

2 EXECUTIVE SUMMARY

2.1 INTRODUCTION

This summary is provided in accordance with the CEQA, including CEQA Guidelines Section 15123 (Title 14, CCR.) As stated in CCR Section 15123(a), “an environmental impact report (EIR) shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical.” As required by the CCR, this section includes: (1) a summary description of the proposed project; (2) a synopsis of environmental impacts and recommended mitigation measures; (3) identification of the alternatives evaluated and of the environmentally superior alternative; (4) a discussion of the areas of controversy associated with the project; and (5) issues to be resolved, including the choice among alternatives.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

2.2.1 Background

The Recology Hay Road (RHR) Landfill has been operating at the site since 1964. Recology is an integrated resource recovery company that currently owns and operates RHR Landfill. Facilities at the project site associated with landfill operations include monitoring and control systems (e.g., groundwater, landfill gas, leachate), storm water retention ponds, flood control berms, groundwater dewatering facilities, materials handling and processing areas, various structures, access roads, and a borrow pit. The landfill provides solid waste disposal services for both municipal and commercial customers in the San Francisco Bay Area and the Sacramento Valley, but primarily serves San Francisco as well as Solano County (i.e., cities of Vacaville and Dixon and portions of the unincorporated County) (Recology n.d.). Under the current Land Use Permit (LUP) U-11-09/Solid Waste Facility Permit (SWFP) 48-AA-0002, the 256-acre permitted landfill has a maximum allowable height limit of 215 feet above mean sea level (msl), a maximum limit for disposal depth of 20 feet below msl, and a total disposal design capacity of 37 million cubic yards (Solano County 2013). In 2016, the RHR Landfill had an average daily throughput of 1,682 tons per day (tpd). In 2017, fires in Sonoma County, an emergency condition, resulted in the need to accept fire debris at local landfills, including the RHR Landfill. As a result, annual throughput at the RHR Landfill increased to 1,947 tpd in response to the emergency condition. As of May 2018, 24.9 million cubic yards of disposal capacity was available for solid waste disposal (Golder 2018).

Included on top of the 256-acre permitted landfill is the Jepson Prairie Organics (JPO) Compost Facility. The permitted footprint of JPO is 39 acres (CalRecycle 2018). JPO is permitted to process manure, orchard and vineyard prunings, crop residue, post-consumer food waste, and yard waste; however, no biosolids are permitted for composting. The maximum annual composting capacity of the JPO facility is 172,600 cubic yards (CalRecycle 2018). JPO currently utilizes two types of composting processes: windrow and Aerated Static Piles (ASP). The windrow process is used for the composting of green waste by piling organic matter or biodegradable waste in long rows. The ASP system is used to compost food and green waste, and employs covers, fans, and several biofilters within different composting zones. Before 2009, JPO utilized the AgBag® vessel reactor system but switched methods due to lower VOC emissions associated with the ECS system (i.e., a reduction of approximately 50%) (Sullivan 2011). Facilities associated with JPO operations include a 22-acre engineered composting pad; leachate collection ditches and sumps, two leachate ponds (Pond A and B), leachate storage tanks, and storm water controls, various structures, and access roads (CVRWQCB 2016).

2.2.2 Project Objectives

The following project objectives have been identified for the proposed project addressed in this Subsequent Environmental Impact Report (SEIR):

- ▶ increase the RHR Landfill's disposal capacity by approximately 8.8 million cubic yards;
- ▶ maximize daily tonnage to the RHR Landfill, while providing at least 15 years of estimated disposal capacity at the RHR Landfill;
- ▶ extend the estimated RHR Landfill life by at least 5 years compared to future conditions under which the RHR Landfill's disposal capacity is not increased;
- ▶ extend the ability of JPO to compost Solano County organics by at least 4 years compared to future conditions under which the RHR Landfill's disposal capacity is not increased;
- ▶ correct the permitted RHR Landfill boundary to reflect existing conditions at the site;
- ▶ allow the RHR Landfill more flexibility in how it balances high-volume and low-volume days;
- ▶ achieve higher solid waste diversion at RHR with better sorting of construction and demolition materials;
- ▶ account for changing market conditions for recyclable commodities while avoiding disposal;
- ▶ allow for the continued disposal of friable asbestos in Solano County past the filling and closure of the existing permitted monofill (DM-1), projected to be 2021; and
- ▶ provide adequate soil cover for the landfill and avoid the import of soil.

2.2.3 Project Overview

The project involves the amendments to the existing RHR Landfill LUP and other associated permits to allow for the following new/expanded landfill operations:

- ▶ A 24-acre lateral expansion of the landfill disposal area within existing landfill property to include an adjacent triangular area (Triangle). Currently, the Triangle is largely undeveloped open space with a private gravel road, a manmade drainage channel (drainage ditch), an aboveground stormwater pipeline, and infrastructure for groundwater monitoring and landfill gas and leachate management. Under the proposed project, this entire area would be included within the permitted landfill disposal area. The Triangle would result in an increase of approximately 8.8 million cubic yards to the landfill's disposal capacity with the landfill footprint extended to the south. Because the expansion area would provide additional disposal capacity, it would extend the landfill's overall life by at least 5 years. Because the JPO compost facility is within the permitted disposal footprint and will, in a later phase of the landfill, be decommissioned to allow for disposal of waste in this area, the proposed capacity increase associated with the lateral expansion of the landfill would also extend the potential life of JPO by at least 4 years.
- ▶ The permitted 39-acre JPO facility boundary would be reduced to approximately 38 acres. The 1-acre area to be removed from the JPO boundary is currently a setback area and would be operated under the RHR Landfill's SWFP instead of the JPO's Compostable Materials Handling Permit (CMHP).
- ▶ A LUP modification that acknowledges disposal module-1 (DM-1) extends 0.3-acre beyond its originally defined disposal footprint. The permitted disposal footprint would be adjusted to reconcile the newly understood disposal footprint.
- ▶ Temporary storage (i.e., maximum of six months) of baled, single-stream recyclables within the landfill footprint until processing capabilities are improved to meet the new requirements and/or new markets are developed to accept the material. Specifically, RHR is proposing four bale stockpiles near the existing administrative office of up to 3,680 bales total.

- ▶ Increase in the allowable tonnage received on a peak day to 3,400 tpd with a 7-day-average limit of 3,200 tpd of disposal. The inclusion of a peak tonnage and a 7-day-average limit would allow the facility to accept additional waste on peak days without having to divert haulers to other facilities while en-route.
- ▶ Installation and operation of a sorting, separation, and processing area for construction and demolition (C&D) materials. This would allow for greater recovery of recyclable materials and greater diversion of materials from landfill disposal. The footprint of the portable C&D sorting operation would be approximately 150 feet wide by 300 feet long and would include all equipment and stockpiled materials.
- ▶ As part of permit modifications and except for DM-2.1, friable asbestos disposal is proposed within all existing DMs. Currently, the landfill is permitted to receive up to 2,500 tons per month of friable asbestos with disposal of this material limited to DM-1. No modification of the monthly tonnage limit on friable asbestos disposal would occur; rather, the onsite location would change because DM-1 is expected to meet capacity and close by 2021.
- ▶ Deepening and widening the limits of the existing soil borrow pit to accommodate the increased need for soil associated with proposed landfill construction and operations. The existing borrow pit measures 80 acres with a current maximum excavation depth of 60 feet below ground surface (bgs). In anticipation of the need for approximately 3.6 million cubic yards of additional soil, up to a 6-acre increase in the existing footprint of the borrow pit and deepening of the borrow pit by an additional 68 feet bgs is proposed as part of the project.
- ▶ An additional enclosed landfill gas (LFG) flare would be installed adjacent to the existing flare to ensure a total capacity of 6,000 cfm at the landfill for safe and adequate control of LFG.

Refer to Chapter 3, "Project Description" for further information regarding each of the proposed amendments listed above.

2.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 2-1, at the end of this chapter, summarizes the environmental impacts of the proposed project, the level of significance of the impact before mitigation, recommended mitigation measures for significant impacts, and the level of significance of the impact after the implementation of mitigation. Implementation of the project would result in a cumulatively considerable contributions to significant and unavoidable transportation impacts at the intersections of State Route (SR) 12/SR 113 and SR 113/Midway Road and along Midway Road, which are projected to operate at unacceptable levels under Cumulative No Project conditions.

2.4 SUMMARY OF ALTERNATIVES

This Draft SEIR evaluates three alternatives to the proposed project: Alternative 1: No Project, Alternative 2: Vertical Expansion Alternative, and Alternative 3: Recology Ostrom Road Expansion.

Under Alternative 1: Under the No Project Alternative, no amendments to the existing RHR Landfill LUP and other permits would be made. Current conditions would continue until the landfill reaches capacity and updates to the RHR Road and Litter Agreement would continue to be updated periodically based on road conditions. Once the site reaches capacity, the landfill would be closed in accordance with closure and monitoring procedures and groundwater and LFG would continue to be monitored. All structures unrelated to ongoing monitoring of the site would be removed.

Alternative 2: Vertical Expansion Alternative. Alternative 2 would involve an increase in the allowable height limit of the existing landfill as part of the amended LUP to the maximum feasible height (260 feet above ground surface) from a grading perspective (shown in Figure 6 1). A summary of the increased total disposal capacity and landfill life for Alternative 2 compared to the proposed project is shown in Table 6-1. This alternative would result in no lateral expansion of the landfill into the Triangle and no increase to existing tonnage limit of 2,400 tons per day (tpd). As a result, deepening and widening of the borrow pit and installation of an additional flare would not be required under

this alternative. However, improvements to existing C&D operations, as well as temporary storage of recyclable bales would occur under this alternative. While this alternative would result in an expansion in the overall solid waste disposal capacity of the landfill, the expansion would accommodate approximately 7,721,700 cy less than that of the proposed project. The smaller increase in disposal capacity under Alternative 2 would result in an estimated closure date extension of less than one year versus the five years that would likely occur under the proposed project.

Alternative 3: Under Alternative 3, expansion in disposal capacity would occur at the Recology Ostrom Road (ROR) Landfill instead of expanding disposal capacity at RHR Landfill. ROR is a Class II Landfill and the only other landfill owned and operated by Recology. Located in southern Yuba County (5900 Ostrom Rd, Wheatland, CA), the ROR Landfill is approximately 76 miles northeast of RHR Landfill and provides solid waste disposal services to both municipal and commercial customers in the northern Sacramento Valley including Yuba, Sutter, Butte, Nevada, and Colusa Counties. The facility has been in operation since 1995, and to date, approximately 70 acres out of a total landfill development of 225 acres has been constructed and approved for operation (CRWQCB 2018: 2). The facility's maximum permitted capacity is 43,467,231 cubic yards (CY) and maximum permitted throughput is 3,000 tons per day (CalRecycle 2007). With a remaining capacity of 24,395,000 tons as of June 2016, ROR Landfill is estimated to reach capacity by 2102 (CVRWQCB 2018:2). Expansion of an existing waste disposal facility would have fewer impacts than construction of a new site, and as discussed above, other offsite alternatives were determined to be infeasible. In order to meet long-term, regional solid waste disposal needs, the projected additional solid waste capacity necessary for RHR customers (i.e., 8.8 million cubic yards) would be provided at ROR Landfill for disposal instead of through the expansion of existing disposal capacity at RHR Landfill. Under this alternative, a similar lateral expansion of ROR Landfill would occur. Additionally, vehicles carrying solid waste coming from the Bay Area would travel an additional 152 miles per round trip to reach the ROR Landfill. Assuming that only transfer and packer trucks associated with the projected increase in vehicle trips under the proposed project would travel to the ROR Landfill instead of the RHR Landfill, up to 114 vehicles per day (refer to Table 4.11-6 of Section 4.11, 'Transportation') would travel the additional 152 miles, resulting in a net increase of 17,328 vehicle miles per day under this alternative, compared to the proposed project. However, no expansion of operations or potential increase in the number of vehicles travelling to and from the landfill per day would occur at the RHR Landfill under this alternative.

2.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 suggests that an EIR should identify the "environmentally superior" alternative. "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

The No Project Alternative would avoid the localized significant environmental impact associated with the proposed project and the other "build" alternatives. However, if the project or a similar expansion of RHR Landfill is not undertaken, an alternative location for solid waste disposal in the region would be necessary. As noted above, the RHR Landfill represents one of the closer regional landfills to the Bay Area. An alternative solid waste disposal location would likely be farther away, and require longer haul truck trips, which would result in a greater overall impact on air quality, GHG emissions, and transportation within the region. In addition, the No Project Alternative would not meet the need for long-term solid waste disposal capacity in Solano County and elsewhere in the region, would not minimize the net fiscal effects on rate payers and taxpayers, and would not conserve resources while providing a reasonable level of solid waste disposal. Therefore, this alternative would not realize the basic objectives of the project.

With regard to the other alternatives considered in this SEIR, development of Alternative 2 (Vertical Expansion Alternative) would reduce all of the potentially significant impacts of the project, primarily through less land disturbance. Alternative 3 would reduce localized impacts at the RHR Landfill but would have potentially greater impacts associated with haul trucks travelling further for disposal purposes and similar localized impacts at ROR Landfill. With respect to Alternative 2, it would avoid the considerable contribution to significant and unavoidable cumulative intersection and roadway segment operational impacts in the vicinity of the RHR Landfill associated with the project. With the exception of aesthetics, Alternative 2 would reduce impacts associated with all other resource

areas compared to the proposed project. While Alternative 2 would involve an expansion of landfill capacity, consistent with the project objectives, it would not achieve the project objectives related to increased gross disposal capacity and extension of the landfill's life to the extent of the proposed project. Therefore, Alternative 2 would be environmentally superior within the near term but may result in greater long-term effects as a result of a lack of solid waste disposal options available to the Bay Area, similar to Alternative 3. Therefore, the environmental impact differences between the project and Alternative 2 are not substantial enough that one is clearly superior over the other. On balance, the environmentally superior alternative would be either the project or Alternative 2, depending on decisions weighing types of environmental benefits and adverse effects by Solano County.

2.6 AREAS OF CONTROVERSY

Section 15123 of the State CEQA Guidelines requires the summary section of a Draft SEIR to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public. The following provides a summary of issues raised through scoping and comments on the Notice of Preparation (NOP) that could be considered controversial. The comment letters received on the NOP's are included in Appendix A of this document.

- ▶ Odor
- ▶ Windblown litter
- ▶ Air Quality
- ▶ Water Quality
- ▶ Increase in truck trips to the landfill

Table 2-1 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
4.1 Aesthetics			
<p>Impact 4.1-1: Temporary Changes in Visual Character Temporary changes in views would occur as a result of construction activities, primarily related to the presence and operation of heavy equipment associated with lateral expansion of the landfill within the Triangle. These activities would include excavation of a realigned drainage ditch segment, construction of a 10-foot high perimeter berm, and installation of a required base liner containment system. Foreground views of these construction activities would be available to motorists heading northbound on SR 113. These changes would be temporary, largely screened from outside views, and not out of character with the existing landfill operations onsite. Therefore, the temporary changes as a result of the proposed project would not substantially degrade views of the project site. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.1-2: Long-Term Adverse Changes in Visual Character Lateral expansion of the landfill into the Triangle area and modification of existing landfill operations near the landfill’s existing administrative office (i.e. storage of baled recyclables and addition of a new flare at G2 facility) would result in changes to views of the project site. However, views of the landfill expansion and operation modifications would be consistent and blend in with existing views of landfill operations from Hay Road and immediately north, east, and west of the Triangle area. Further, design of the landfill expansion area would include vegetated landfill perimeter slopes with a 4:1 (horizontal: vertical) slope along the southern boundary of the Triangle to screen views of landfill operations from SR 113. Modifications to these views would be consistent with existing views of the landfill operations onsite and substantial adverse changes would not occur. With project implementation, the increase in truck trips and the expansion of the landfill into the Triangle area could result in an increase in the amount of windblown litter generated from the facility. Although existing litter removal is governed by the 2016 RHR Road and Litter Agreement, it does not factor in the proposed lateral expansion and increase in truck trips. Therefore, the impact is considered potentially significant.</p>	PS	<p>Mitigation Measure 4.1-1: Litter Control The facility operator shall implement the following litter control mitigation measures to address the lateral landfill expansion area and/or the increase in landfill truck trips following implementation of the proposed project:</p> <ul style="list-style-type: none"> ▶ Windblown Litter from the RHR Site: <ul style="list-style-type: none"> ▪ Portable litter control fences shall be installed directly downwind of the working face during site operations. ▪ Additional litter collection crews shall be deployed following high wind events to remove litter from the parcels adjacent to the landfill. The RHR facility operator shall work to establish site access agreements with the adjacent property owners prior to project implementation. ▪ The maximum size of the working face shall be limited to 200’ x 75’ or smaller. ▪ Use of portable fencing in the immediate vicinity of the landfills working face and downwind of the working face shall be used to contain litter. ▪ Fencing along the site boundary of the landfill expansion area shall be high enough to contain litter from migrating offsite. ▪ Prior to the start of landfill operations within the expansion area, RHR shall construct a permanent 25 ft. tall litter-control fence that extends along the entire length of the southerly site boundary of the landfill expansion area. 	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<ul style="list-style-type: none"> ▪ Adequate staffing shall be onsite to remove litter immediately from the property boundary in the event of a sudden change in wind speed or direction. Similarly, additional litter collection crews shall be deployed following such high wind events to remove litter from parcels adjacent to the landfill. The permittee (RHR) shall establish site access agreements with the adjacent property owners within 90 days of issuance of the use permit. ▶ Windblown Litter from RHR-Related Truck Trips: <ul style="list-style-type: none"> ▪ If waste is hauled by RHR or its contractors over the following roads, RHR shall check for and pick up litter, on a weekly basis, or more frequently, on the following roads: Vanden Road from Peabody Road to Canon Road, Canon Road from Vanden Road to North Gate Road, North Gate Road from Canon Road to McCrory Road, McCrory Road from North Gate Road to Meridian Road, Meridian Road from McCrory Road to Hay Road, Hay Road from Meridian Road to Lewis Road, Lewis Road from Midway Road to Fry Road, and Midway Road from I-80 to SR 113. ▪ If Solano County personnel identify litter on roads used by RHR and its contractors, Solano County shall immediately notify RHR and request that it be removed. RHR shall respond and remove such litter within twenty-four (24) hours of receiving notification from Solano County. ▶ Litter Control: <ul style="list-style-type: none"> ▪ The facility operator shall negotiate an agreement with Solano County regarding reimbursement for the cost of removing trash and materials dumped along the above mentioned County roads, should County employees be required to assist in the removal of trash associated with the expanded use of the landfill. ▪ Litter control shall be the responsibility of the RHR compliance officer and shall be monitored by the Solano County Local Enforcement Agency (LEA) to ensure compliance with state minimum standards. A plan for litter control, by means of fencing, crews, adjustment of the size of working the face and use of soil cover, shall be detailed in the litter management plan. ▪ On a weekly basis, or more frequently if needed, RHR shall check for and pick up litter along adjacent properties, and along Burke Lane 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
		south of Hay Road, Dally Road north and south of Hay Road, Box R Ranch Road, Binghampton Road between SR 113 and Pedrick Road, Main Prairie Road between SR 113 and Pedrick Road, Brown Road between SR 113 and Pedrick Road, Pedrick Road between Brown Road and Binghampton Road, and along the following major haul routes: Fry Road between Leisure Town Road and SR 113, Lewis Road between Fry Road and Hay Road, Hay Road between SR 113 and Meridian Road, and Meridian Road between McCrory Road and Fry Road. The site, offsite properties, and roads listed above shall be kept as litter free as possible depending upon weather conditions. The County shall not be charged for disposal of litter or trash picked up during these activities. Within 90 days of the issuance of the land use permit, RHR shall execute an agreement with Solano County regarding reimbursement to the County for the cost of removing trash and materials dumped along the above mentioned County roads, should County employees be required to assist in the removal of trash associated with use of the RHR landfill in the event that RHR does not remove the litter within 24 hours of receiving notification from Solano County.	
<p>Impact 4.1-3: Potential to Substantially Damage or Change Views from Any Scenic Resources Within a Designated Scenic Corridor</p> <p>SR 113 is a County Scenic Roadway located adjacent to the eastern boundary of the RHR Property boundary and approximately 0.25 mile from the Triangle area. Foreground views of the expanded landfill into the Triangle area would be available to motorists on northbound SR 113. Foreground views of the Triangle from SR 113 may include new views of landfill operations (i.e., trucks and refuse) within this area of the site. However, views of the expanded landfill area would be consistent with and blend into existing views of landfill operations located immediately north, east, and west of the Triangle. Consistent with existing landfill design onsite, the landfill expansion area would include vegetated landfill perimeter slopes with a 4:1 (horizontal: vertical) slope to partially screen views of landfill operations from SR 113. At final grade, a rounded, rolling land formation is proposed to enhance the aesthetic appearance of the landfill modules. With implementation of the project, changes to views of the Triangle from SR 113 would be consistent with existing views of immediately adjacent landfill operations and design measures included in the project would partially screen views of the landfill expansion area from SR 113 motorists. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
<p>Impact 4.1-4: Potential for Increased Light and Glare The existing landfill includes fixed and portable nighttime lighting, which would continue after implementation of the project. No new sources of fixed lighting are proposed. The project would include base liner preparation work during construction of the landfill expansion area that could result in the need for occasional and temporary portable nighttime lighting. If the operator determines daytime temperatures are too high, use of portable nighttime lighting under this circumstance is allowable under the landfill's light control program and would require downcast and shielded lighting to prevent offsite glare and confine lighting to the work area. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>4.2 Air Quality</p>			
<p>Impact 4.2-1: Construction-Related Emissions of Criteria Air Pollutants and Precursors Project construction would generate emissions of ROG, NO_x, PM₁₀, and PM_{2.5} from grading, excavation, and installation of the geomembrane. Emissions would be generated by heavy-duty, off-road equipment and by worker commute trips and trucks hauling materials and equipment to the site. However, construction activities would not generate emissions of ROG, NO_x, and PM₁₀ that would exceed YSAQMD-recommended mass emission thresholds. Therefore, construction-generated emissions of criteria air pollutants and precursors would not conflict with the air quality planning efforts in the region or contribute substantially to the nonattainment status of SVAB with respect to the NAAQS and CAAQS for ozone, the CAAQS for PM₁₀, or the NAAQS for PM_{2.5}. Thus, emissions generated during the project's construction would not contribute to air quality-related health complications experienced by people living in the SVAB. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.2-2: Long-Term Operational Emissions of Criteria Air Pollutants and Precursors The increase in project-related truck travel would generate levels of NO_x in the SFBAAB that exceed BAAQMD-recommended daily mass emission thresholds. Therefore, operational emissions could conflict with the air quality planning efforts in the SFBAAB or contribute substantially to the nonattainment status of SFBAAB with respect to the NAAQS and CAAQS for ozone and the project's operational emissions could contribute to air quality-related health complications experienced by people living in the SFBAAB. This would be a significant impact.</p>	S	<p>Mitigation Measure 4.2-2: Ensure Truck-Generated Emissions of NO_x in the San Francisco Bay Area Air Basin Will Not Exceed BAAQMD-recommended Mass Emission Criteria The applicant shall demonstrate compliance with one or a combination of the following mitigation options to ensure that the level of NO_x emissions in the SFBAAB associated with project-related truck trips does not exceed BAAQMD's recommended significance criteria of 54 lb/day and 10 tons/year. Within 60 days of use permit approval, the applicant shall submit to the Planning Services Division of the Department of Resource Management, a detailed action plan that demonstrates implementation of this measure.</p> <ul style="list-style-type: none"> ▶ Option A. Achieve Early Compliance with the Truck and Bus Regulation., the applicant shall retrofit and/or upgrade its fleet of trucks to fully comply 	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<p>with CARB’s Truck and Bus Regulation prior to increasing average daily throughput at RHR landfill and before January 1, 2023, which is the date by which all trucks are required to comply with the emissions standards imposed by the Truck and Bus Regulation. The action plan submitted for this mitigation measure shall include an inventory of the vehicles to be retrofitted or upgraded and may include a phased approach. After January 1, 2023, Recology shall contract with haulers that are compliant and certified with CARB’s Truck and Bus Regulations.</p> <ul style="list-style-type: none"> ▶ Option B: Pay an Offset Fee to a Third-Party to Fund NO_x Emissions Offsets. The applicant shall purchase and retire NO_x offset credits sufficient to offset NO_x emissions in the SFBAAB at a rate of 57 lb/day and 10.3 tons/year from to a third-party non-profit (e.g., Bay Area Clean Air Foundation) or governmental entity prior to the receiving an increase in truck trips greater than the limits identified in Option B. The NO_x emission offset credits must be used to fund a NO_x reduction project in the SFBAAB. The cost of the credits, as well as any related administrative costs, shall be paid by the applicant. The applicant shall provide to the county the agreement that specifies the payment fee, timing of payment, and offset mechanism. This agreement must be signed by the applicant and the third-party entity. The specific emissions reduction project must result in emission reductions within the SFBAAB that are real, surplus, quantifiable, and enforceable and would not otherwise be achieved through compliance with existing regulatory requirements or any other legal requirement. The cost of implementing the selected measures shall be fully funded by the applicant. The NO_x project or program that would be implemented to offset NO_x must be approved by BAAQMD. The applicant shall provide proof to the county that the offsets are approved by BAAQMD and have been fully funded by the applicant. This option can only be implemented if NO_x offset credits are available at the time they are needed. ▶ Option C: Use Renewable Diesel Fuel in All Diesel Trucks Operated by the Applicant. The applicant shall use only renewable diesel (RD) fuels in all diesel-powered trucks uses to haul materials to the landfill and the Construction and Demolition Sorting Operation. This measure applies to diesel trucks operated or contracted by the applicant. RD fuel must meet the following criteria: 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
		<ul style="list-style-type: none"> ▪ meet California’s Low Carbon Fuel Standards and be certified by CARB Executive Officer; ▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ▪ contain no fatty acids or functionalized fatty acid esters; and ▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. The use of RD in trucks is estimated to reduce NO _x emissions by approximately 14 percent compared to conventional diesel fuel (SMAQMD 2015:3).	
Impact 4.2-3: Exposure of Offsite Sensitive Receptors to Toxic Air Contaminants Emissions of TACs associated with implementation of the project, including diesel PM emitted by heavy construction equipment, TACs contained in LFG, and diesel PM generated by haul trucks traveling on area roadways, would not result in an incremental increase in cancer risk greater than 10 in one million or a hazard index of 1.0 or greater at any offsite sensitive receptors. Therefore, this impact would be less than significant.	LTS	No mitigation measures are necessary.	LTS
Impact 4.2-4: Exposure of Sensitive Receptors to Odors The increase in municipal solid waste processed and landfilled at the project site as expansion occurs is not expected to result in additional sources or objectionable odors nor increased intensity of odors. Additionally, the area of landfill expansion is further away from the nearest offsite sensitive receptors than the portions of the landfill that are the currently being filled. Any odors associated with proposed storage of baled recyclables would be addressed with implementation of the nuisance and odor control measures described in the RHR Recyclable Material Bale Management Operations Plan that was approved by the County in April 2018. Therefore, it is not anticipated that the project would result in odors adversely affecting a substantial number of people. This impact would be less than significant.	LTS	No mitigation measures are necessary.	LTS
4.3 Archaeological, Historic, and Tribal Cultural Resources			
Impact 4.3-1: Potential Impacts to Unique Archaeological Resources Results of the records search and pedestrian survey did not indicate any known archaeological sites within the project site. However, project-related ground-disturbing activities could result in discovery or damage of yet undiscovered	PS	Mitigation Measure 4.3-1: Halt Ground-Disturbing Activity Upon Discovery of Subsurface Archaeological Features In the event that any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
subsurface unique archaeological resources. This would be a potentially significant impact.		conceal cultural deposits, are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall be halted and a professional archaeologist, qualified under the Secretary of the Interior’s Professional Qualification Standards, shall be retained to assess the significance of the find. Specifically, the archaeologist shall determine whether the find qualifies as an historical resource, a unique archaeological resource, or a tribal cultural resource. If the find does fall within one of these three categories, the qualified archaeologist shall then make recommendations to Solano County regarding appropriate procedures that could be used to protect the integrity of the resource and to ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to, preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery, with preservation in place being the preferred option if feasible. If the find is a tribal cultural resource, Solano County shall provide a reasonable opportunity for input from representatives of any tribe or tribes the professional archaeologist believes may be associated with the resource. Solano County shall implement such recommended measures if it determines that they are feasible in light of project design, logistics, and cost considerations.	
<p>Impact 4.3-2: Impacts to Unknown Tribal Cultural Resources Consultation with the Yocha Dehe Wintun Nation has resulted in no resources identified within the project boundaries as tribal cultural resources per AB 52. However, it is possible that tribal cultural resources could be encountered during construction within the Triangle. Due to the potential for unknown resources within the Triangle that may be discovered through project construction activities, potential impacts to tribal cultural resources could be potentially significant.</p>	PS	<p>Mitigation Measure 4.3-2: Pre-Construction Cultural Sensitivity Training Prior to ground disturbance activities for the borrow pit and lateral expansion (Triangle), the project applicant shall provide evidence to Solano County to demonstrate compliance with Mitigation Measure 4.3-2. The project applicant shall arrange for a qualified archaeologist to conduct a cultural resources sensitivity training for all construction personnel who will be active on the project site during project-related construction activities. The training will be provided before the initiation of construction activities and will be developed and conducted in coordination with a representative from Yocha Dehe Wintun Nation. The training will include relevant information regarding sensitive cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The cultural sensitivity training will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential tribal cultural resources are discovered.</p>	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
<p>Impact 4.3-3: Discovery of Human Remains Based on documentary research, no evidence suggests that any prehistoric or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, ground-disturbing construction activities could uncover previously unknown human remains. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would make this impact less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>4.4 Biological Resources</p>			
<p>Impact 4.4-1: Potential impacts to Special-Status Plants Project construction activities, including ground disturbance and vegetation removal, could result in disturbance to or loss of special-status plants if present on the project site. Because the loss of special-status plants could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a significant impact.</p>	S	<p>Mitigation Measure 4.4-1a: Special-Status Plant Surveys Prior to commencement of ground disturbance within habitats in the Triangle where special-status plants may occur (i.e., grassland habitat, vernal pool habitat), and during the blooming period for the special-status plants with potential to occur on the sites (Table 4.4-4), a qualified botanist will conduct protocol-level surveys for the potentially occurring special-status plants that could be removed or disturbed by project activities. Protocol-level surveys will be conducted in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009). If special-status plants are not found, the botanist will document the findings in a letter report to CDFW and further mitigation will not be required. [See pg 4.4-19 for Table 4.4-4, Normal Blooming Period for Special-Status Plants with Potential to Occur Within the Triangle]</p> <p>Mitigation Measure 4.4-1b: Special-Status Plant Avoidance If special-status plant species are found on the project site and are located outside of the permanent footprint of any proposed structures/site features and can be avoided, the project applicant will establish and maintain a protective buffer around special-status plants to be retained.</p> <p>Mitigation Measure 4.4-1c: Special-Status Plant Impact Minimization Measures If special-status plants are found during rare plant surveys and cannot be avoided, the project applicant will consult with CDFW and USFWS, as appropriate depending on species status, to determine the appropriate compensation to achieve no net loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, preserving and enhancing existing populations, creating offsite populations on mitigation sites through seed collection or transplantation at a 1:1 ratio, and restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Potential mitigation sites could include</p>	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
		suitable locations within or outside of the campus. The project applicant will develop and implement a site-specific mitigation strategy describing how unavoidable losses of special-status plants will be compensated. Success criteria for preserved and compensatory populations will include: <ul style="list-style-type: none"> ▶ The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat. Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when: <ul style="list-style-type: none"> ▪ plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and ▪ reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity. 	
<p>Impact 4.4-2: Potential impacts to Special-status Wildlife Construction activities, such as ground disturbance, grading, and vegetation removal could result in the disturbance to several special-status wildlife species, including California tiger salamander, giant garter snake, burrowing owl, California black rail, northern harrier, Swainson’s hawk, tricolored blackbird, white-tailed kite, special-status branchiopods, and Delta green ground beetle. The loss of special-status wildlife species and their habitat would be a potentially significant impact.</p>	PS	<p>Mitigation Measure 4.4-2a: California Tiger Salamander Avoidance and Compensatory Mitigation for Habitat Loss Prior to deepening and widening of the borrow pit and commencement of ground-disturbing activities within suitable habitat for California tiger salamander (i.e., grassland, vernal pools), the project applicant will implement the following measures to avoid direct loss of California tiger salamanders if present within the project site.</p> <ul style="list-style-type: none"> ▶ A worker environmental awareness training shall be conducted to inform onsite construction personnel regarding the potential presence of listed species and the importance of avoiding impacts to these species and their habitat. ▶ A USFWS-approved biologist will conduct a pre-construction survey of the project site no more than two weeks before commencement of project construction activities. ▶ When feasible, there will be a 50-foot no-disturbance buffer around burrows that provide suitable upland habitat for California tiger salamander. Burrows considered suitable for California tiger salamander will be determined by a qualified biologist, approved by USFWS. ▶ All suitable burrows directly impacted by construction will be hand excavated under the supervision of a qualified wildlife biologist. If California tiger salamanders are found, the biologist will relocate the organism to the nearest burrow that is outside of the construction impact area. 	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<ul style="list-style-type: none"> ▶ For work conducted during the California tiger salamander migration season (November 1 to May 31), exclusionary fencing will be erected around the construction site during ground-disturbing activities after hand excavation of burrows has been completed. A qualified biologist will visit the site weekly to ensure that the fencing is in good working condition. Fencing material and design will be subject to the approval of the USFWS. If exclusionary fencing is not used, a qualified biological monitor will be onsite during all ground disturbance activities. Exclusion fencing will also be placed around all spoils and stockpiles. ▶ For work conducted during the California tiger salamander migration season (November 1 to May 31), a qualified biologist will survey the active work areas (including access roads) in mornings following measurable precipitation events. Construction may commence once the biologist has confirmed that no California tiger salamander are in the work area. ▶ Prior to beginning work each day, underneath equipment and stored pipes greater than 1.2 inches (3 cm) in diameter will be inspected for California tiger salamander. If any are found, they will be allowed to move out of the construction area under their own accord. ▶ Trenches and holes will be covered and inspected daily for stranded animals. Trenches and holes deeper than 1 foot will contain escape ramps (maximum slope of 2:1) to allow trapped animals to escape uncovered holes or trenches. Holes and trenches will be inspected prior to filling. ▶ All food and food-related trash will be enclosed in sealed trash containers at the end of each workday and removed completely from the construction site once every three days to avoid attracting wildlife. ▶ A speed limit of 15 mph will be maintained on dirt roads. ▶ All equipment will be maintained such that there are no leaks of automotive fluids such as fuels, oils, and solvents. Any fuel or oil leaks will be cleaned up immediately and disposed of properly. ▶ Plastic monofilament netting (erosion control matting) or similar material will not be used at the Project site because California tiger salamander may become entangled or trapped. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds. ▶ Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 100 feet from 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<p>aquatic habitat. If it is not feasible to store hazardous materials 100 feet from wetlands and the river channel, then spill containment measures will be implemented to prevent the possibility of accidental discharges to wetlands and waters.</p> <ul style="list-style-type: none"> ▶ The applicant shall secure any necessary take authorization prior to project construction through formal consultation with USFWS pursuant to Section 7 of the ESA. <p>Prior to commencement of ground-disturbing activities within suitable habitat for California tiger salamander in the Triangle (i.e., grassland and vernal pools within the landfill expansion area), the project applicant will implement the following measures to compensate for loss of California tiger salamander habitat.</p> <ul style="list-style-type: none"> ▶ The project applicant will provide suitable in-kind habitat that will be created, restored, and/ or set aside in perpetuity at a ratio of 3:1. Alternatively, credits will be purchased at a USFWS-approved conservation bank. Compensation plans will be subject to review and approval by USFWS. All compensation will be acquired or secured prior to the beginning of ground disturbance. ▶ In-kind habitat compensation will occur prior to initiation of ground or vegetation disturbance activities. Aquatic habitat will be provided for damage or loss of aquatic habitat and upland habitat will be provided for damage or loss of upland habitat. Compensation will be accomplished through the following options: 1) acquire land, by itself, or possibly in conjunction with a conservation organization, State park, State Wildlife Area, National Wildlife Refuge, or local regional park that provides occupied habitat; 2) purchase the appropriate credit units at a USFWS-approved conservation bank; 3) restore habitat to support the Central California tiger salamander; or 4) other method as determined by USFWS including participation within a HCP permit area. <p>Mitigation Measure 4.4-2b: Protection of Giant Garter Snake</p> <p>Prior to deepening and widening of the borrow pit and commencement of ground-disturbing activities within suitable aquatic (i.e., irrigation ditches) or upland habitat (i.e., grassland habitat) for giant garter snake in the Triangle, the project applicant will implement the following measures to avoid direct loss of giant garter snake if present within the project site.</p>	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<p>For projects or ground-disturbing activities with potential to disturb suitable aquatic or adjacent upland habitat for giant garter snake, the following measures will be implemented.</p> <ul style="list-style-type: none"> ▶ The applicant shall retain a qualified biologist to conduct a field investigation to delineate giant garter snake aquatic habitat within the project footprint and adjacent areas within 300 feet of the project footprint. Giant garter snake aquatic habitat includes agricultural ditches. A report summarizing the results of the delineation shall be submitted to the Solano County Department of Resource Management within 10 days of the delineation. ▶ During construction, an approved biologist experienced with giant garter snake identification and behavior shall be onsite daily when construction activities within aquatic habitat or within 300 feet of aquatic habitat are taking place. The biologist shall inspect the project site daily for giant garter snake prior to construction activities. The biologist will also conduct environmental awareness training for all construction personnel working on the project site on required avoidance procedures and protocols if a giant garter snake enters an active construction zone. ▶ All construction activity within giant garter snake aquatic and upland habitat in and around the site shall be conducted between May 1 and September 15, the active period for giant garter snakes. This would reduce direct impacts on the species because the snakes would be active and respond to construction activities by moving out of the way. ▶ If construction activities occur in giant garter snake aquatic habitat (i.e., irrigation ditches, the borrow pit, other habitat identified during the delineation of habitat), aquatic habitat shall be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of construction activities. If complete dewatering is not possible, the project applicant shall consult with CDFW and USFWS to determine what additional measures may be necessary to minimize effects to giant garter snake. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing shall be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing shall be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<p>area. In addition, high-visibility fencing shall be erected to identify the construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Giant garter snake habitat outside construction fencing shall be avoided by all construction personnel. The fencing and the work area shall be inspected by the approved biologist to ensure that the fencing is intact and that no snakes have entered the work area before the start of each work day. The fencing shall be maintained by the contractor until completion of the project.</p> <ul style="list-style-type: none"> ▶ If a giant garter snake is observed, the biologist shall notify CDFW and USFWS immediately. Construction activities will be suspended in a 100-foot radius of the garter snake until the snake leaves the site on its own volition. If necessary, the biologist shall consult with CDFW and USFWS regarding appropriate procedures for relocation. If the animal is handled, a report shall be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect giant garter snake within 1 business day to CDFW and USFWS. The biologist shall report any take of listed species to USFWS immediately. Any worker who inadvertently injures or kills a giant garter snake or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist. ▶ All excavated steep-walled holes and trenches more than 6 inches deep shall be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches shall be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within giant garter snake modeled habitat shall be inspected for giant garter snake by the approved biologist prior to being moved. ▶ If erosion control is implemented on the project site, non-entangling erosion control material shall be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials. 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<ul style="list-style-type: none"> ▶ The applicant shall ensure that there is no-net-loss of giant garter snake habitat by compensating for loss of habitat at a ratio of 1:1, by purchasing credits from a USFWS-approved conservation bank. ▶ Prior to construction, USFWS shall be consulted pursuant to Section 7 of the ESA. The activities may qualify to use the “Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California” (USFWS 1999). The Habitat Replacement & Restoration Guidelines (Appendix A), Items Necessary for Formal Consultation (Appendix B), Avoidance & Minimization Measures During Construction (Appendix C), and Monitoring Requirements (Appendix D) shall be followed. <p>Mitigation Measure 4.4-2c: Vernal Pool Tadpole Shrimp and Vernal Pool Fairy Shrimp Habitat Compensation for Direct Effects</p> <p>The project applicant shall implement the following measures to minimize and compensate for loss of vernal pool fairy shrimp and vernal pool tadpole shrimp and suitable habitat prior to ground-disturbing activities.</p> <p>The following mitigation shall occur prior to ground-disturbing activities and approval of improvement plans for the lateral expansion and any project phase that would allow work within 250 feet of such habitat, and before any ground-disturbing activity within 250 feet of the habitat.</p> <ul style="list-style-type: none"> ▶ Habitat Preservation: The applicant, in consultation with USFWS, shall compensate for direct effects of the project on potential habitat for vernal pool fairy shrimp, conservancy fairy shrimp, and vernal pool tadpole shrimp at a ratio of 2:1, by purchasing vernal pool preservation credits from a USFWS-approved conservation bank. Compensation credits shall be purchased prior to any ground-disturbing activities. ▶ Habitat Creation: The applicant shall compensate for the direct effects of the project on potential habitat for vernal pool fairy shrimp, conservancy fairy shrimp, and vernal pool tadpole shrimp at a ratio of 1:1, by purchasing vernal pool creation credits from a USFWS-approved conservation bank. ▶ For seasonal wetlands and drainages that shall be retained on the site (i.e., those not proposed to be filled), a minimum setback of at least 50 feet from these features will be avoided on the project site. The buffer area 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
		<p>shall be fenced with high visibility construction fencing prior to commencement of ground-disturbing activities and shall be maintained for the duration of construction activities.</p> <ul style="list-style-type: none"> ▶ A worker environmental awareness training shall be conducted to inform onsite construction personnel regarding the potential presence of listed species and the importance of avoiding impacts to these species and their habitat. ▶ The applicant shall secure any necessary take authorization prior to project construction through consultation with USFWS pursuant to Section 7 of the ESA. ▶ Documentation of habitat preservation, habitat creation, and take authorization shall be provided to the County following approval by USFWS. <p>Mitigation Measure 4.4-2d: Protection of Conservancy Fairy Shrimp Habitat From Indirect Effects</p> <p>The project applicant shall implement the following measures to minimize indirect effects to Conservancy fairy shrimp habitat prior to any ground-disturbing activities within or adjacent to the playa pool on the project site.</p> <ul style="list-style-type: none"> ▶ During the dry season, when the playa pool is completely devoid of water, the project applicant shall construct a permanent, impermeable barrier along the southern boundary of the new disposal area within the Triangle that overlaps the playa pool. The barrier will be designed to prevent stormwater runoff or sediment discharge between the project site and the playa pool and will remain in place after construction to prevent operation-related discharge into the playa pool. The barrier shall be constructed of material that prevents discharge into the playa pool, including but not limited to: an earthen levee, steel sheet piles, or concrete riprap. Final design plans shall be reviewed and approved by a qualified biologist and the County. ▶ The project site will be graded in a manner that prevents surface water flow from the project site into the playa pool. ▶ A worker environmental awareness training shall be conducted to inform onsite construction personnel regarding the potential presence of listed species and the importance of avoiding impacts to these species and their habitat. <p>Mitigation Measure 4.4-2e: Protection of Burrowing Owl</p> <p>Prior to ground disturbance, grading, or vegetation removal activities for the lateral expansion (Triangle), the project applicant will implement the following measures:</p>	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<ul style="list-style-type: none"> ▶ The applicant shall retain a qualified biologist to conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of suitable habitat on and within 1,500 feet of the project site. Surveys shall be conducted prior to the start of construction activities and in accordance with Appendix D of CDFW's <i>Staff Report on Burrowing Owl Mitigation</i> (CDFW 2012). ▶ If no occupied burrows are found, a letter report documenting the survey methods and results shall be submitted to CDFW and no further mitigation will be required. ▶ If an active burrow is found during the nonbreeding season (September 1 through January 31), the applicant shall consult with CDFW regarding protection buffers to be established around the occupied burrow and maintained throughout construction. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan shall be developed, as described in Appendix E of CDFW's 2012 Staff Report. Burrowing owls shall not be excluded from occupied burrows until the project's burrowing owl exclusion plan is approved by CDFW. The exclusion plan shall include a plan for creation, maintenance, and monitoring of artificial burrows in suitable habitat proximate to the burrows to be destroyed, that provide substitute burrows for displaced owls. ▶ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and will be provided with a 150- to 1,500-foot protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer shall depend on the time of year and level disturbance as outlined in the CDFW Staff Report (CDFW 2012). The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented to ensure burrowing owls are not detrimentally affected. Once the fledglings are capable of independent survival, the owls can be evicted and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW's 2012 Staff Report. 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<ul style="list-style-type: none"> ▶ If active burrowing owl nests are found on the site and are destroyed by project implementation, the project applicant shall mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW 2012 Staff Report, which states that permanent impacts to nesting, occupied and satellite burrows, and burrowing owl habitat shall be mitigated such that habitat acreage, number of burrows, and burrowing owls impacted are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The applicant shall retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards: <ul style="list-style-type: none"> ▪ Mitigation lands shall be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species range wide. ▪ If feasible, mitigation lands shall be provided adjacent or proximate to the site so that displaced owls can relocate with reduced risk of take. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient suitable habitat to support displaced owls that may be preserved in perpetuity. ▪ If suitable habitat is not available for conservation adjacent or proximate to the project site, mitigation lands shall be focused on consolidating and enlarging conservation areas outside of urban and planned growth areas and within foraging distance of other conservation lands. Mitigation may be accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. If mitigation credits are not available from an approved bank and mitigation lands are not available adjacent to other conservation lands, alternative mitigation sites and acreage shall be determined in consultation with CDFW. ▪ If mitigation is not available through an approved mitigation bank and will be completed through permittee-responsible conservation lands, the mitigation plan shall include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<p>management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success shall be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the 2012 Staff Report, shall include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors.</p> <p>Mitigation Measure 4.4-2f: Special-status and Other Nesting Bird Surveys and Avoidance</p> <p>Prior to any ground disturbances for the lateral expansion (Triangle), the applicant will implement the following measures to reduce impacts on special-status bird species:</p> <ul style="list-style-type: none"> ▶ To minimize the potential for disturbance or loss of tricolored blackbird, northern harrier, California black rail, or other bird nests, vegetation removal activities will only occur during the nonbreeding season (September 1-January 31). If all suitable nesting habitat (e.g., trees, grassland) is removed during the nonbreeding season, no further mitigation would be required. ▶ Prior to removal of any vegetation or any ground disturbance between February 1 and August 31, a qualified biologist will conduct preconstruction surveys for nests within 0.5 mile of the project site for Swainson’s hawks, 500 feet for other nesting raptors, and 100 feet for all other birds. The surveys will be conducted no more than 30 days before construction commences. ▶ If no active nests are found during focused surveys, no further action under this measure will be required. ▶ If active nests are located during the preconstruction surveys, the biologist will notify CDFW. Impacts to nesting Swainson’s hawks, other raptors, or other nesting birds shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. Project activity shall not commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. CDFW guidelines recommend implementation of 0.5-mile-wide buffer for Swainson’s hawk, 500 feet for 	

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable</p>			
		<p>other raptors, and 100 feet for other nesting birds, but the size of the buffer may be adjusted if a qualified biologist and the project applicant, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after construction activities shall be required if the activity has potential to adversely affect the nest.</p> <p>Mitigation Measure 4.4-2g: Swainson’s Hawk Foraging Habitat Mitigation To mitigate for the loss of approximately 17 acres of suitable Swainson’s hawk foraging habitat, the project applicant shall implement a Swainson’s hawk mitigation plan consistent with the following but not limited to the requirements described below:</p> <ul style="list-style-type: none"> ▶ Prior to site disturbance associated with the landfill expansion, such as clearing or grubbing within the Triangle, building, or other site improvements, or recordation of a final map, whichever occurs first, the project applicant shall acquire suitable Swainson’s hawk foraging habitat as determined by CDFW. ▶ The project applicant shall preserve through conservation easement(s) or fee title one acre of similar habitat for each acre affected or shall purchase credits from a CDFW-approved mitigation bank in Solano County at the same ratio. ▶ The project applicant may transfer said easement(s) or title to CDFW and a third-party conservation organization as acceptable to CDFW. Such third-party conservation organizations shall be characterized by non-profit 5019(c)(3) status with the Internal Revenue Service. 	
<p>Impact 4.4-3: Potential impacts to Wetlands, Vernal Pools, and Other Waters of the United States and State Potentially jurisdictional vernal pools, vernal pool swales, open water, detention basins, and drainage ditches are present within the project site. Future land use changes and development would result in conversion of these wetlands and vernal pools to urban uses. Loss or degradation of wetland or vernal pool habitat would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 4.4-3: Wetland Delineation Verification, Permitting, and Compensatory Mitigation Prior to ground disturbance, grading, or vegetation removal activities within undeveloped areas of the project site (including ditches) the project applicant will implement the following measures:</p> <ul style="list-style-type: none"> ▶ Wetlands and vernal pools are of special concern to resource agencies and are afforded specific consideration, based on Section 404 of the CWA and other applicable regulations. An updated delineation of waters of the United States or state, including wetlands that would be affected by the project, was completed by ICF in 2017 (ICF 2017). This delineation shall be submitted to and verified by USACE. If, based on the verified delineation, it 	<p>LTS</p>

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
		is determined that fill of waters of the United States or state would result from implementation of the project, authorization for such fill shall be secured from USACE through the 404 permitting process. <ul style="list-style-type: none"> ▶ Any waters of the United States that would be affected by project development shall be replaced or restored on a “no-net-loss” basis in accordance with USACE mitigation guidelines (or the applicable USACE guidelines in place at the time of construction). In association with the Section 404 permit (if applicable) and prior to ground disturbance, grading, or vegetation removal activities within undeveloped areas of the project site (including ditches), Section 401 Water Quality Certification from the RWQCB shall be obtained. ▶ If it is determined that waters subject to jurisdiction by CDFW are present within the project site following the delineation of waters of the United States and state, and that site development would affect the bed, bank, or channel, a Streambed Alteration Notification will be submitted to CDFW, pursuant to Section 1600 et seq. of the California Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the project proponent will abide by the conditions of any executed agreement prior to ground disturbance, grading, or vegetation removal activities within undeveloped areas of the project site (including ditches). Several aquatic features onsite, including intermittent streams, would likely fall under the jurisdiction of CDFW. 	
Impact 4.4-4: Impacts to Wildlife Migratory Corridors Future land use changes and development within the project site would result in loss of grassland and vernal pool habitats but would not substantially impede wildlife movement because the project site is relatively small, mostly developed, and is surrounded by roads and agricultural development. The project site does not contain any native wildlife nursery sites. Impacts to movement corridors and habitat connectivity for these species would be less than significant.	LTS	No mitigation measures are necessary.	LTS
Impact 4.4-5: Conflict with the Solano County General Plan Project implementation could result in impacts to natural resources and conversion of vernal pool habitat within an area identified as a high-priority habitat area in the Solano County General Plan, potentially resulting in a conflict with the Plan. This would be a potentially significant impact.	PS	Implement Mitigation Measures 4.4-1a, 4.4-1b, 4.4-1c, 4.4-2a, 4.4-2b, 4.4-2c, 4.4-2d, 4.4-2e, 4.4-2f, 4.4-2g, and 4.4-3 as described in this section.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
4.5 Energy			
Impact 4.5-1: Result in Inefficient and Wasteful Consumption of Energy The project would not increase electricity and natural gas consumption at the project site relative to existing conditions; no new structures requiring energy supplies would be required. However, construction and operation of the project would result in additional fuel consumption, associated with the use of construction equipment and vehicles travelling to and from the landfill. However, as part of the project and on an ongoing basis, Recology would use modern, more fuel-efficient equipment, and as part of the project, the increase in transfer trucks under the project reflects a consolidation and overall reduction in the number of potential vehicles travelling to and from the landfill. For these reasons, the project would not result in wasteful, inefficient, or unnecessary consumption of energy. This impact would be less than significant.	LTS	No mitigation measures are necessary.	LTS
Impact 4.5-2: Consistency with Plans for Renewable Energy and Energy Efficiency The project would be required to comply with federal and State energy standards regulations for reducing fuel consumption through construction and landfilling activities. Thus, this impact is less than significant.	LTS	No mitigation measures are necessary.	LTS
4.6 Geology, Soils, Mineral, and Paleontological Resources			
Impact 4.6-1: Exposure of People or Structures to Potential Increases in Seismic Hazards Project facilities would be constructed on a site that may be subject to strong seismic ground shaking from active earthquake faults and the site is located within an area of high shrink-swell potential area. Seismic ground shaking, though infrequent, could cause structural failure of proposed facilities. Because the project would be designed, engineered, and constructed in conformance with applicable codes and standard engineering practices, which consider the characteristics of materials and forces, and are designed to result in adequate strength and safety requirements, the potential for structural damage and associated hazards to people during a seismic event would be substantially reduced, and this impact would be less than significant.	LTS	No mitigation measures are necessary.	LTS
Impact 4.6-2: Destruction of a Unique Paleontological Resource Portions of the Recology Hay Road (RHR) Property are underlain by older(Pleistocene) alluvium and the Tehama Formation, two geologic units known to be highly sensitive for paleontological resources. Thus, the project could have a potentially significant impact on paleontological resources.	PS	Mitigation Measure 4.6-1: Paleontological Resources Prior to initiation of earthmoving activities associated with the Triangle or deepening and widening of the borrow pit, Recology shall retain a qualified paleontologist to alert all construction personnel involved with earthmoving activities, including the site superintendent, about the possibility of encountering fossils. The appearance and types of fossils likely to be seen during construction will be described. Construction personnel will be trained about the proper notification procedures should fossils be encountered.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
		<p>If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work in the vicinity of the find and notify the County. Recology will retain a qualified paleontologist that will be readily available for quick identification and salvage of fossils so that construction delays can be minimized. If large specimens are discovered, the paleontologist will have the authority to halt or divert grading and construction equipment while the finds are removed. The paleontologist will be responsible for implementing the following measures.</p> <ul style="list-style-type: none"> ▶ In the event of discovery, salvage of unearthened fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster-jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits ▶ Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting ▶ Laboratory preparation (cleaning and repair) of collected fossil remains to a point of curation, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens ▶ Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database ▶ Transferal, for storage, of cataloged fossil remains to an appropriate repository ▶ Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection. 	
4.7 Greenhouse Gas Emissions			
<p>Impact 4.7-1: Generation of Greenhouse Gas Emissions and Consistency with GHG Reduction Targets/Plan</p> <p>The project would result in increased GHG emissions contained in landfill gas and increased GHG emissions generated by truck hauling. All the GHG-emitting activities that would operate with the project are subject to regulations developed for the purpose of reducing GHG emissions and/or are consistent with GHG reduction</p>	LTS	No mitigation measures are necessary.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
<p>policies identified in CARB's 2017 Scoping Plan to help California meet its statewide GHG emission targets. Therefore, the project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Because the RHR Landfill is both infrastructure and an accessory land use that receives waste generated by residential and commercial land uses throughout the Bay Area and Sacramento Region, thereby supporting a large population and a large quantity of economic activity, its emissions of GHGs would not be substantial. For these reasons, project-related GHG emissions would not result in a cumulatively considerable contribution to climate change and this impact would be less than significant.</p>			
4.8 Hazards and Hazardous Materials			
<p>Impact 4.8-1: Exposure of People and the Environment to Hazardous Materials Operation of a landfill inherently involves the storage, use, and transport of hazardous materials; however, systems are in place at the RHR facility that are compliant with federal, state, and local laws to allow such handling in a way that is protective of people and the environment. No aspect of the proposed project would substantially change operations such that new or revised systems or procedures would be required. Hazardous materials would continue to be managed with existing controls in place and in accordance with all applicable laws, including Title 27 of the CCR, as it is currently. Implementation of the project would extend the disposal area laterally, deepen and widen an existing onsite borrow pit, allow for friable asbestos disposal within additional areas of the landfill, and allow for an increase in the existing daily peak tonnage limit. However, operations related to the storage, use, and transport of hazardous materials would remain the same as under existing conditions. Thus, the project would operate in accordance with all federal, state, and local regulations pertaining to the use, storage, and transport of hazardous materials. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.8-2: Exposure of People and the Environment to Hazards Related to LFG Expansion of the landfill could result in the production of additional LFG that could expose people or the environment to safety hazards. However, a third LFG flare is proposed as part of this project to ensure a total capacity of 6,000 cubic feet per minute (cfm) at the landfill for safe and adequate control of LFG with landfill expansion. LFG would continue to be monitored at the project site and the LFG collection and the monitoring system would be expanded to accommodate the increased production of LFG. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
<p>Impact 4.8-3: Potential Hazards Associated with Vectors Vector control measures that are currently in place are effective and would continue to be implemented. In addition, there no proposed expansions of onsite water-related facilities; therefore, the proposed project would not increase the amount of standing water that could attract mosquitoes. Any vector control issues associated with proposed storage of baled recyclables would be addressed with implementation of the vector control measures described in the RHR Recyclable Material Bale Management Operations Plan that was approved by the County in April 2018. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.8-4: Potential Hazards Associated with Proximity to Airports The RHR Landfill is located approximately four miles northeast of the landfill and within the Travis AFB Land Use Compatibility Plan Zones C and B2. Potential safety hazards for aircraft using Travis AFB pertain to the landfill’s potential to attract birds, which may increase wildlife strikes, and the use of lighting, which can be confused with landing zones by aircraft pilots. No new sources of fixed lighting are proposed and portable lighting to be used onsite would be consistent with the landfill’s light control program and limited to base liner preparation work, as needed, during construction of the landfill expansion area and. The landfill maintains a bird control program and facility lighting standards, both of which minimize potential adverse hazards on aircraft. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.8-5: Increased Potential for Wildland Fires The project site is located in an area classified as a moderate fire hazard severity zone. However, extensive fire control measures are currently, and would continue to be, implemented at the project site to reduce the potential risk for fires. Thus, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>4.9 Hydrology and Water Quality</p>			
<p>Impact 4.9-1: Violation of Water Quality Standards or Waste Discharge Requirements Related to Construction Activities Project construction activities could result in soil erosion, sedimentation, and discharge of pollutants in nearby surface water bodies and groundwater, resulting in reduced water quality. The project applicant will control onsite stormwater and protect water quality through implementation of a SWPPP and associated BMPs, as required by federal and State regulations and the RHR Recyclable Material Bale Management Operations Plan approved by the County in April 2018. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
<p>Impact 4.9-2: Violation of Water Quality Standards or Waste Discharge Requirements Related to Operation Project operation could result in soil erosion, sedimentation, and discharge of pollutants in nearby surface water bodies and groundwater, resulting in reduced water quality. The new disposal expansion area would be constructed to isolate any runoff and/or materials onsite, including a composite liner system to collect and remove leachate from the landfill, to prevent pollutant discharge to groundwater. This liner, as well as compliance with federal and State regulations regarding water quality, would ensure that this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.9-3: Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge With proposed expansion of the landfill, project implementation would require extended water use onsite related to dust control for the extended life of the landfill, and the current source of onsite water, the borrow pit, would be deepened and widened as part of the project. The project would not require groundwater supplies in excess of current demands. The change in the acreage of impervious surfaces would be negligible. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.9-4: Changes to Drainage Patterns or Stormwater Runoff That Would Create Flooding or Exceed the Capacity of Existing or Planned Storm Drains Project implementation would result in a negligible increase in impervious surfaces across the site. With implementation of the project, the RHR Landfill's existing surface water management system would be extended and expanded to include the landfill expansion area. As required by existing WDRs issued by the Central Valley RWQCB, the surface water management system would be designed to handle a minimum 100-year, 24 hour storm event such that any additional runoff generated onsite would be retained at the landfill property and no offsite flooding or potential capacity exceedances of existing or planned storm drains would occur. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>4.10 Noise</p>			
<p>Impact 4.10-1: Short-Term Construction Noise Project implementation would result in construction activity associated with the expansion of the existing landfill capacity. However, construction-generated noise levels would not exceed the applicable daytime or nighttime noise exposure standards established by the County for non-transportation noise sources at any sensitive receptors. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
<p>Impact 4.10-2: On-Site Operational Noise Project implementation would result in the expansion of the existing landfill capacity as well as other modifications to the landfill. The expansion of the existing landfill capacity and other modifications would not result in changes in daily operations at the landfill and would not result in an increase in the number of facility employees. The project would also incorporate the processing of construction and demolition materials. Based on noise modeling conducted, noise levels generated by project-related operational activity would not increase and would not expose offsite receptors to noise levels that exceed applicable noise standards. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.10-3: Traffic-Related Noise Project implementation would result in an estimated 195 additional daily trips to the landfill facility. Project-generated traffic volume increases along affected roadways would result in an increase in traffic noise levels along these roadways. However, based on traffic noise modeling conducted for the project, traffic noise levels along affected roadways would not exceed the County’s transportation noise standards at any noise-sensitive receptors. As a result, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
4.11 Transportation and Circulation			
<p>Impact 4.11-1: Impacts to Intersection Operations Implementation of the project would add an estimated 46 AM peak hour, 27 PM peak hour, and 43 Saturday peak hour trips to the roadway network in the study area. Based on the traffic modeling and analysis, all study intersections would operate at acceptable LOS with the addition of project-generated trips. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.11-2: Impacts to Roadway Segment Operations Implementation of the project would add an estimated 46 AM peak hour and 27 PM peak hour trips to the roadway network in the study area. Based on the traffic modeling and analysis, all study roadway segments would operate at acceptable LOS with the addition of project-generated trips. This impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
<p>Impact 4.11-3: Impacts to Local Roadways Operation of the project could cause additional damage to local roadways within the vicinity of the landfill. Compliance with the Road and Litter Agreement between Recology and Solano County would ensure that any additional road damage caused by facility operations are paid for by RHR. Therefore, this impact would be less than significant.</p>	LTS	No mitigation measures are necessary.	LTS

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
NI = No impact, LTS = Less than significant, PS = Potentially significant, S = Significant, SU = Significant and unavoidable			
Cumulative Impacts			
Cumulative Plus Project Intersection Operations	S	<p>Mitigation Measure 5-1a: SR 113 and Midway Road Intersection Improvements This intersection is under the jurisdiction of Caltrans, and Caltrans has identified a conceptual project to widen shoulders, construct a median and install a traffic signal at the SR 113 / Midway Road intersection to enhance safety. Within six months of project approval by the County, the project applicant and Solano County shall coordinate with Caltrans and identify the appropriate fair share contribution that the project applicant shall pay toward the construction of the improvements detailed above.</p> <p>Mitigation Measure 5-1b: SR 12 and SR 113 Intersection Improvements Installation of a second eastbound lane through the roundabout will improve the LOS to an acceptable level in the PM peak hour. Within six months of project approval by the County, the project applicant and Solano County shall coordinate with Caltrans and identify the appropriate fair share contribution that the project applicant shall pay toward the construction of a second eastbound lane through the roundabout.</p>	SU
Cumulative Plus Project Roadway Segment Operations	S	<p>Mitigation Measure 5-2: Midway Road (I-80 Eastbound Ramps to Porter Road) Roadway Segment Improvements A 0.30-mile-long passing lane in both eastbound and westbound directions would be needed to improve the roadway segment LOS to an acceptable level. The project applicant shall coordinate with Solano County and identify the appropriate fair share contribution that the project applicant shall pay toward the construction of the eastbound and westbound passing lanes along Midway Road between the I-80 eastbound ramps and Porter Road.</p>	SU