any excess oil. Once the cover is added to the Green and Food Waste Bunker, storm water will no longer drain into the CDS unit and absorbent pellets will no longer be needed.

Monitoring described in the SWPPP includes quarterly visual observations of authorized and unauthorized non-storm water discharges, monthly storm water visual observations between October 1 and May 31, and collection and analysis of two storm water samples per year. Storm water monitoring and sampling records are maintained for five years.

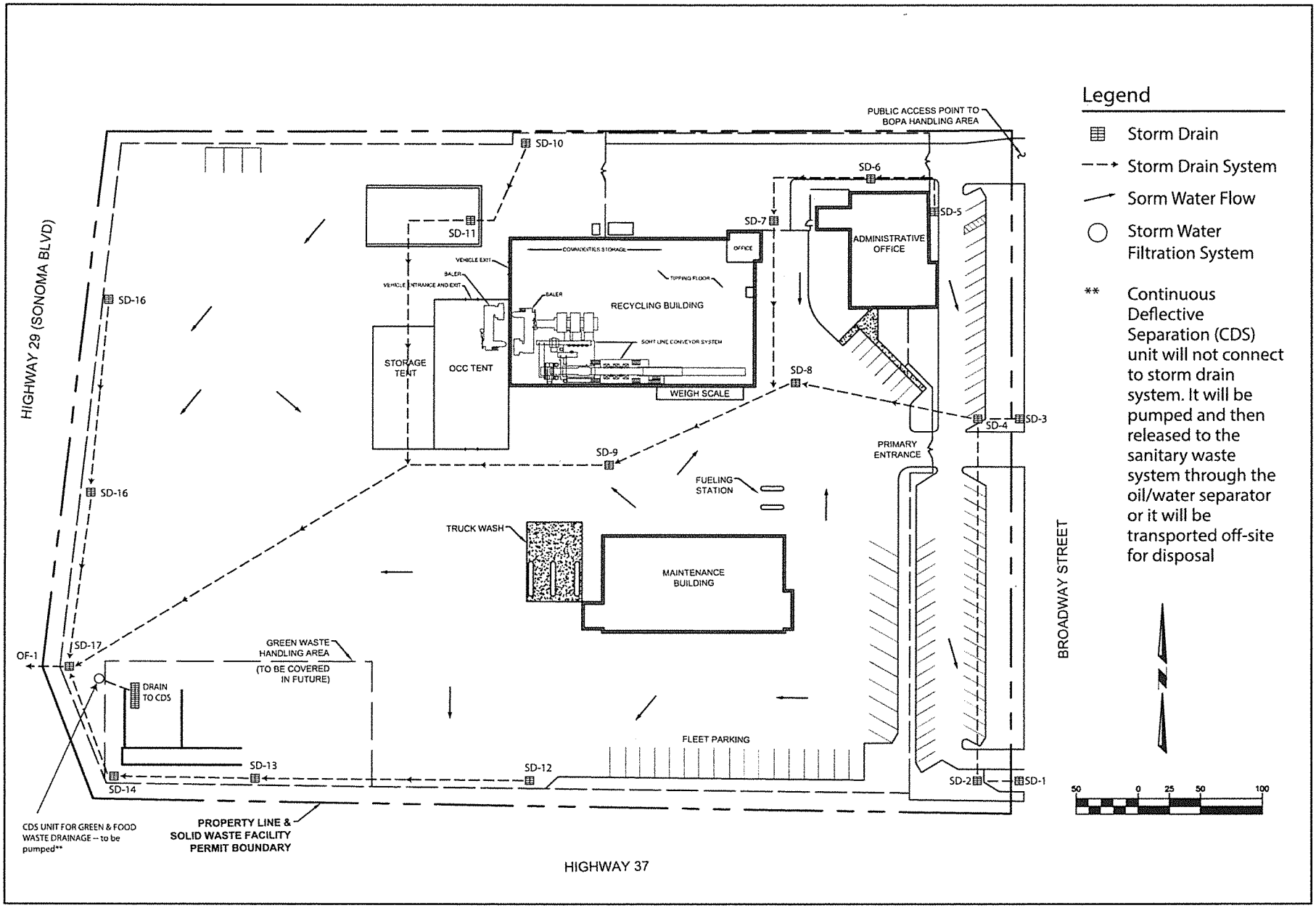
The proposed project would add food waste to the existing green waste collection program, which would be stored and handled at the existing Green Waste Bunker on the site. Food waste has a higher liquid content than green waste and could generate more leachate at the Green and Food Waste Bunker than under current conditions, in which only green waste is processed. Food waste is not expected to contain substantial amounts of hazardous contaminants, but could contain oil and grease. The additional leachate from the Green and Food Waste Bunker would be directed into the existing underground CDS unit through the drain to the CDS unit located on the western (downslope) side of the Bunker. The leachate stored in the CDS unit would be pumped frequently, especially prior to storm events. Once pumped, if the leachate meets pH requirements it could then go through the oil/water separator and be disposed through the on-site connection to the sanitary sewer system. Any leachate that does not meet pH requirements would be taken off-site for disposal. No runoff or leachate from the Green and Food Waste Bunker would enter the storm drain. **Figure 5** shows the separation of the leachate from the Green and Food Waste Bunker from the storm drain system for the project site.

As discussed in Section 8, Description of Project above, a cover would be installed over the Green and Food Waste Bunker. All storm water runoff would be directed into the existing storm drain. This cover would prevent percolation of storm water through the green and food waste in the Bunker. The amount of storm water discharged from the site would not change, and there would be no additional contaminants from the Green and Food Waste Bunker in the storm water that ultimately enters the City's storm drain system.

During construction, the cover over the Green and Food Waste Bunker would probably be anchored to the existing paved surface surrounding the Bunker. This area is paved and the ground disturbance of the anchors would be minimal. Construction of the cover would not involve release of substantial water contaminants, and would have a less-than-significant effect on water quality.

In the event that fire control water is utilized as part of a fire mitigation response, nearby storm drains would be covered to allow containment and collection of the water and prohibit its introduction into the storm water system.

The existing structural and non-structural BMPs and proposed cover would prevent contamination of storm water by leachate from the Green and Food Waste Bunker area. However, addition of food waste to the existing green waste processing could increase the volume of leachate generated, and add oil and grease to the leachate. If not managed appropriately, and the CDS unit fills to capacity (a situation considered unlikely by the site operators), these pollutants could be transported with storm water runoff that reaches San Francisco Bay, which would result in a significant impact.



SOURCE: EBA Engineering; RCH Group, 2013

Recology Vallejo, SWFP

Figure 5

Drainage Plan

These potential impacts on water quality would be reduced to less-than-significant levels with the implementation of **Mitigation Measure HYD-1**.

> **Mitigation Measure HYD-1:** The applicant shall continue all existing structural and non-structural Best Management Practices relating to the control of storm water from the green waste catchment area, as identified in the site's Storm Water Pollution Prevention Plan (SWPPP).
>
> The applicant shall ensure that storm water discharges from the Green and Food Waste Bunker area comply with all effluent limitations, including oil and grease, of the State Water Resources Control Board Water Quality Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS 000001, by implementing one of the following:
>
> 1. If leachate from the Green and Food Waste Bunker is discharged to the existing sanitary sewer, it shall first be treated to remove oil and grease and meet all effluent limitations in the NPDES General Permit. It must also meet the City of Vallejo requirement for pH levels between 6.0 and 9.0.
>
> 2. If leachate from the Green and Food Waste Bunker is not discharged to the sanitary sewer, it shall be disposed off-site in a manner that complies with wastewater treatment requirements.
>
> 3. No leachate from the Green and Food Waste Bunker shall be disposed via the storm water drains.
>
> The applicant shall continue monitoring storm water discharges in accordance with the General Permit and the Facility Monitoring Program Plan (MPP) of the SWPPP, including the Annual Comprehensive Site Compliance Evaluation (ACSCE). If it is determined that additional BMP(s) are needed, they shall be implemented in accordance with the provisions of the MPP and SWPPP.

b) **No Impact.** The proposed project would not change water usage at the site, or change the existing impervious surfaces. Therefore, there would be no impact related to groundwater recharge or lowering of any local groundwater table levels.

c) **No Impact.** The project site is covered by impervious paved surfaces, buildings, and landscaped areas. The proposed project, including construction of the cover over the Green and Food Waste Bunker, would not alter the impervious surfaces or existing drainage pattern of the project site and vicinity, and would not alter the course of any stream or river. For these reasons, there would be no impact related to erosion and siltation.

d) **No Impact.** The proposed project, including construction of the cover over the Green and Food Waste Bunker, would not increase the amount of impervious surfaces at the project

site, or alter any watercourse. There would be no impact on the rate or amount of surface runoff, or on flooding. In addition, adherence to the Regional Municipal NPDES permit includes measures to ensure that onsite management of storm water runoff does not result in any onsite flooding. Therefore, there would be no impact related to flooding on- or off-site from changes in drainage patterns.

e) **Less than Significant with Mitigation.** As mentioned above, the proposed project, including construction of the cover over the Green and Food Waste Bunker, would not change the amount of impervious surfaces at the site and therefore would not increase the amount of storm water runoff from the site. There would be no impact on existing or planned storm water drainage systems. As discussed under criterion 9.a, above, implementation of Mitigation Measure HYD-1 would reduce potential impacts on water quality to a less-than-significant level.

f) **No Impact.** Other than leachate generated from the Green and Food Waste Bunker, which would require mitigation to reduce impacts to a less-than-significant level (and is discussed under criterion 9.a. above), the proposed project would not include any actions or components, including construction of the cover over the Green and Food Waste Bunker, that would substantially degrade water quality. There would be no impact.

g) **No Impact.** The proposed project does not include any construction of housing or other residential units and therefore there would be no impact related to this criterion.

h) **No Impact.** The project site is not located within the 100-year flood zone (County of Solano, 2013). Although potential future levels of sea level rise are difficult to predict, the Association of Bay Area Governments (ABAG) has compiled mapping that indicates areas that could be inundated under two different sea level rise scenarios: 16 inch and 55 inch rises. The proposed project site would not be inundated under either scenario according to these modeled mapping tools (ABAG, 2013a). The proposed project would not involve any new structures, except for the cover over the Green and Food Waste Bunker, which would not impede or redirect flood flows. Therefore, there would be no impact due to structures that may impede or redirect flood flows.

i) **No Impact.** According to mapping compiled by ABAG, the proposed project site is not located within a dam inundation area, therefore there would be no impact related to failure of a dam or levee (ABAG, 2013b).

j) **No Impact.** The project site is located approximately 4 miles from the Bay shoreline, which is considered potentially susceptible to seiche waves; however, there is no historical record of any occurring within the Bay. Tsunami waves have been observed in the Bay, most recently from the 2011 Japanese Tsunami disaster. According to modeled inundation mapping compiled by ABAG, the project site would not be subject to inundation from a tsunami event (ABAG, 2013c). The project site is relatively flat with no real sources of mudflow in the vicinity and therefore would not be considered susceptible to mudflows. In

summary, there would be no impact related to inundation from seiche, tsunami or mudflow.

References

Association of Bay Area Governments (ABAG), *Sea Level Rise Map for Long Range Planning,* http://gis.abag.ca.gov/Website/SeaLevelRise/index.html, accessed 28 August 2013a.

Association of Bay Area Governments (ABAG), *Dam Failure Inundation Map for Vallejo,* http://www.abag.ca.gov/cgi-bin/pickdamx.pl, accessed 28 August 2013b.

Association of Bay Area Governments (ABAG), *Tsunami Inundation Map for Coastal Evacuation,* http://gis.abag.ca.gov/website/Tsunami/, accessed 28 August 2013c.

County of Solano, *Solano County General Plan*, November 2008, Chapter 5 Public Health and Safety, available at: http://www.co.solano.ca.us/depts/rm/planning/general_plan.asp, accessed 28 August 2013.

Geomatrix Consultants, Inc., *Storm Water Pollution Prevention Plan, Vallejo, California, Prepared for: Norcal Waste Systems, Inc., Vallejo Garbage Service*, Last Revised June 2008.

Recology Vallejo, *Stormwater Pollution Prevention Plan, Addendum To Section V, Non-Structural Best Management Practices Addendum To Section VI Structural Best Management Practices*, June 14, 2013a.

Recology Vallejo, *Transfer/Processing Report, Recology Vallejo, Solano County*, July 2013b.

Land Use and Land Use Planning

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
10.	**LAND USE AND LAND USE PLANNING — Would the project:**				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

a) **No Impact.** The proposed project would be located at the existing Recology Vallejo facility, and would not involve construction of any new structures or other changes that could physically divide an established community. There would be no impact.

b) **No Impact.** The project site is designated Commercial-Retail in the Vallejo General Plan, and is in an Intensive Use zoning district, in which uses such as scrap operations, collection facilities, and processing facilities are permitted. The proposed project would not change the existing types of uses at the site or involve any new structures except for the cover over the Green and Food Waste Bunker. Therefore, the proposed project would not conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

c) **No Impact.** At the time this Initial Study was prepared, the Solano County Multispecies Habitat Conservation Plan was being prepared but had not been adopted. Thus, the project site is not covered by a Habitat Conservation Plan or Natural Community Conservation Plan. In any case, operation of the proposed project would not conflict with the provisions of the unadopted draft Solano County Multispecies Habitat Conservation Plan. Therefore, the proposed project would not result in impacts related to this criterion.

References

Marcus Adams, Associate Planner, City of Vallejo, 2013. *Staff Report – Planning, City of Vallejo, Planning Commission, 2021 Broadway Street, APN #0067-150-260,* April 1, 2013.

City of Vallejo, 2012. *Municipal Code City of Vallejo California, Title 16 Zoning, Section 16.34*, available at http://library.municode.com/index.aspx?clientId=16106&stateId=5&stateName=California&customBanner=16106.jpg&imageclass=L&cl=16106.txt, accessed 28 August 2013.

Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

a-b) **No Impact.** The proposed project would be located within an urbanized area at an existing developed site, the Recology Vallejo facility, and would not affect the availability of mineral resources, nor would the proposed project result in the loss of any delineated, locally important mineral resource recovery site. Therefore, no impact on mineral resources is anticipated.

Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
12. NOISE — Would the project:				
a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Result in exposure of persons to or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) Less than Significant.

Introduction

The analysis presented in this section is based on a noise study conducted by an independent noise consultant, RCH Group (RCH, 2013).

Potential noise impacts associated with the proposed project would be related to noise generated as a result of the increased daily tonnage limit requested in the Solid Waste Facility Permit. The applicable noise descriptors, significance criteria for any increased noise, and the potential impacts are discussed below.

Noise Descriptors

To describe noise environments and assess potential impacts on noise–sensitive areas, a frequency weighting measure, which simulates human perception, is commonly used. It has been found that A–weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A–weighted decibel scale (dB)[6] is cited in most noise criteria. All references to decibels (dB) in this report will be A-weighted unless noted otherwise. Decibels are logarithmic units that conveniently compare the wide range of sound intensities to which the human ear is sensitive. **Table 3** identifies decibel levels for common sounds heard in the environment.

Table 3: Typical Noise Levels

Noise Level (dB)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at 3 feet, jet flyover at 1,000 feet	Rock Band
80–90	Diesel truck at 50 feet	Loud television at 3 feet
70–80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at 3 feet, vacuum cleaner at 10 feet
60–70	Commercial area	Normal speech at 3 feet
40–60	Quiet urban daytime, traffic at 300 feet	Large business office, dishwasher next room
20–40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10–20		Broadcast / recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing

Source: (modified from Caltrans Technical Noise Supplement, 1998)

Several time–averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are the equivalent A–weighted sound level over a given time period (L_{eq});[7] average day–night 24–hour average sound level (L_{dn})[8] with a nighttime increase of 10 dB to account for sensitivity to noise during

6 A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called "sound level") measured in dB. An A–weighted decibel (dB) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels.

7 The Equivalent Sound Level (L_{eq}) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time–varying sound energy in the measurement period.

8 L_{dn} is the day–night average sound level that is equal to the 24–hour A–weighted equivalent sound level with a 10–decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.

the nighttime; and community noise equivalent level (CNEL),[9] also a 24–hour average that includes both an evening and a nighttime sensitivity weighting.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles or onsite construction equipment, attenuate (lessen) at a rate of 6 to 7.5 dB per doubling of distance from the source, depending on ground absorption. Soft sites attenuate at 7.5 dB per doubling because they have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and therefore have less attenuation (6.0 dB per doubling). Widely distributed noise, such as a large industrial facility spread over many acres or a street with moving vehicles (known as a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dB each time the distance doubles from the source, which also depends on ground absorption (Caltrans, 1998b). Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, will increase the attenuation in addition to the attenuation that occurs by distance alone.

Exterior noise levels from onsite stationary noise sources at Recology Vallejo should be attenuated by a minimum of about 6 dB for each doubling of the reference distance from the noise source. The Vallejo Recology facility is surrounded primarily by hard site conditions (such as streets and parking lots). The attenuation of noise levels from the facility to off-site receptors is much greater however, because the facility is surrounded on all sides by adjacent land uses that effectively reduce noise from the facility at off-site sensitive receptors. The adjacent land uses (see **Figure 4**) either block the noise from the facility (such as adjacent buildings that function as sound barriers) or mask any noise with background noise (such as the traffic on Highways 29 and 37).

Noise Standards

City of Vallejo Noise Ordinance

Sections 7.84 and 16.72 of the City of Vallejo municipal code (noise ordinance) are applicable to the proposed project.

7.84.010 General prohibition – Loud unnecessary and unusual noise.

Notwithstanding any other provisions of the Vallejo Municipal Code and in addition thereto, it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary, and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standard which may be considered in determining whether a violation of the provisions of this chapter exists may include, but not be limited to, the following:

A. The level of noise;
B. Whether the nature of the noise is usual or unusual;
C. Whether the origin of the noise is natural or unnatural;
D. The level and intensity of the background noise, if any;
E. The proximity of the noise to residential sleeping facilities;

9 CNEL is the average A–weighted noise level during a 24–hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 P.M., and an addition of a 10–decibel penalty in the night between 10:00 P.M. and 7:00 A.M.

F. The nature and zoning of the area within which the noise emanates;
G. The density of the inhabitation of the area within which the noise emanates;
H. The time of the day and night the noise occurs;
I. The duration of the noise;
J. Whether the noise is recurrent, intermittent, or constant; and
K. Whether the noise is produced by a commercial or noncommercial activity.

7.84.020 Specific prohibitions.

In addition to and separate from the prohibition set forth in Section 7.84.010 above, the following acts, and the causing or permitting thereof, are hereby declared to be in violation of this ordinance. As used in this section, the term "noise disturbance" means any sound which

(1) endangers or injures the safety or health of humans or animals;
(2) annoys or disturbs a reasonable person of normal sensitiveness; or
(3) endangers or injures personal or real property.

The listing of specific prohibited activities in this section is not intended to limit the city's authority to regulate any and all loud, unnecessary and unusual noise pursuant to Section 7.84.010. Any noise not falling within the specific prohibitions set forth in this section is subject to regulation under the provisions of Section 7.84.010 above.

F. Loading and Unloading. It shall be unlawful to load, unload, open, close, or to do other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of nine P.M. and seven A.M. in such a manner as to cause a noise disturbance across a residential real property boundary. This subsection shall not apply to the collection and disposal of garbage and recyclable materials by the city's franchises.

16.72.030 Noise performance standards.

No land use shall generate sound exceeding the maximum levels permitted in the following table when such sounds are measured in any of the zoning districts listed in this table (**Table 4**):

Table 4: Vallejo Zoning District Noise Limits

Zoning District	Maximum Sound Pressure Level in Decibels
Resource Conservation, Rural Residential, and Medical Districts	55
Low, Medium, and High Density Residential Districts	60
Professional Offices, Neighborhood, Pedestrian, and Waterfront Shopping and Services Districts	70
Freeway Shopping and Service, Linear Commercial and Intensive Use Districts	75

16.72.040 Noise performance standards – Correction factors.

The following correction factors, when applicable, shall be applied to the maximum sound pressure levels given in Section 16.72.030:

Table 5: Vallejo Zoning District Noise Limit Correction Factors

Zoning District	Correction in Maximum Permitted Decibels
Emission only between 7 a.m. and 10 p.m.	Plus 5
Noise of unusual impulsive character such as hammering of drill pressing	Minus 5
Noise of unusual periodic character such as hammering or screeching	Minus 5

16.72.050 Noise performance standards – Exceptions.

The following sounds, upon compliance with state conditions, may exceed the maximum sound pressure levels given in Section 16.72.030:

C. Sounds from transportation equipment used exclusively in the movement of goods and people to and from a given premises, temporary construction or demolition work;

Although construction noise is exempt from the City's noise limit standards, City Environmental Impact Reports (EIRs) usually limit the hours of nighttime construct activities to be consistent with the Vallejo General Plan Noise Element Policy 2b (Vallejo, 2011).

> Policy 2b: Where appropriate, limit noise generating activities (for example, construction and maintenance activities and loading and unloading activities) to the hours of 7:00 a.m. to 9:00p.m.

Existing Sensitive Receptors and Noise Sources/Levels

Noise sensitive receptors (land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise) typically include residential dwellings, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. The nearest sensitive receptors to the Recology Vallejo facility include single family residences approximately 300 feet east of the facility and 200 feet west of the facility.

To quantify existing ambient noise levels in the immediate project vicinity, short–term measurements of existing noise were taken at four locations (Sites 1-4). Noise measurements were made using Metrosonics db308 Sound Level Meters. The noise measurement locations were selected to capture existing noise levels in locations that could be affected by the proposed project, such as the green waste area, the recycling building, and Broadway Street. The noise measurements are summarized in **Table 6** and noise measurement locations are shown on **Figure 6.**

Overview of Existing Noise Levels

As summarized in **Table 6**, measured noise levels in the area had 5-minute average noise levels of 63-82 dB.

Noise levels on Broadway Street were 95 percent associated with traffic going to or from other locations (not the Recology Vallejo facility). All of the noise at Site 1 was effectively from the traffic on Broadway Street, and maintenance activities (leaf blower and lawn mower from the east side of the Recology Vallejo facility – outside of the sound walls at the facility). Noise from activities inside the Recology Vallejo facility (behind the sound walls) was not distinguishable at the Site 1 location east of Broadway Street.

Existing on-site noise levels (recorded at Sites 2-4) were typical of solid waste processing facilities that use a wide variety of heavy equipment. There were no high-noise level outliers (the highest short-term Lmax was 92 dB measures at a distance of 25 feet or less) that would affect the off-site receptors. The General Manager, Tom Phillips, indicated there have not been any complaints about noise from existing operations by adjacent residences or businesses. The facility is in compliance the Municipal Code Sections related to noise. While there is noise on-site from all the activities, the facility does not generate loud unnecessary or unusual noise (Section 7.84.010 of the Municipal Code).

Potential Noise Impacts from Implementing the Solid Waste Facility Permit

Potential impacts associated with the proposed project could include impacts from construction activities, increased traffic on Broadway Street, and increased operations at the facility (associated with the green and food waste operations and/or any increase in recyclables sorting).

Temporary construction activities associated with modification to the Green and Food Waste Bunker would be exempt from noise performance standards according to Municipal Code section 16.72.050. However, if the temporary noise were to occur during the nighttime it could affect offsite residences and would be in conflict with the Vallejo General Plan Noise Ordinance Policy 2b. Therefore a mitigation measure for the proposed project should require that the temporary construction (of the cover for the Green and Food Waste Bunker) be limited to the hours between 7:00 a.m. and 9:00 p.m.

The increase in traffic from the proposed project would result in up to 323 daily vehicle trips, including 17 morning and 18 afternoon peak hour trips (PHA, 2013). The peak hour trips would increase existing traffic on Broadway Street in the project area by about 1 trip every 5 minutes or about one percent of the existing traffic. The peak hour trips would increase existing traffic on Broadway Street in the project area by about one trip every five minutes, which would be approximately a one percent increase in traffic. A one percent increase in traffic would result in less than a 0.1 dB increase in noise and would be a less-than–significant impact.

The proposed project would result in noise increases from increasing the facility daily tonnage receipt limit to 300 tons per day of mixed recyclables and organics. At the maximum permitted tonnage, the average noise levels at the facility would probably increase by about 2.3 dB, in proportion to the logarithmic increase from the existing 177 tons per day to 300 tons per day. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB (Caltrans, 1998a). Therefore this change would be a less-than-significant increase. Furthermore, the 2.3 dB increase in average noise level would be from more constant activity at the facility, as the maximum noise levels from facility operations would not increase from the maximum noise levels of current activities. Maximum noise levels would continue to be noise from landscape equipment, the sort line and other on-site equipment, back-up beepers and other on-site alarms. However, while some of these noise sources would be more frequent on a maximum day, the maximum decibel level of these noise sources would not increase as a result of the proposed project. The increased noise level from the facility would be further attenuated by buildings on adjacent land uses (see **Figure 4**) and masked by the constant background noise from Highways 29 and 37.

The applicant would limit construction hours to between 7:00 a.m. and 9:00 p.m. and thus the project would be consistent with the City's Noise Element Policy 2b that recommends construction be limited to the hours between 7:00 a.m. and 9:00 p.m. This would be a less-than-significant noise impact.

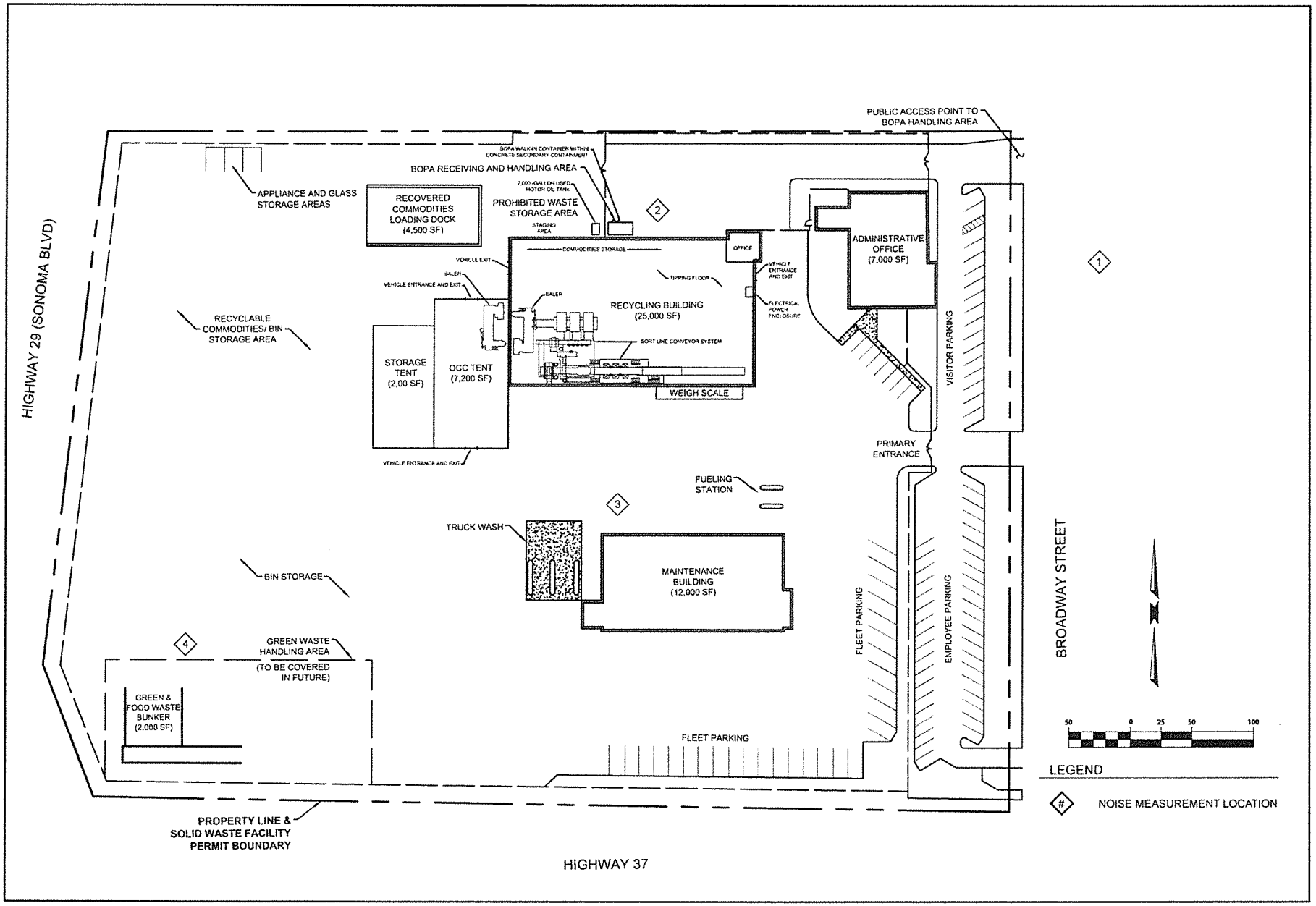
TABLE 6 EXISTING NOISE MEASUREMENTS

Location	Time Period Wednesday 9/18/2013	Leq (dB)	Noise Sources
Site 1. 25' east of the center of the northbound lane of Broadway Street. The location was directly east of the Recology Vallejo administration building.	7:34 – 7:49 A.M. 8:15 – 8:25 A.M.	5-minute Leqs: 69, 70, 70, 69, 68 dB 5-minute Lmaxs: 82, 81, 81, 81, 76 dB	Cars 66-75 dB, trucks and buses 70-82 dB. Leaf blower in front of Recolgy 65 dB, lawn mower in front of Recology 65 dB. About 5% of the traffic was going to/from Recology. The other 95% were pass-by trips. On-site back-up beepers barely audible from this location.
Site 2. 50 feet north of the open doors for the Recology Vallejo Recycling building.	9:18 – 9:28 A.M.	5-minute Leqs: 71, 71 dB 5-minute Lmaxs: 76, 77	Sort Line Operating. Back-up beeper 73 dB. Constant noise was from pick line, loader, and back-up beepers.
Site 2. See location description above.	9:28 – 9:33 A.M.	5-minute Leq: 63 dB 5-minute Lmax: 78	Sort Line on break. Much quieter, no noise sources from Recycling Building. Can hear faint back-up beepers from other on-site locations.
Site 3. 30 feet north of Maintenance Building Open doors.	9:46 – 9:56 A.M.	5-minute Leqs: 69, 70 dB 5-minute Lmaxs: 82, 84 dB	Noise included air brake release, jake brake from truck on Hwy 37, back-up beepers, transfer truck weigh-in, various trucks driving around at slow speeds, loading and unloading of roll-offs.
Site 4. Approx. 50 feet from entrance to the green waste bunker (northeast of bunker) and 24 feet from loader route to transfer vehicles.	10:03 – 10:13 A.M.	5-minute Leqs: 82, 78 dB 5-minute Lmaxs: 91, 86 dB	Two roll-offs 25 yd and 30 yd plus a CAT loader top-loading transfer truck. Loader driving was within 25 feet of noise meter (80 dB).

TABLE 6 EXISTING NOISE MEASUREMENTS (CONTINUED)

Location	Time Period Wednesday 9/18/2013	Leq (dB)	Noise Sources
Site 4. See location description above.	10:17 – 10:24 A.M.	5-minute Leqs: 79, 76 dB 5-minute Lmaxs: 89, 88 dB	Unloading a 15-yard commercial truck. Back-up beeper 84 dB
Site 4. See location description above.	10:38 – 10:43 A.M.	5-minute Leq: 71 dB 5-minute Lmax: 81	Self hauler with leaf blower to clean out vehicle. Leaf blower 78 dB.
Site 4. See location description above.	10:43 – 10:56 A.M.	5-minute Leqs: 79, 81, 79 dB 5-minute Lmaxs: 89, 84, 83 dB	Top loading of a transfer truck. Loader going back and forth between bunker and drop area for transfer truck.
Site 4. See location description above.	11:04 – 11:14 A.M.	5-minute Leqs: 75, 76 dB 5-minute Lmaxs: 87, 86 dB	Two 20-yard trucks side by side unloading into the green waste bunker.
Site 4. See location description above.	11:14 – 11:28 A.M.	5-minute Leqs: 79, 79, 81 dB 5-minute Lmaxs: 88, 92, 89 dB	Loader cleaning the front half of bunker and top loading a transfer truck.

Source: RCH Group, 2013



SOURCE: EBA Engineering; RCH Group, 2013

Recology Vallejo, SWFP

Figure 6

Noise Measurement Sites

b) **Less than Significant.** In contrast to airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment (FTA, 2006). The effects of ground-borne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings.

For architectural or building damage, vibration is expressed in peak particle velocity (PPV) commonly measured in inches/second (in/sec). A vibration level of 0.08 in/sec could affect extremely sensitive structures such as ruins and ancient monuments. Vibration levels that exceed 0.2 in/sec are the lowest levels that can affect normal structures. Given these vibration levels, extreme care must be taken when sustained pile driving occurs within 7.5 m (25 ft) of any building, and 15-30 m (50-100 ft) of a historical building, or building in poor condition (Caltrans, 2002 and Caltrans, 2004). There are no adopted local policies for groundborne vibration levels.

The proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels because it would not include major construction within 25 feet of any building or 100 feet of a historic building. Therefore, this would not be a significant impact. No mitigation is required.

c) **Less than Significant.** As discussed above in a), the proposed project would result in noise increases from increasing the facility daily tonnage receipt to 300 tons per day of mixed recyclables and organics. At the maximum permitted tonnage, average noise levels at the facility would be expected to increase by about 2.3 dB, in proportion to the logarithmic increase from the existing 177 tons per day to 300 tons per day. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB (Caltrans, 1998a). Therefore, this change would be a less-than-significant increase.

d) **Less than Significant.** The proposed project would include minor construction activities for the cover over the Green and Food Waste Bunker. The applicant would limit construction hours to between 7:00 a.m. and 9:00 p.m. and thus the project would be consistent with the City's Noise Element Policy 2b that recommends construction be limited to the hours between 7:00 a.m. and 9:00 p.m. This would be a less-than-significant noise impact.

e) **No Impact**. The project site is not located within an airport land use plan or within two miles of a public or public use airport. Development on the site would not expose people working or visiting in the project area to excessive airport noise levels and no impact would occur.

f) **No Impact.** There are no private airstrips located near the project site and, therefore, the proposed project would not expose future employees and visitors to excessive aircraft noise levels. The proposed project would not increase onsite exposure to aircraft noise. Thus, no impact would occur.

References

City of Vallejo, General Plan Noise Element, accessed 11/04/2013 at (http://www.ci.vallejo.ca.us/common/pages/DisplayFile.aspx?itemId=31257)

City of Vallejo, Municipal Code, accessed 11/04/2013 at (http://library.municode.com/index.aspx?clientId=16106&stateId=5&stateName=California&customBanner=16106.jpg&imageclass=L&cl=16106.txt)

City of Vallejo, Vallejo Winco Foods Project Draft EIR, Noise Section, March 2011.

Caltrans, Technical Noise Supplement, 1998a.

California Department of Transportation (Caltrans), *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects*, October 1998b.

Caltrans, *Transportation Related Earthborne Vibrations*, prepared by the Division of Environmental Analysis, Office of Noise, Air Quality, and Hazardous Waste Management, 2002.

Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, Prepared by Jones & Stokes, 2004

California Department of Transportation (Caltrans), *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects*, October 1998.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (FTA-VA-90-1003-06), 2006

PHA Traffic Consultants, *Recology Vallejo Traffic Study*, November 2013.

RCH Group, Inc. *Noise Technical Report, Recology Vallejo*, December 2013.

Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a-c) **No Impact.** The proposed project would be located at the existing Vallejo Recology facility and would not involve construction of homes, businesses, or infrastructure that would directly or indirectly induce growth in the area, nor would the proposed project displace any housing units or people. The proposed project would have no impact on population and housing.

Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

a.i) **No Impact.** The proposed project would not change the types of uses and activities on the project site. The proposed project would add food waste as a feedstock into the

existing green waste collection program, but handling and processing of this low-flammability material would not increase the existing level of fire hazard at the site. As such, the proposed project would not increase the demand for fire services and there would be no impact.

a.ii) **No Impact.** The proposed project would not change the types of uses and activities on the project site, or otherwise increase the existing level of demand for police protection at the site. The proposed project would have no effect on the provision of police services.

a.iii) **No Impact.** The proposed project would have no effect on population in the area; therefore, there would be no impact on the provision of schools.

a.iv) **No Impact.** The proposed project would have no effect on population in the area; therefore, there would be no impact on the provision of park services.

a.v) **No Impact.** The proposed project would have no impact on the provision of any other public facilities.

Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
15. RECREATION — Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a-b) **No Impact.** The proposed project would have no effect on population in the area; therefore, there would be no impact related to the use of parks and recreational facilities in the area. The proposed project would not include recreational facilities, and would have no impact due to new or expanded recreational facilities.

Transportation and Traffic

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
16. TRANSPORTATION AND TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Discussion

a-b) **Less than Significant.**

Introduction

The analysis presented in this section is based on a transportation study conducted by an independent transportation consultant (PHA, 2013).

The project site is located at 2012 Broadway Street in Vallejo, bounded by the elevated State Route (SR) 37 Highway and Lewis Brown Drive to the south, SR 29 Highway (Sonoma Boulevard) to the west, and Broadway Street to the east.

The proposed project's effect on traffic operations would be the greatest at the four intersections nearest to the project site, listed below (see **Figure 7**):

1. Broadway Street/Lewis Brown Drive
2. SR 29 (Sonoma Boulevard)/SR 37 on-off ramps
3. SR 29 (Sonoma Boulevard)/Mini Drive
4. Broadway Street/Mini Drive-shopping center driveway

SOURCE: PHA 2013; RCH Group, 2013

Recology Vallejo, SWFP

Figure 7

Site Location & Intersections

EXISTING CONDITIONS

This section describes current conditions within the study area including land use, street network, site access, and traffic operations.

Land Use

The project site is occupied by the existing Recology Vallejo facility. Land uses in the vicinity of the project site consist of a mix of uses including residential, parking, a railroad track, public storage, light industrial uses and vacant land (see **Figure 4**).

Street Network and Site Access

The street network providing access and circulation to the area and the project site includes Broadway Street, Mini Drive, Lewis Brown Drive, and State Route 37. Access to and from the site is provided through three driveways on Broadway Street. The local streets and highways are briefly described below.

Broadway Street is mostly a two-lane arterial street connecting north to Mini Drive and South to Lewis Brown Drive. The segment near the Recology Vallejo facility has one traffic lane in each direction plus a center dual left-turn lane. Near the shopping center north of the facility, the street has two southbound lanes and one northbound lane. North of the shopping center, the street transitions into two traffic lanes with one in each direction. The posted speed limit on Broadway Street is 35 miles per hour (mph).

Mini Drive is a semi-circular collector street running in the east-west orientation and then north-south orientation connecting SR 29 in the northeast and Lewis Brown Drive to the south. It is mostly a two-lane street but the section between Broadway and SR 29 in the north has four traffic lanes with two in each direction. The posted speed limit on Mini Drive is 25 mph.

Lewis Brown Drive is a four-lane arterial street with a center dual left-turn lane between SR 29 and Broadway Street, providing access to and from SR 29 and SR 37. East of Mini Drive/B.W. Williams Drive, the street transitions into two traffic lanes with one in each direction. The posted speed limit along the four-lane section of the street is 35 mph.

State Route 29 is a major north-south highway providing access north to American Canyon and Napa Valley Area and south to Curtola Parkway-Interstate 780. It also connects with SR 37 providing access to and from US Highway 101 in Marin County. The roadway in vicinity of the project site is a four-lane street. The posted speed limit on SR 29 in the vicinity of the project site is 50 mph.

Public Transit and Bicycle Facilities

Public Transit. Solano County Transit (SolTrans) provides local and express bus service to the Solano County cities of Vallejo, Benicia, and Fairfield, with express bus service connecting to the Contra Costa County communities of El Cerrito, Pleasant Hill, Walnut

Creek, and regional connections to BART. Seven local fixed routes serve Vallejo, four limited service routes operate during school in-service dates within Vallejo and Benicia, and five intercity routes connect to surrounding areas. Route 1 provides direct transit services through the study area via SR 29, Mini Drive and Broadway Street. Weekday service begins at 6:30 a.m. and ends about 7:30 p.m. at 30-minute intervals.

Bicycle Facilities. There are no bike lanes along SR 29, Mini Drive, Lewis Brown Drive or Broadway Street in the vicinity of the project site.

Pedestrian Facilities. Pedestrian facilities, such as sidewalks, are limited in the project area. There are pedestrian sidewalks along the project site frontage and the shopping area along the west side of Broadway Street, and the shopping center area along Mini Drive near the intersection with SR 29. There are no pedestrian sidewalks on Lewis Brown Drive and SR 29 within the study area.

Intersection Operations

Traffic Operation Level of Service (LOS). Intersection traffic operations are rated using the Level of Service (LOS) grading system. The LOS grading system is a qualitative measurement of traffic flows, with a scale ranging from LOS A to F. LOS A represents free-flow conditions and LOS F represents congested or jammed conditions. Intersections are graded based on Control Delay per Vehicle, with different scales for signalized and non-signalized intersections. **Table 7**: Levels of Service Criteria shows these LOS grades and their relationship to traffic conditions.

The City of Vallejo considers intersection LOS A through LOS D acceptable and the Solano County Congestion Management Agency (CMA) considers LOS A through LOS E as acceptable.

Table 7: Levels of Service Criteria	
Signalized Intersections	
LOS	**Control Delay per Vehicle[1] (Seconds)**
A	0.0-0.10
B	10.1-20.0
C	20.1-35.0
D	35.1-55.0
E	55.1-80.0
F	> 80.00
Non Signalized Intersections	
LOS	**Control Delay per Vehicle[1] (Seconds)**
A	0.0-10.0
B	10.0-15.0
C	15.0-25.0
D	25.0-35.0
E	35.0-50.0
F	>50.0

Source: Highway Capacity Manual, 2000

Notes:

1. Control delay includes acceleration, deceleration and stop time. For 4-way intersections, delay and LOS are the average of all approaches. For 2-way intersections, delay and LOS represents only the side street approach with the worst delay and LOS. Major street approaches generally would operate at LOS, as main street traffic would not have to stop to yield.

Existing Level-of-Service (LOS). Based on traffic counts conducted during a seven-day period in late August 2013. all four study intersections currently operate at either LOS B or LOS C, while the three site driveways operate at LOS B for the driveway approach and LOS A for through traffic on Broadway Street. **Table 8** shows existing LOS at the four study intersections and three project driveways.

Table 8 Traffic Operation (LOS) – Current Conditions

	Study Intersections (Signalized)	Existing Conditions					
		a.m. peak			p.m. peak		
		V/C[1]	Delay[2]	LOS[3]	V/C	Delay	LOS
1	Lewis Brown/Broadway St.	0.491	15.3	B	0.529	15.5	B
2	Sonoma Bl. (SR29)/SR 37 Ramps	0.555	12.9	B	0.589	13.0	B
3	Sonoma Bl. (SR29)/Mini Dr.	0.759	26.3	C	0.847	26.6	C
4	Broadway St./Mini Dr.	0.508	14.2	B	0.484	14.4	B
	Site Access (Non-signalized)						
5	North Driveway/Broadway	0.326			0.347		
	Left and right-turn from Drwy		12.4	B		12.6	B
	Left turn from Broadway		8.0	A		8.0	A
	Right-turn from Broadway		0.0	A		0.0	A
6	Center Driveway/Broadway	0.325			0.355		
	Left and right-turn from Drwy		12.5	B		12.8	B
	Left turn from Broadway		8.0	A		8.1	A
	Right-turn from Broadway		0.0	A		0.0	A
7	South Driveway/Broadway	0.327			0.355		
	Left and right-turn from Drwy		12.8	A		12.8	A
	Left turn from Broadway		0.0	A		0.0	A
	Right-turn from Broadway		0.0	A		0.0	A

Note: PHA evaluated intersection LOS using SYNCHRO computer software based on 2000 HCM methods. Driveway traffic volumes were converted to passenger car equivalent (PEC) prior to conducting LOS analyses. The V/C ratios for access driveways represent the entire intersection.
[1] Volume-Capacity ratio or ICU in the SYNCHRO traffic model.
[2] Delay- average vehicle delays at the intersection measured in seconds.
[3] LOS = Level-of Service.

PROJECT IMPACTS

Project Trip Generation and Distribution

The proposed additional 123 tons of daily recyclable and organic materials (from 177 tons to 300 tons), would be an increase of 70 percent compared to its current incoming daily tonnage. Based on this percentage increase, and the maximum existing traffic level on an individual day during the seven-day traffic counts, the proposed project is expected to generate approximately eight additional truck trips (four inbound and four outbound) in the morning peak hour and six additional truck trips (three inbound and three

outbound) in the afternoon peak hour. All new project-generated trips are expected to be truck trips. For comparability in the subsequent traffic LOS analyses (discussed below), truck trips were converted to passenger car equivalent (PCE), in which one truck trip is equal to 2.5 auto trips. **Table 9** presents a summary of project trip generation analysis, and **Figure 8** shows estimated directional distribution of project-generated traffic.

Table 9: Project Trip Generation

	a.m. peak			p.m. peak			Daily		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Current-all traffic	7	10	17	4	14	18	162	162	324
Current-truck only	6	6	12	4	4	8	53	53	106
Proposed-truck only (*0.7)	4	4	8	3	3	6	37	37	74
Proposed-truck PCE*2.5	10	10	20	8	8	16	93	93	185

The project trip generation is estimated based on a 70% increase of the current driveway volumes, derived from the percentage increase of daily capacity load from 177 tons to 300 tons. The above trip generation estimates represent the maximum of the seven-day driveway count.

Traffic Impacts: Existing Plus Project Conditions

Table 8 summarizes study intersection LOS for the project conditions. The added new trips to and from the current facility as a result of the additional tonnage would be truck trips, but were converted to passenger car equivalent (PCE) for LOS analyses.

As shown in **Table 10**, with the addition of project traffic, all of the study intersections and site access driveways would continue to operate at similar conditions, LOS C or better, as before the proposed project. The proposed project would have a less-than-significant impact on area traffic operation.

Site Access and On-site Circulation

A traffic operation analyses indicated that all of the driveways currently operate at good LOS conditions with no vehicle queues, and would operate at similar LOS conditions with the additional project traffic. There are no horizontal or vertical curves on Broadway Street near the project site and therefore no sight restrictions at any of the access driveways. The project site plan as shown in **Figure 2,** along with the three access driveways off Broadway Street would provide adequate on-site circulation.

SOURCE: PHA 2013; RCH Group, 2013

Recology Vallejo, SWFP

Figure 8

Project Traffic Distribution Estimates

Table 10 Traffic Operation (LOS) – Project Conditions

	Study Intersections (Signalized)	Existing Conditions						Existing + Project					
		a.m. peak			p.m. peak			a.m. peak			p.m. peak		
		V/C[1]	Delay[2]	LOS[3]	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
1	Lewis Brown/Broadway St.	0.491	15.3	B	0.529	15.5	B	0.494	17.9	B	0.532	17.9	B
2	Sonoma Bl (SR29)/SR 37 Ramps	0.555	12.9	B	0.589	13.0	B	0.557	17.2	B	0.589	17.2	B
3	Sonoma Bl (SR29)/Mini Dr.	0.759	26.3	C	0.847	26.6	C	0.763	29.2	C	0.847	29.6	C
4	Broadway St./Mini Dr.	0.508	14.2	B	0.484	14.4	B	0.515	18.0	B	0.492	18.2	B
	Site Access (Non-signalized)												
5	North Driveway/Broadway	0.326			0.347			0.326			0.349		
	Left and right-turn from Drwy		12.4	B		12.6	B		14.2	B		15.1	C
	Left turn from Broadway		8.0	A		8.0	A		8.3	A		8.3	A
	Right-turn from Broadway		0.0	A		0.0	A		0.0	A		0.0	A
6	Center Driveway/Broadway	0.325			0.355			0.325			0.362		
	Left and right-turn from Drwy		12.5	B		12.8	B		14.3	B		15.0	C
	Left turn from Broadway		8.0	A		8.1	A		8.4	A		8.4	A
	Right-turn from Broadway		0.0	A		0.0	A		0.0	A		0.0	A
7	South Driveway/Broadway	0.327			0.355			0.327			0.361		
	Left and right-turn from Drwy		12.8	A		12.8	A		13.6	B		14.1	B
	Left turn from Broadway		0.0	A		0.0	A		0.0	A		0.0	A
	Right-turn from Broadway		0.0	A		0.0	A		0.0	A		0.0	A

PHA evaluated intersection LOS analyses using SYNCHRO computer software based on the HCM methods. PHA collected traffic data from the field in late August 2013. Driveway traffic volumes were converted to passenger car equivalent (PCE) prior to conducting LOS analyses. The V/C ratios for driveways are for the intersection as a whole.

[1] Volume-Capacity ratio or ICU in the SYNCHRO traffic model.

[2] Delay- average vehicle delays at the intersection measured in seconds.

[3] LOS- Level-of Service.

Public Transit

The proposed project is not likely to have an impact on public transit service in the project area since the proposed project would mostly involve collection trucks carrying additional loads of recyclable materials, green materials, or food waste to and from the facility. A Recology Vallejo official has also indicated that its current employees would be able to process the additional recyclable materials and no additional employees would be needed. A Recology official also indicated that most employees drive to work and would therefore not have any impact on public transit.

Cumulative Impacts

This section describes traffic operations associated with cumulative conditions (buildout). The cumulative scenario evaluates future traffic conditions associated with the buildout of the City of Vallejo, which would probably occur after the year 2025. Under cumulative conditions, traffic is anticipated to increase, and levels of service at some intersections may deteriorate to unacceptable levels (LOS E or LOS F) at some intersections, potentially including intersections in the project vicinity. These conditions would occur with or without the proposed project. With the proposed project, traffic levels at local intersections, including those that may operate at unacceptable levels of service, would not be substantially different than conditions without the proposed project. For this reason, the project's contribution would be less than cumulatively considerable, and the proposed project's impact on cumulative traffic would be less than significant.

c) **No Impact.** The nearest airport, Napa County Airport, is approximately four miles north of the project site. The proposed project would not affect air traffic patterns or traffic levels. There would be no impact.

d) **No Impact.** The proposed project would not involve any changes to existing streets or circulation patterns. The proposed project would not involve any new hazardous design features or introduce any new uses that may be incompatible with transportation. The proposed project would therefore have no impact on transportation hazards.

e) **No Impact.** The proposed project would not involve any changes to existing streets and circulation patterns. The proposed project would not impede or require diversion of rescue vehicles or evacuation traffic in the event of a life-threatening emergency. There would be no impact on emergency response and access.

f) **No Impact.** The proposed project would not involve any changes to existing streets and circulation patterns. The proposed project would not affect transit, bicycle or pedestrian circulation or safety. There would be no impact.

References

PHA Transportation Consultants, *Recology Vallejo Traffic Study,* November 2013.

Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☒	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

a) **Less than Significant with Mitigation.** As discussed in criterion 9.a, above, the proposed project would add food waste to the existing green waste processing program, which would generate leachate containing oil and grease. As stipulated in Mitigation Measure HYD-1, removal of this oil and grease would be required before discharge to the sanitary sewer system. With implementation of this mitigation measure, wastewater that is conveyed to a wastewater treatment plant would comply with wastewater treatment requirements of the San Francisco Regional Water Quality Control Board, and the impact on wastewater treatment requirements would be less than significant.

b) **Less than Significant.** The proposed project would not increase water demand at the project site, and there would be no impact on water treatment facilities. As discussed in criterion 9.a, above, Mitigation Measure HYD-1 stipulates that leachate from the Green and

Food Waste Bunker be treated to remove oil and grease before discharge to the sanitary sewer system. The additional volume of wastewater that would be discharged to the sanitary sewer system would be negligible in comparison to the capacity of wastewater treatment facilities. New or expanded wastewater treatment facilities would not be required. The impact on wastewater treatment facilities would be less than significant.

c) **No Impact.** As discussed under criteria 9.d and 9.e, above, the proposed project, including construction of the cover over the Green and Food Waste Bunker, would not change the amount of impervious surfaces at the site and therefore would not increase the amount of storm water runoff from the site. New or expanded storm water drainage facilities would not be required. There would be no impact on existing or planned storm water drainage systems.

d) **No Impact.** The proposed project would not increase water demand at the project site. No new or expanded water entitlements would be needed.

e) **Less than Significant.** As discussed under criterion 17.b, above, the proposed project would result in additional wastewater that would be negligible in comparison to the capacity of wastewater treatment facilities. New or expanded wastewater treatment facilities would not be required. The impact on wastewater treatment capacity would be less than significant.

f) **No Impact.** The proposed project would add food waste to the existing composting program, thus reducing the volume of waste that must be disposed in landfills. There would be no adverse impact on landfill capacity.

g) **No Impact.** The proposed project would be required to comply with the Solid Waste Facility Permit (SWFP) issued by the LEA for the project site, and would comply with all other federal, state, and local statutes and regulations related to solid waste. Implementation of the proposed project would result in no impact.

Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) **Less than Significant with Mitigation.** The project site is currently developed as a recycling and transfer facility and the project would not disturb any new areas. With implementation of Mitigation Measure **HYD-1**, the proposed project would not substantially degrade the quality of the environment, reduce habitat, or restrict the range of a rare or endangered plant or animal, or eliminate a plant or animal community. The proposed project would not affect any historic structures.

b) **Less than Significant.** The proposed project would not have a cumulatively considerable impact on any of the environmental factors discussed above. This would result in a less-than-significant impact.

c) **Less than Significant with Mitigation.** The proposed project would not result in impacts to human beings that would result in substantial adverse effects on human beings, directly or indirectly. Mitigation Measures **AQ-1** and **HYD-1** would respectively reduce potential objectionable odors that could affect a substantial number of people, and reduce potential for leachate to leave the site via the storm water system.

APPENDIX A

City of Vallejo Resolution No. PC 13-04

ATTACHMENT 1

CITY OF VALLEJO PLANNING COMMISSION

RESOLUTION NO. PC 13-04

A RESOLUTION OF THE PLANNING COMMISSION APPROVING AN AMENDMENT TO A CONDITIONAL USE PERMIT ALLOWING FOOD SCRAP COLLECTION AT 2021 BROADWAY STREET

Major Use Permit #12-0009
Recology Green Waste Food Collection

* *

I. GENERAL FINDINGS

WHEREAS, an application was filed by Tom Phillips seeking approval for an amendment to Major Conditional Use Permit (UP #87-27) for the collection of food scraps from commercial and residential Vallejo properties, to be temporarily stored at 2021 Broadway Street; and

WHEREAS, the City of Vallejo Planning Commission conducted a duly noticed public hearing to consider the Use Permit application on April 1, 2013, at which testimony and evidence, both written and oral, were presented to and considered by the Planning Commission; and

WHEREAS, based on evidence received at the public hearing, the Planning Commission makes the following factual findings:

II. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS

The Planning Commission finds that the Project is exempt from the California Environmental Quality Act pursuant to Section 15301 (Class 1 Categorical Exemption, "Existing Facilities") of the CEQA Guidelines.

III. FINDINGS RELEVANT TO USE PERMIT FOR PROJECT APPROVAL AND FOR DETERMINATION OF PROJECT CONSISTENCY WITH APPLICABLE GENERAL PLAN

1. The location, size, design and operating characteristics of the proposed conditional use will be compatible with adjacent uses, building or structures, with consideration given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities, to the harmful effect, if any, upon desirable neighborhood character; to the generation of traffic and the capacity and physical character of surrounding streets; and to any other relevant impact of the proposed use, *based on compliance with the conditions of approval associated with odor control and potential traffic impacts.*

2. The impacts and the location as described in the staff report accompanying this resolution and the hearing on this matter are consistent with the City's General Plan's *goal of establishing programs that encourage recycling of materials and initiation of recycling of materials used during governmental operation and implementation of the adopted Source Reduction and Recycling Element and Household Hazardous Waste Element.*

IV. RESOLUTION APPROVING THE USE PERMIT AMENDMENT TO ALLOW FOOD SCRAP COLLECTION AT 2021 BROADWAY STREET

NOW, THEREFORE, LET IT BE RESOLVED that the Planning Commission hereby APPROVES an amendment to Major Conditional Use Permit #12-0009 to allow the collection of food scraps from commercial and residential Vallejo properties as a component of Recology Vallejo's Green Waste Collection Program at 2021 Broadway Street based on the findings above and subject to the Conditions of Approval attached to this resolution as Exhibit A and incorporated herein by this reference.

V. VOTE

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Vallejo, State of California, on the 1st day of April 2013, by the following vote to-wit:

AYES: 7
NOES: 0
ABSENT: 0

KENT PETERMAN, CHAIRPERSON
City of Vallejo Planning Commission

Attest:

ANDREA J. OUSE, AICP, SECRETARY
City of Vallejo Planning Commission

APPENDIX B

Odor Impact Minimization Plan

ODOR IMPACT MINIMIZATION PLAN

RECOLOGY VALLEJO
2021 BROADWAY
VALLEJO CA 94589

April 2014

Facility Description

Recology Vallejo provides recycling and comingled green and food waste collection from both commercial and residential properties. The facility is located at 2021 Broadway, Vallejo California, in Solano County. The facility is situated on a parcel of land approximately 9.36 acres in size and is bordered to the south, west, and east by the following major arterials: Highway 37 to the south is an elevated freeway; Highway 29/Sonoma Boulevard on the west is a five-lane thoroughfare; and Broadway Street on the east is a two-lane industrial arterial paralleled by active railroad tracks. The closest residences are approximately 200 feet to the west, across Highway 29/Sonoma Boulevard.

Minimal odors occur due to the recyclable operations and any potential odors would be generated by the green and food waste. The wet season for this region is usually between October and April. During this period, the amount of green waste throughput drops due to less generation of grass clippings and green waste materials from other sources. The amount of food waste is expected to stay relatively stable.

Green and food waste from the commercial and residential customer routes throughout Vallejo is collected and dropped off at the Green and Food Waste Bunker. The green and food waste is then loaded into transfer trucks with the tops are covered to prevent drift of the material, and then transported to the Recology Jepson Prairie Organics facility located in Vacaville California. Compostable materials are removed and transported four times per day, five to six days per week. The sixth day is added to the schedule during periods of increased throughput.

The Green and Food Waste Bunker is located in the southwest corner of the property and is enclosed by a tent structure, which will reduce odor impacts. The area surrounding the bunker is swept daily with the sweeper truck and with brooms, and the trench drains adjacent to the bunker are cleaned daily. Although the Green and Food Waste Bunker is rarely completely empty, the sweeper truck and brooms are used to clean out areas when they become available. The Green and Food Waste Bunker will not be hosed down. No runoff from the bunker will enter the storm drain. All drainage from the Green and Food Waste Bunker will be directed into the existing underground Continuous Deflective Separation (CDS) unit through the drain to the CDS unit located on the western side of the Bunker.

Equipment on hand used to handle Green Waste

Recology Vallejo maintains the following pieces of equipment for the handling of compostable materials on-site:

Two (2) bucket loaders

One - floor sweep machine

Protocol for Handling Odor Complaints

As mentioned above, the closest residences are approximately 200 feet to the west, on the other side of Highway 29/Sonoma Boulevard. Each day staff and management evaluates on-site odors and conducts and oversees the drop off and removal for shipment of the green and food waste. In the event that the material cannot process the material due to equipment malfunction or peak loading, compostable materials are diverted to either Napa Recycling and Waste Services or the Jepson Prairie Organics facility. This eliminates the possibility of too much material accumulating on-site and potentially creating odors. Operational practices are implemented to minimize the release of objectionable odors. Those practices are:

- Good housekeeping measures, such as clearing spilled materials and ensuring all green and food waste gets pushed back into the bunkered area; and

- Removal and transport of material in a timely manner.

When odors are detected on site, the staff/management uses the following protocol:

- Investigate and determine the likely source of the odor.

- Determine if on-site management practices could remedy the problem and immediately take steps to remedy the situation such as finding and, removing for shipment, the offending source green waste prior to the movement of any other material.

When Customer Service Representatives or staff receives complaints of odors off-site, management personnel are sent out to investigate and an attempt is made to identify the odor in order to determine the origin. If the odor is determined to have originated from the Recology Vallejo site, then management will address the cause. The following protocol is used:

- Management/staff will check for any extenuating circumstances

- Determine if on-site management practices could remedy the problem and immediately take steps to remedy the situation such as finding and, removing for shipment, the offending source green and food waste prior to the movement of any other material.

- If a particularly malodorous load is received, it will be covered with a tarp and removed from the site within 24 hours.

Changes to the Odor Impact Minimization Plan

This Odor Impact Minimization Plan shall be revised to reflect any changes, and a copy shall be provided to the enforcement agency, within 30 days of those changes.