..PUBLIC HEARING to consider amending use permit number U-11-09 (Amendment No. 2) of **Recology Hay Road** to allow the following: 1) the lateral expansion for municipal solid waste which would result in an increase of approximately 8.8 million cubic yards to the landfill disposal capacity; 2) modification of the peak tonnage from 2400 tons per day (tpd) maximum to 3400 (tpd) peak day limit with a 7 day average of 3200 tpd; 3) temporary storage of baled recyclables; 4) one (1) additional Landfill Gas Flare (LFG); 5) include portable equipment to be used in the construction and demolition (C&D) sorting operations, allow friable asbestos; and minor modifications to the existing borrow pit, boundaries of Jepson Prairie Organics and the footprint of disposal module number 1. The site is located at 6426 Hay Road, 5 miles southeast of the City of Vacaville in the "A-80" and "A-160" Exclusive Agricultural Zoning Districts, APN's: 0042-020-060, 280 and 020. (Project Planner: Nedzlene Ferrario)

..body

RECOMMENDATION:

The Department of Resource Management recommends that the Planning Commission:

Conduct a public hearing to consider use permit U-11-09, Amendment No. 2, and

A. CERTIFY the Final Subsequent Environmental Impact Report for Recology Hay Road; and

B. APPROVE Use Permit U-11-09 Amendment No. 2 subject to the findings and conditions of approval contained in the attached Resolution, including a Statement of Overriding Considerations, and **ADOPT** the Mitigation Monitoring and Reporting Program.

EXECUTIVE SUMMARY:

The land use permit amendments involves several components, 1) conversion of 24 acres of Recology property, earmarked for the Delta Ground Green Beetle mitigation site, into additional disposal area. The conversion would expand the disposal capacity by 8.8 million cubic yards, totaling 45.8 million cubic yards of landfill capacity; 2) modification of maximum amount of solid waste received from 2400 tons per day (tpd) maximum to 3400 (tpd) peak day limit with a 7 day average of 3200 tpd; 3) temporary storage of baled recyclables; 4) one (1) additional Landfill Gas Flare (LFG); 5) include portable equipment to be used in the construction and demolition (C&D) sorting operations, allow friable asbestos; and minor modifications to the existing borrow pit, boundaries of Jepson Prairie Organics and the footprint of disposal module number 1.

Approval of the amendments would allow additional disposal capacity for municipal solid waste, flexibility in receiving waste, temporary storage space for recyclables before transfer to another facility and minor operational changes that would allow the continued operation of the Recology Hay Road landfill.

ENVIRONMENTAL ANALYSIS:

The Public Draft Subsequent Environmental Impact Report (DSEIR) was circulated for a 45-day period of review and comment and identified potentially significant impacts in the areas of air quality, biological resources, cultural resources, and cumulative traffic. Mitigation measures are

proposed to reduce the impacts to less than significant levels. A notice public hearing was held on January 16, 2020 to provide opportunity for public comment. No public testimony was received and comment period closed on January 23, 2020.

Comment letters were received from CalRecycle, Caltrans, Central Valley Regional Water Quality Board, California Fish and Wildlife and Recology. Responses which required clarification or modifications to the mitigation measures are noted in the Response to Comments and Mitigation Monitoring and Reporting Program (MMRP), in the Final Subsequent Environmental Impact Report.

It should be noted that new CEQA guidelines requiring the use of vehicle miles travelled as the measure of impacts were adopted in December 2018. The new guidelines were incorporated in to the California Code of Regulations 15064.3 with a provision that the new regulations would be effective statewide on July 1, 2020. However, due to recent court ruling, impacts and measures associated with automobile delays are considered no longer acceptable, mitigation measures related to fair-share contribution for State Highway 12, 113 and Midway Road recommended in the Public Draft SEIR were removed from the Final EIR and are considered to be no longer applicable. Detailed discussion is on page 2-57 of FSEIR.

The Planning Commission is requested to certify the Final Subsequent EIR prior to taking action on the proposed project applications. All mitigation measures, including the monitoring responsibilities, have been incorporated into the project as recommended conditions of approval and in the mitigation monitoring plan.

A. Applicant/Owner: Recology

B. Surrounding General Plan, Zoning and Land Uses:

	General Plan	**Zoning**	**Land Use**
Property	Agriculture	A-80 and A-160	Landfill/Compost Facility
North	Agriculture	A-160	Agriculture
South	Agriculture	A-160	Agriculture
East	Agriculture	A-160	Agriculture
West	Agriculture	A-160	Agriculture

C. ANALYSIS:

Background: The Recology Hay Road property is 640 acres in size, includes the landfill facility, Jepson Prairie Organics and the Recology Vacaville Solano Fleet maintenance facility. The property includes an 80 acre borrow pit and 200 acres of undeveloped land and 18-acre Bird Sanctuary Pond both currently being placed under conservation easement. Recology Hay Road is a Class II and III waste management facility and accepts non-hazardous solid waste, high liquid content waste, wastewater treatment plant sludge, designated waste, asbestos containing waste and waste requiring special

handling. The landfill is currently authorized by a Solid Waste Facility Permit issued by County Local Enforcement Agency (LEA). Amendments to the Solid Waste Facility Permit is required following use permit approval.

Project Description: The land use permit amendment consists of the following components:

1. Landfill Lateral Expansion: Recology Hay Road proposes to convert a 24-acre triangular area south of the Jepson Prairie Organics area into additional disposal area. The 24-acre area would change the landfill footprint and result in an additional 8.8 million cubic yards of solid waste disposal capacity, increasing the total landfill capacity to 45.8 million cubic yards. The additional capacity would extend the life of the landfill to 2038. The maximum permitted height of a disposal module, 215 feet above mean sea level, is not proposed to change. Expansion in to the triangle, would be part of the adjacent disposal module (no.8) and construction is anticipated in summer 2021. The existing groundwater and landfill gas monitoring network, and leachate collection system will be modified to include the expansion. Drainage and engineering review will be subject to Public Works, County LEA, CalRecycle and Central Valley Regional Water Quality Control Board's waste discharge requirements and approval.

   The site was earmarked as mitigation area for the Delta Green Ground Beetle by the United States Fish and Wildlife Service (USFWS) and placed under conservation easement. In 2016, Recology reached an agreement with USFWS which resulted in a purchase of 2.06 acres of mitigation credits at Elsie Gridley Mitigation Bank in exchange for removal of the easement. This transaction allowed Recology to consider the landfill expansion and make formal application for a land use permit amendment.

   In terms of impacts and nuisances, the additional disposal area has the potential to become a bird attractant; however, the impacts may be minimized by the current Bird Aircraft Strike Hazard (BASH) monitoring strategies required in conditions no. 25, 79 and 80 for all disposal modules within the landfill. Such strategies include limiting the size of the working face, use of frightening device to ward off birds, monitoring of wastes particularly attractive to birds, monthly and quarterly reports to Travis Air Force Base and Department of Resource Management.

   Additional litter, windblown or by delivery vehicles, are mitigated by 25-feet high perimeter fencing and requirements for litter pickup by Recology, conditioned in the use permit and the Litter Management Plan monitored by County LEA.

   Ground disturbance in the triangle area has the potential to impact cultural resources and sensitive biological species such as Giant Garter Snake, California Tiger Salamander, Vernal Pool Tadpole Shrimp and Vernal Pool Fairy Shrimp, Burrowing Owl, wetlands, Swainson Hawk and other avian species. Implementation of the conditions of approval and mitigation monitoring program shall minimize impacts to a less than significant level.

2. Modifications to landfill peak tonnage limits: Recology is proposing to modify the maximum allowable municipal solid waste stream for the landfill from 2400 tons per day (tpd) maximum, approved in 2012, to 3400 (tpd) peak day limit with a 7-day average of 3200 tpd.

Between 2016-2017, Recology exceeded the maximum tonnage and received several violations issued by County LEA. The increase in maximum allowable tonnage and including the 7-day average would reduce the number of waste diverted and allow flexibility. Currently, traffic trips are limited to a 7-day average of 620 vehicles per day for both the landfill and Jepson Prairie Organics. Recology does not anticipate exceeding the number of allowable trips for the facility; therefore, modifying vehicle trip limits is not proposed.

The project related truck traffic has the potential to increase nitrogen oxide (Nox) emissions and exceed the Bay Area Air Quality Management District's significance criteria of 54 lbs/day and 10 tons per year. In order to mitigate impacts, three options are outlined in the recommendation such as early compliance with California Air Resource Board's (CARB) Truck and Bus Regulation that is before January 1, 2023, which is CARB's deadline, purchase credits to the Third Party to offset Nox emissions or use of renewal diesel fuel. Within 60 days of Use Permit approval, Recology shall submit a detailed action plan to the Department of Resource Management that demonstrates compliance with one or combination of the options.

As stated earlier, mitigation measures related to fair-share contribution for State Highway 12, 113 and Midway Road recommended in the Public Draft SEIR were removed from the Final EIR and are considered to be no longer applicable (page 2-57 of FSEIR). However, in order to address Caltrans' comments regarding fair share contribution to the needed improvements to the State Transportation Network, Planning staff recommends that Recology collaborate with Caltrans regarding fair share contribution to Highway 113 and 12 and provide a progress report on a quarterly basis until a resolution is reached (condition no. 31.b).

3. Baled Recyclable Materials: Recology is proposing to store baled single-stream recyclables, such as cans, plastics, paper and glass, within the landfill footprint. The storage area is located north of Jepson Prairie Organics and inside the existing recycling bunker, within a paved area. Each bale is approximately 3 x 3 x 5 feet and the bale stockpiles are approximately 40 feet wide by 105 feet long and 12 feet high. Stockpiles are setback 180 feet from the edge of Hay Road. The bales will be stored on pallets and covered with a tarp. The bales may be stored for a maximum of six (6) months before being transferred to another facility. Up to 20 truck trips per day are anticipated to be delivered to the site. Recology submitted a Recyclable Material Bale Management Operations Plan which was approved by the Local Enforcement Agency(LEA). The plan details procedures for bale management and includes Best Management Practices related to stormwater, vector, nuisance and odor controls. Compliance with the operations manual will minimize impacts. A copy of the operations plan is provided as Appendix B of the Draft Subsequent EIR.

4. Other minor modifications: Included in the application are requests for an additional landfill gas flare, use of portable equipment for the construction and demolition operations, allow friable asbestos disposal (i.e. materials such as thermal insulation and acoustic ceilings) and excavation depth of the borrow pit an additional 68 feet for the disposal module cover. The aforementioned modifications are necessary to continue the landfill operations. Minor modifications to the Jepson Prairie Organics acreage from 39 to 38 acres and boundaries for Disposal Module No.1 do not result in any substantive impacts to the land use permit and are intended to align with the Solid Waste Permit. Detailed information is provided in the Project Description section

of the Subsequent EIR.

D. Travis Airforce Base Land Use Compatibility Plan:

The site is located within the Travis Airforce Base sphere of influence and according to the Travis Air Force Base Land Use Plan, a majority of the property falls within Zone C with a small part of the northwestern site is located within Zone B2. The project is required to assess the potential increased risk of wildlife strikes. A Wildlife Hazards Analysis report was prepared in April 2018 (Appendix I in the Subsequent EIR) and determined that the proposed expansion would modify existing wildlife attractants by relocating an existing drainage ditch and would not add new wildlife attractants. In addition, the existing Birds Aircraft Strike Hazards (BASH) program would continue to be implemented and minimize impacts. The BASH program is outlined in condition no. 25, 79 and 80.

Airport Land Use Commission staff reviewed the project and the Public Draft EIR, and determined that the project is consistent with the plan.

ATTACHMENTS:

Attachment A - Project Location Map
Attachment B - Draft Resolution and conditions of approval
Exhibit A - Statement of Overriding Considerations
Exhibit B – Mitigation and Monitoring Reporting Program
Attachment C - Site Plan
Attachment D - Final Subsequent Environmental Impact Report

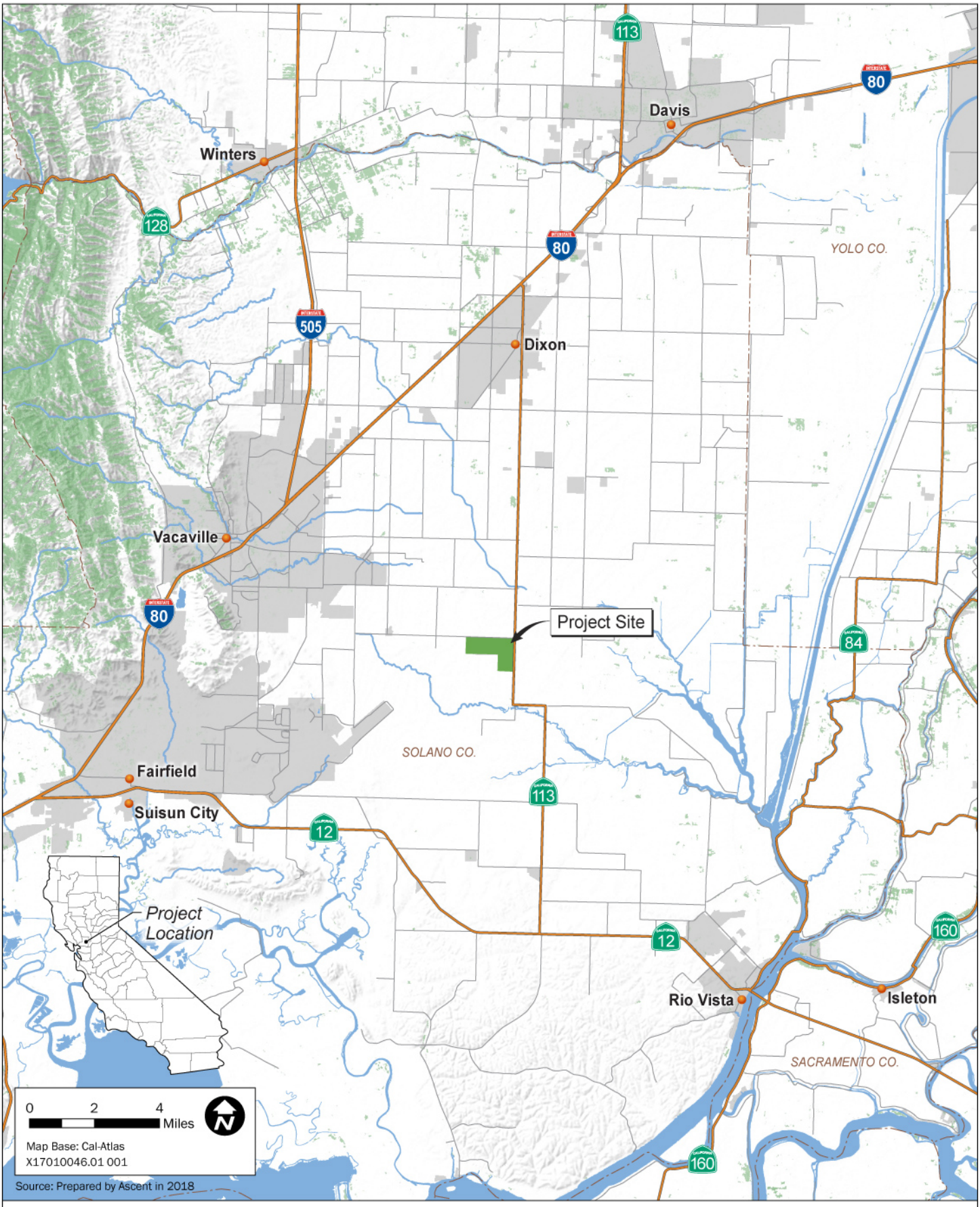

Figure 3-1 Regional Location

SOLANO COUNTY PLANNING COMMISSION
RESOLUTION NO. XXXX

WHEREAS, the Solano County Planning Commission has considered Use Permit Application No. U-11-09 Amendment No. 2 of **Recology Hay Road** to allow the following: 1) the lateral expansion for municipal solid waste which would result in an increase of approximately 8.8 million cubic yards to the landfill disposal capacity; 2) modification of the peak tonnage from 2400 tons per day (tpd) maximum to 3400 (tpd) peak day limit with a 7 day average of 3200 tpd; 3) temporary storage of baled recyclables; 4) one (1) additional Landfill Gas Flare (LFG); 5) include portable equipment to the construction and demolition (C&D) sorting operations, allow friable asbestos; and minor modifications to the existing borrow pit, boundaries of Jepson Prairie Organics and the footprint of disposal module number 1. The site is located at 6426 Hay Road, 5 miles southeast of the City of Vacaville in an "A-80" and "A-160" Exclusive Agricultural Zoning District, APN's: 0042-020-060, 280 and 020; and

WHEREAS, the Planning Commission has reviewed the report of the Department of Resource Management and heard testimony relative to the application at a duly noticed public hearing held on May 7, 2020; and

WHEREAS, the Planning Commission has certified a Subsequent Environmental Impact Report (SEIR) for the proposed project, and has read and considered the SEIR prior to taking action on the application; and

WHEREAS, the Planning Commission finds that changes or alterations have been required in the project through the conditions described herein which avoid or substantially lessen the significant environmental effects as identified in the certified SEIR, or can and should be imposed on the project by agencies that the County having responsibility and jurisdiction over the project, as is more fully described in the CEQA Findings of Fact attached as Exhibit A and incorporated by reference; and

WHEREAS, documents constituting the record of proceedings for the Planning Commission's action on the project are held by, and are available for review at, the Solano County Department of Resource Management, Solano County Government Center (675 Texas Street, Suite 5500, Fairfield, CA 94533); and

WHEREAS, after due consideration, the Planning Commission has made the following findings in regard to the application:

1. **The establishment, maintenance, or operation of the proposed use is in conformity with the County General Plan with regard to traffic circulations, population densities and distribution, and other aspects**

of the General Plan.

The project will allow continued operation and maintenance of the landfill. The proposal is consistent with the goal and the objectives and policies of Solano County General Plan.

2. **Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

The project is conditioned to provide required improvements such required groundwater and landfill gas monitoring network, and drainage. The site has adequate access road and the project is conditioned to collaborate with Caltrans regarding fair-share contribution to the State Highway Transportation Network, specifically, State Highway 12 and 113 improvements.

3. **The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

Impacts relative to biological resources, litter control, roadway improvements and air quality can be reduced to a less than significant level by conditions imposed on the project and mitigation measures specified in the mitigation monitoring program.

~~**BE IT, THEREFORE,**~~ **RESOLVED**, the Planning Commission of the County of Solano adopts the Mitigation Monitoring Program, attached as Exhibit B, and approves Amendment No. 2 to Use Permit Application No. U-11-09, subject to the following conditions of approval:

1. Approval is hereby granted to Recology for a landfill and composting facility located at 6426 Hay Road on a total of 640 acres zoned A-80 and A-160.

   a. Solid waste disposal: The maximum capacity of the disposal site is 45.8, 000, 000 cubic yards. The maximum elevation at Mean Sea Level is 215 feet or the equivalent of 217.5 feet utilizing the National American Vertical Datum of 1988 (NAVD 88).

   b. Composting Facility/Jepson Prairie Organics (JPO): The composting facility footprint is an overlay within the landfill footprint and comprises of 39 acres in size. The JPO boundaries are shown on Figure 3-2 of the May 2020 Subsequent Environmental Impact Report. The maximum composting capacity shall not exceed 225, 000 cubic yards.

Commented [A1]: To be updated

c. Temporary Storage of Baled Recyclables & Landfill Gas to Energy Facility are limited to the areas shown on Figure 3-2 of the Subsequent Environmental Impact Report.

1.5. Approval of application no. U-11-09 Amendment No. 2, subject to the conditions of approval described here, supersedes all prior use permit approvals and permit conditions.

2. The maximum amount of municipal solid waste accepted at the Recology Hay Road landfill shall not exceed 3400 tons per day (tpd) and limited to 3200 tpd over a 7-day average. Jepson Prairie Organics is limited to 600 tons per day, averaged over a 7- day period, with a peak of 750 tons per day, or a lesser amount as may be specified in permits issued for the facility by other agencies. All vehicle trips to the facility shall be limited to 620 trips daily, averaged over a 7-day period.

Commented [A2]: To be updated

Commented [A3]: Will amend for the staff report recommendation

2.5. The Baled Recyclable Storage Operations shall be in compliance with the Revised Recyclable Material Bale Management Operations Plan, dated April 11, 2018. Any revisions or modifications to the operations or plan, shall be subject to Department of Resource Management Review as specified in condition no. 10.

3. The permitted hours of operations for the landfill and composting facility are 7 days per week, 24 hours per day. Public tipping area may be open 8 am to 4 pm, 7 days per week. Commercial haulers may bring in waste between 8 am – 4 pm, 7 days a week. Arrangements may be made with commercial haulers to bring waste in earlier or later than 8:00 am to 4:00 pm. Delivery of asbestos containing waste and all designated wastes are limited to 7:00 am – 4:00 pm, Monday – Saturday. In order to minimize traffic impacts, the permittee shall make every effort to restrict acceptance of waste material from outside Solano County during the am peak hour in order to avoid peak-hour congestion on Interstate-80 through Fairfield and Vacaville.

4. In order to effectively implement and monitor the adopted mitigation monitoring program for FSEIR 2020, a minimum of 60 days of any ground disturbance related to the landfill expansion and, in conjunction or prior to submitting the grading/improvement plan application referred to in condition no. 14, the permittee shall provide the Planning Services Division the construction schedule and weekly updates until construction is complete.

4.5. The permittee shall submit an updated Soil and Borrow Area Cut Slope Stability analysis to the Planning Services Division, 30 days prior to excavating the borrow pit.

5. The landfill, composting and landfill gas to energy facility shall be established and operated in accord with the plans and documents

submitted with the application for U-11-09 Amendment No. 2 and previously approved use permit applications and the corresponding minor revisions, and as described all applicable State and local entitlements, including but not limited to the following documents:

a. Recology Hay Road Site Plan consistent with Figure 3-20 of the Subsequent Final EIR 2020 for Recology Hay Road.

b. The landfill gas to energy facility shall be established in accord with the plans entitled "G2 Energy at Recology Hay Road, 6426 Hay Road, Vacaville, CA 95667 submitted with Minor Revision No. 5 of Use Permit Application No. U-91-28

c. Recology Hay Road Solid Waste Facility Permit 48- AA-0002 (June 23, 2008) and Joint Technical Document (Aug 2008 Rev July 2010), and all approved updates and revisions as approved by the California Integrated Waste Management Board and as issued by the Solano County Department of Resource Management Local Enforcement Agency (LEA).

d. Jepson Prairie Organics Compostable Materials Handling Facility Permit #48-AA-0083 (May 25, 2012) and Report of Composting Site Information, and all approved updates and revisions.

e. Solano County Reclamation Plan 91-04 (rev. #1, December 1995).

f. Waste Discharge Requirements Order R5-2008-0188 (Dec 10, 2008) and all approved updates and revisions.

g. Hazardous Materials Management Plan and Emergency Response Plan EPA-ID- CAD 982042475 (10/99, rev. 9/25/09).

h. Letter of December 14,1992, Revised Soil Borrow Area Cut Slope Stability Analysis and subsequent updates.

i. Memorandum from Michael Caprio, Norcal Waste Systems, December 2,1992, Description of Existing and Future Leachate Management Practices and as updated or revised by the Joint Technical Document.

Commented [A4]: Leachate management at the site is described in the JTD, which is updated frequently and supersedes this memo. I recommend we remove it from this list. You can ask Marcy for her opinion as well.

j. Wetlands Mitigation Plan by Global Environmental, December 1, 1992.

k. Weed Monitoring and Control Program by Global Environmental, March 1993.

l. Letter of April 13,1993, Clarification of Aspects of Reclamation Plan.

m. Revised Recyclable Material Bale Management Operations Plan, April 11, 2018

6. The permittee shall make the site available for inspection at any time by regulatory agencies with oversight authority in order to monitor compliance.

7. The permittee shall reimburse the Department of Resource Management pursuant to Solano County Code Section 1-18 and Government Code Section 21081.56 for the Department's cost of verifying compliance with the terms of this permit and monitoring and enforcing the use of performance standards by the permittee. Billing for this activity may occur on a monthly basis. In the annual compliance report the permittee shall indicate an annual total paid toward the LEA functions of permitting, monitoring and enforcement.

8. The site design and operations shall meet the specifications and requirements of all applicable permits and permitting agencies including but not limited to the Cal Recycle, the Solano County Department of Resource Management (DRM), the Local Enforcement Agency (LEA), the Central Valley Regional Water Quality Control Board– (RWQCB), and the Yolo-Solano Air Quality Management District (Y-SAQMD). Changes or amendments to the design and/or operation of the facility by the agencies which regulate this site shall be reported to the LEA by the permittee consistent with PRC 44004(b) at least 180 days prior to their implementation.

9. The permit shall be valid until the California Department of Resource Management Recycling and Recovery (Cal Recycle) has determined that the landfill closure is complete and in compliance with the Solid Waste Facility Permit.

10. Substantial or significant change(s) in the permitted operation and/or facilities as determined by the Director of Resource Management, shall require an application for an amended Use Permit and additional environmental review for continuance of the permitted activity.

11. Prior to final closure of the landfill, the permittee shall submit an application for a revision to this permit covering closure, post-closure monitoring and maintenance, the status of on-site wetlands, and a final reclamation and habitat creation plan for the borrow area.

12A. The permittee shall on or before January 31st of each year submit to the Department of Resource Management, an annual compliance report to document compliance with all conditions contained in the permit.

12B. In each annual compliance report the permittee shall submit a status report to the Director of Resource Management by January 31st of each year containing information required for completion of the "self-monitoring" provisions of the Solid Waste Facilities Permit.

12C. The permitted operation shall submit an Odor Management Compliance Report covering the operations of Jepson Prairie Organics. The report shall be submitted annually by June 30, covering the period from October through May of the prior period.

The Odor Management Compliance Report shall address the following items at minimum:

a. Odor sources and sensitive receptors.

b. Complaints and violations and description of how the complaints were resolved.

c. Odor control strategies implemented and proposed.

The report shall be presented to the Zoning Administrator for review and consideration on two-year intervals and at its discretion, may request more frequent reviews. The Zoning Administrator public hearing shall be duly noticed and advertised.

These hearings may be held for the purpose of modifying any conditions previously imposed conditions of approval or adding conditions of approval that may be required to guarantee the continued validity of the findings made by the Planning Commission for approval of the use permit. This reconsideration may include, but is not limited to, the imposition of requirements for the modification, closure, and/or removal of facilities, operations, materials or equipment from the premises affected by this permit within thirty days of notification, or the requirement that appropriate guarantees to secure such changes or removal be filed and maintained.

Any condition modified or added shall be of the same force and effect as if originally imposed. This periodic review shall be for project facilities or any part thereof, and each review, although to be accomplished in accordance with CEQA, shall not be considered a separate project under CEQA

13. Pursuant to Assembly Bill 901 (Gordon, Chapter 746, Statute of 2015), the permittee is required to report to the types and quantities of organic material, recyclables, and solid waste that the permittee sells, transfers or disposes to CalRecycle through the online Recycling and Disposal Reporting System (RDRS) effective October 2019. The permittee shall submit this required reporting on a quarterly basis to the Department of Resource Management in accordance with the RDRS reporting schedule to

support the County's compliance with the California Integrated Waste Management Act 1989 (AB 939).

14. Prior to any ground disturbance activity related to the landfill expansion (FSEIR 2020) and minimum of 60 days prior to the issuance of a grading/improvement plan permit, the permittee shall submit the following:

    a. An updated Grading, Drainage, and Erosion Control Plan approved by the County Department of Resource Management in conformance with the County Grading Ordinance and Erosion and Sediment Control Handbook. Said plan shall include, but is not limited to, detailed design features to maintain downstream water quality; maintenance of sediment basins; a comprehensive landfill revegetation plan to establish and maintain adequate erosion control and slope stability and to restore the site; and an interim landfill reclamation plan showing final slopes and grades.

    b. An application for a grading permit for development of the on-site borrow area to the County Department of Resource Management.

    c. Application for a grading permit and encroachment permit for development of any off-site borrow area to the County Department of Resource Management.

    d. Documentation from the Department of Resource Management that all encroachment permits have been obtained as necessary for any access locations to County roads.

    e. A surety bond or other guarantee acceptable to the County in favor of the County of Solano in the amount of $100,000 to ensure immediate availability of funds for emergency remedial action at the Recology Hay Road site, or for correcting any conditions on adjacent properties caused by site operations that are determined by the Department of Resource Management to be harmful to public health, safety or welfare or detrimental to agricultural operations. In the case of a bond, the permittee shall post the bond through a surety bond company that is rated "A" by the A.M. Best Company Guide. The bond or other guarantee shall remain in effect and be in the possession of the Department of Resource Management until after all phases of landfill site reclamation and revegetation are completed.

    f. Comply with the Road Damage and Litter Agreement executed between the County and permittee and any subsequent amendments. The purpose of the agreement is to recover costs due to damage of County roads caused by transfer trucks and trucks used for hauling soil to the facility along County roads. An annual

Commented [A5]: PWS to review and update April 16, noon

fee as determined by the Department of Resource Management shall be paid to the Department of Resource Management. The fee will be indexed and adjusted yearly in accordance with the prevailing costs as shown by the Engineering News Record - Construction Cost Index. The fee shall be due on the anniversary date of issuance of this permit.

g. The permittee shall file with the Department of Resource Management the name, and phone number of the site manager and alternate. The site manager or alternate shall be available to county officials at all times (24 hours) and shall be responsible for the control of operations and for keeping specific records of operations to be made available upon request of, and in conformance with the requirements of the Department of Resource Management. The site manager or alternate shall be present at the site at all times when loads are accepted for disposal and during construction activities.

h. The permittee shall document that closure and post closure maintenance cost estimates have been prepared and financial mechanisms established for the Recology Hay Road site in accordance with the standards established by the CalRecycle. The permittee shall make payments in full each year as required by Title 27 of the California Code of Regulations, Article 1, sections 22205 (closure) and Article 2, 22210 (post closure).

i. The permittee shall maintain a comprehensive General Liability and Workers' Compensation insurance policy in the minimum amount of $1,000,000 during the term of the permit. Evidence of such coverage shall be filed with the Director of Resource Management and shall comply with the requirements of the County Risk Manager.

15. By signature of this permit, the permittee and its successors in interest agree that the County of Solano, its officers and employees shall not be responsible for injuries to property or person arising from exercise of this permit. The permittee shall defend, indemnify and hold harmless the County of Solano, its officers, agents and employees from all claims, liabilities, losses, or legal actions arising from any such injuries, and from all approvals and conditions associated with issuance of this permit. The permittee shall reimburse the County for all legal costs and attorney's fees related to litigation based on the issuance of and/or interpretation of this permit, and all associated approvals and conditions. This agreement is a covenant that runs with the land and shall be binding on all successors in interest of the permittee.

16. The permittee shall be responsible for remediating any off-site contamination, damage, or injury to surrounding properties, including ground and surface water contamination, litter or safety hazards, or pollution

of the air above any properties which may result from issuance of the permit; and during exercise of the use permit shall take adequate measures to prevent litter, dust, standing water, generated traffic, unsafe conditions, trespass to adjacent properties, or other activity in excess of, or inconsistent with conditions of the permit from creating a hazard or nuisance.

17. Non-compliance with the approved use permit or any condition(s) set forth therein shall be cause for revocation by the Planning Commission of said permit, and for payment of applicable bonds to the County.

18. Subsections (j) and (m) of Section 28-53 of the Solano County Code concerning revocation of a use permit for non-compliance with conditions of a use permit and minor revisions to a use permit are expressly made applicable to this permit. Upon any revocation, permittee shall reclaim the site in accordance with conditions of the permit and the closure requirements. If necessary, the County may resort to any security to accomplish such reclamation. In addition, any term or condition of this use permit and any violation of this permit may be enforced by injunction issued out of the Superior Court upon suit by the County. In the event of permit revocation, the permittee shall submit within 90 days a report to the Department of Resource Management fully describing their reclamation of the site. The permittee shall make periodic reports, as required by the Department of Resource Management, on the progress and conclusion of site reclamation procedures.

19. The permittee shall notify the Division of Environmental Health Services within 24 hours of any significant injury to a worker, fire, spill, explosion, vehicle or equipment accident. Notwithstanding above, California Health and Safety Code, Chapter 6.95 requires immediate reporting of a potential or actual release of a hazardous substance to the State of California and Division of Environmental Health Services. All such incidents shall be summarized in the annual report.

20. The permittee shall comply with all applicable Federal, State and local enactments, laws, and regulations, as they now exist and as they may be amended. A copy of correspondence concerning any enforcement action shall be provided to the Department of Resource Management. Compliance with any enforcement action shall be summarized in the annual compliance report.

21. The permittee shall provide for the employees both a water supply and sewage disposal system which have been approved by the Division of Environmental Health Services and shall comply with hazardous materials and hazardous waste management laws and regulations including when applicable preparing, revising, and updating a Hazardous Materials Business Plan that has been reviewed and accepted by the Division of Environmental Health Services.

22. The permittee shall obtain approval from the Building and Safety Division prior to construction, erection, enlargement, altering, repairing, moving, improving, removing, converting, or demolishing any building or structure, fence or retaining wall regulated by the Solano County Building laws. The permittee shall submit three sets of plans to the Building and Safety Division for plan review and permits prior to beginning any improvements.

23. The permittee shall prevent a reduction of land available for grazing by continuing to permit and encourage grazing on areas not used for the landfill or landfill facilities pursuant to a management plan that promotes the maintenance of native plants and vernal pools and consistent with the management plan used for grazing at the Jepson Prairie Preserve.

24. The project shall be consistent with the Travis Air Force Base Airport Land Use Compatibility Plan. The following measures shall be taken so that the facility is operated in a manner consistent with this plan:

    a. Existing and proposed sheds and structures with reflective exteriors, including roofs, shall be painted or coated so that they are rendered nonreflective.

    b. If night and/or security lights are to be used on the subject site, they shall be downcast and shielded so that off-site glare is prevented, and lighting is confined to the work area.

    c. Prior to establishment of an office on the western parcel, noise abatement measures shall be incorporated into its design and construction to achieve a noise level reduction (NLR) of 35 dBA.

    d. If a residence is proposed to be constructed on-site, it shall be located in an area with a noise level below 75 CNEL.

    e. Litter, dust and smoke shall be controlled as required by conditions 16, 29A, 33, 34, 36, and 69.

    f. Bird hazards shall be controlled as required by condition 25, 79 and 80.

    g. The permittee shall notify Travis Air Force Base - Airfield Management when lighting operation commences.

    h. Future landfill support facilities involved with recycling operations and onsite improvements shall be considered by the Solano County Airport Land Use Commission prior to any construction.

Commented [A6]: Update if condition #'s change

Commented [A7]: Update if condition #'s change

25. Bird hazards for aircraft using Travis Air Force Base shall be controlled by the following measures:

    a. The size of the working face of the landfill during the wet season (October 15 to April 15) shall be limited to a maximum of 15,000 square feet (75' x 200').

    b. Selected landfill staff shall be trained on firearm safety and instructions on Bird Aircraft Strike Hazard (BASH) strategies. At least one landfill employee shall be designated to enforce the bird control strategies.

    c. A combination of deterrent measures shall be used in consultation with the Solano County Department of Resource Management including: the use of "screamers" as a frightening device (shells fired from a hand-held pistol); broadcast of seagull distress signals over a loudspeaker in conjunction with mock elimination (attach a stuffed seagull to a wire and simulate injury) or elimination if necessary (a predatory permit from the California Department of Fish and Game would be required); and the use of blank shotgun shells and/or a propane cannon as a scare device.

    d. The permittee shall analyze incoming regular and seasonal waste loads for those which might be particularly attractive to birds, such as commercial restaurant loads, cannery loads, or brewery loads. If appropriate, these wastes shall be placed at the side of the working face and covered immediately to prevent bird access to the refuse.

    e. A monitoring program shall be established to determine the effectiveness of the bird control program. A wildlife biologist shall visit the site to establish baseline conditions for 1993. After implementation of the bird control program, the wildlife biologist shall document results of the program in monthly reports for the first six months and on a quarterly basis thereafter. These reports shall be provided to the Solano County Department of Resource Management and to Travis Air Force Base.

26. To prevent erosion and sedimentation the permittee shall take the following measures;

    a. Maintain grading, sedimentation, drainage, and erosion controls pursuant to the Solano County Grading Ordinance and/or Sedimentation and Erosion Control Guidelines as required by the Solano County Department of Resource Management as applicable.

b. Space drains that convey surface runoff from closed landfill surfaces as shown on the most recent approved closure plan.

c. Keep graded areas as small as feasible and vegetation shall not be removed until necessary.

27. To prevent increased water infiltration and leachate production in the landfill and damage to drainage and leachate control facilities, the permittee shall take the following actions:

a. Submit a report to the County prior to closure, which documents settlement rates and existing cover and slope stability performance.

b. Install permanent survey monuments during closure construction to measure and monitor settlement following closure.

28. The permittee shall prevent adverse impacts to ground water and surface water by implementing the following measures:

a. Comply with existing Waste Discharge Requirements (Order R5-2008-0188 (Dec 10, 2008) and all approved updates and revisions, and with all enforcement orders issued by the Regional Water Quality Control Board.

b. Reimburse the County for the expense of third party engineering review and inspection to verify the adequacy of construction of the sub base and liner system.

c. Comply with most recent requirements for leachate management and disposal specified by the Regional Water Quality Control Board.

29A. The permittee shall control dust, PM10, odor, and other airborne contaminants as specified by all applicable environmental impact studies and reports, the most recent and updated Joint Technical Document (JTD), Report of Composting Site Information (RCSI), Mitigation Monitoring Reporting Plan (MMRP), Odor Impact Management Plan (OIMP), Solid Waste Facility Permit, and by the Y-SAQMD, RWQCB, LEA, and other agencies with regulatory authority over the site.

a. A water truck shall be located and used at the site for dust suppression at least twice a day during excavation and grading activities, and thereafter as necessary until vegetation is reestablished.

b. Comply with the asbestos acceptance and handling protocols described in the most recent Joint Technical Document.

c. For special wastes not addressed in the JTD or for new sources of sludge, a waste handling protocol shall be submitted to the LEA and other responsible agencies for review and approval prior to acceptance of the wastes.

d. All Recology affiliated haul trucks shall use tarpaulins or other effective covers and every effort shall be made by the permittee to prevent self-haulers from bringing uncovered loads into the facility. Reasonable measures would include but shall not be limited to imposing fines on uncovered vehicle loads. The landfill shall continue to post signage that loads must be covered.

e. Soil shall not be exposed nor grading occur during high wind conditions with wind speeds greater than 20 mph over 1 hour.

29B: In order to mitigate PM-10 emissions from stationary sources, the permittee shall acquire emission offsets during the permitting process, if determine necessary by the YSAQMD, consistent with YSAQMD Regulation 3-4.

29C: The permittee shall control additional landfill gas generation through modifications to the landfill gas collection and treatment system and shall implement any required offsets, consistent with the YSAQMD Rule 3-4.

30. The permittee shall control reactive organic compounds (ROC's) by conforming to the requirements of the YSAQMD and by implementing the following measures:

a. Petroleum contaminated soils shall continue to be managed as required by the YSAQMD.

b. Provide proper maintenance of equipment and engines.

c. Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time.

d. Use new technologies to control ozone precursor emissions for vehicles and equipment as they become available and feasible.

e. Minimize vehicle idling, generally below 5 minutes.

f. Install and operate a vertical or horizontal landfill gas (LFG) extraction and treatment system at the existing landfill and any proposed landfill cells. The design of any landfill gas extraction system(s) shall be incorporated into the JTD for the landfill, shall be reviewed and approved by the LEA, RWQCB, and other appropriate

agencies prior to installation, and shall be referenced as part of the revised Solid Waste Facilities Permit.

Commented [A8]: Recommend removing conditions since they specify compliance with another districts rules and regulations. Condition 20 of this CUP already requires this.

Commented [A9]: These are mitigation measures carried over as COAs. No, 20 is too general to cover this issue. Same comment for , 29B, 29 C, 30 etc

31A Comply with the Road Damage and Litter Agreement executed between Solano County Department of Resource Management and Recology Hay Road regarding reimbursement to the County for the cost of removing trash and materials and impacts to roads.

31B Notwithstanding no. 31A, the permittee shall mitigate traffic impacts associated with trucks operated by the permittee or its contractors by implementing the following measures:

a. Local soil hauling trucks shall be restricted to routes approved by the Solano County Department of Resource Management.

b. Recology Hay Road shall collaborate with Caltrans regarding a fair share contribution towards construction and improvements at Highway 113 & Midway Road and Highway 12 and 113 intersection improvements. Recology Hay Road shall provide to the Department of Resource Management, a progress letter signed by Caltrans on a quarterly basis from the date of the approval of Land Use Permit amendment no. 2, until a resolution between both parties have been reached.

c. The permittee shall make every effort to restrict acceptance of waste material from outside Solano County during the a.m. peak hour in order to avoid peak- hour congestion on Interstate 80 through Fairfield and Vacaville.

32. Adverse impacts on plant and animal life shall be mitigated by the following measures:

a. Comply with the Wetlands Mitigation Plan approved by the U.S. Army Corps of Engineers.

b. Continue to implement the wetlands enhancement and development plan and monitoring program.

c. Maintain and continue to implement the delta green ground beetle management plan.

d. Filled areas and soil stockpiles shall be revegetated according to the parameters set in the Grading, Drainage and Erosion Control Plan approved by the County Department of Resource Management.

e. Any topsoil secured on or off site shall be stored separately from subsoils for use in the preparation of final cover. The location of topsoil stockpiles shall be shown in the annual compliance report.

f. Use non-invasive and/or native plant species for interim revegetation of the borrow area.

g. A revegetation plan shall be prepared for the site for final closure that includes the use of native grasses, a monitoring program, a grazing management plan if grazing is contemplated, and a habitat development plan for the borrow area lake.

h. Prior to final closure, the lake development, enhancement, management, and monitoring plan prepared in consultation with the Solano County Mosquito Abatement District shall be maintained.

33. The Permittee shall develop and maintain the facility so that adverse visual impacts are reduced through the following measures:

a. All filled areas with interim cover and soil stockpiles shall be vegetated as needed.

b. Operations and facilities shall be contained on-site in specified areas to avoid the appearance of haphazard sprawl within the site.

c. Fencing and landscaping along the perimeter shall be adequately maintained.

d. Night lighting for operations at the facility shall be downcast and shielded so that off-site glare is prevented, and lighting is confined to the work area.

e. The permittee shall conform to landfill closure requirements and design, including appropriate slopes, as approved by the Cal Recycle the Regional Water Quality Control Board, and the Planning Commission. Provide visual relief in design of the final landfill surface to avoid artificial geometric appearance.

f. Provide a 4:1 (horizontal:vertical) slope in the landfill perimeter.

g. Place final soil cover and revegetate incrementally as portions of landfill expansion project are brought to final design grades.

h. Keep landfill working face as small as possible and orient away from nearby roads and high use areas whenever possible.

i. Maintain landscape screening along the portion of the project site which abuts Highway 113.

34. The permittee shall control litter by implementing the following measures:

a. The maximum size of the working face shall be limited to 200' x 75' or smaller.

b. Use portable fencing in the immediate vicinity of the landfills working face and downwind of the working face to contain litter.

c. Fencing along the site boundary should be high enough to contain liter from migrating off-site.

d. Adequate staffing shall be on site 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 litters from parcels adjacent to the landfill. The permittee shall establish site access agreements with the adjacent property owners within 90 days of issuance of the use permit.

e. Litter control shall be the responsibility of the permittee compliance officer and shall be monitored by the 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.

f. On a weekly basis, or more frequently if needed, the permittee shall check for and pick up litter along adjacent properties, and along Burke Lane 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 SR113, Lewis Road between Fry Road and Hay Road, Hay Road between SR 113 and Meridian Road, 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.

g. If waste is hauled by the permittee or its contractors over the following roads, the permittee shall check for and pick up litter, on a weekly basis, or more frequently if needed, 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 Interstate 80 to State Route 113.

h. The permittee shall construct a permanent 25 ft. tall litter-control fence along the entire length of the southerly site boundary.

i. If Solano County personnel identify litter on roads used by Recology, Solano County shall immediately notify Recology and request that it be removed. Recology shall respond and remove such litter within twenty-four (24) hours of receiving notification from Solano County under this provision.

35. The permittee shall implement the following measures to mitigate for underground migration of landfill gas (LFG:

a. Install gas probes to monitor for landfill gas migration as required by the LEA in accordance with Title 27 and Title 14.

b. Avoid construction of buildings on top of refuse.

c. Equip any on-site habitable structures with an automatic combustible gas detection system with an audible alarm.

d. Avoid reentering buildings following earthquakes until LFG has been determined not to exist. Make any repairs immediately.

36. The permittee shall implement the following fire protection measures:

a. The site, including structures, equipment and vehicles, shall be inspected by the Dixon Fire Protection District as deemed necessary by the District and kept in compliance with the Fire District regulations. The landfill permittee shall provide the County LEA proof of compliance with the Dixon Fire Protection District in the annual report.

b. Flammable recyclables such as wood, tires, and paper shall be isolated from other materials, contained by a berm, or be stored on-site for less than 30 days.

c. A ten (10) foot fire break shall be provided around the perimeter of the active landfill area and any areas used for the storage of compostable materials, recyclables, and any combustible materials prior to their use.

d. Notify the County LEA immediately if unusual amounts of settlement or venting of smoke occurs and take appropriate corrective action.

e. Any fire incidents shall be reported to the County LEA within 24 hours.

37. The permittee shall provide site security by the following measures:

a. Use lockable gates and fencing around the perimeter of the landfill and the compost facility as deemed necessary by the LEA, and have an on-site emergency coordinator during operating hours, to protect the public health and safety,.

b. Maintain fencing and posting of signs to protect the wetlands mitigation area as proposed in the Wetlands Mitigation Plan approved by the U.S. Army Corps of Engineers.

38. The permittee shall not dispose of hazardous wastes other than asbestos. The screening of wastes for hazardous substances and their management shall be governed by the following provisions:

a. Prior to issuance of the permit, the permittee shall have a load checking plan approved by the County LEA and the RWQCB. It shall be included in the Joint Technical Document (JTD).

b. Prior to issuance of the permit, the permittee shall have an approved Hazardous Materials Business Plan from the Division of Environmental Health. It shall be included in the JTD.

c. in the annual compliance report the permittee shall summarize any hazardous materials incidents and amounts of collected hazardous materials by volume and/or weight for the year and include a copy of each of the quarterly reports for the load checking program.

d. The permittee shall participate in an on-going public education program to make the public aware of household hazardous waste and safe handling practices, along with information on source reduction, recycling and composting. Such participation could include development of a brochure that would accompany billing notices.

39. The following wastes, as defined by the LEA, shall have approved waste handling protocols prior to their acceptance: high moisture content wastes or other wastes with potentially objectionable odors, wastes with an increased potential to cause or contribute to adverse water quality impacts, combustible materials stored in the open, and contaminated soils.

40. In the event of an earthquake, the permittee shall submit to the County within 30 days a post-earthquake inspection plan to evaluate any damage that may have occurred to site structures or equipment.

41. The permittee shall have a portable light with generator, inspected and approved by the LEA, available on the site at all times for emergency work.

42. As required by the JTD, adequate cover material shall be available for use at all times. This may include ADC or soil as determined appropriate by the LEA.

43. The permittee shall follow the disposal procedures outlined in the LEA-approved asbestos disposal manual included in the JTD.

44. The permittee shall not allow standing water to create breeding grounds for mosquitoes. The following restrictions apply to the storage and disposal of tires:

    a. Tires shall be managed consistent with Title 14 requirements (14 CCR 17350 et seq.) as approved by the LEA and the Dixon Fire Department.

    b. The site shall be open for inspection to the Solano County Mosquito Abatement District (SCMAD) for random inspections during the wet season (November-April).

    c. If mosquito larvae are found during inspection, the tires shall be shredded or cut within 10 days, or more frequently as determined by the SCMAD.

45. The permittee shall have resource book(s) at the site to train employees in the identification of all the various types of cultural resources that may be encountered at the site. Should any subsurface cultural resources be encountered during ground altering activities, the permittee shall immediately halt work and consult a registered archaeologist to evaluate the significance of the find. The permittee shall notify the Department of Resource Management within one day of encountering cultural resources and shall notify the department within 5 working days thereafter of the name and qualifications of the archaeologist retained to evaluate the significance of the find. If the archaeologist determines the find to be significant, he/she shall prepare and submit to the Department of Resource Management a mitigation plan consistent with the State CEQA Guidelines for review and approval prior to further site disturbance. The approved plan shall be followed upon the permittee's resumption of work in the area.

46. The permittee shall comply with all relevant conditions and requirements of the City of Vacaville's sewer ordinance, Pretreatment Program, and Industrial Wastewater Discharge Permit. The permittee shall provide a copy of the contract and all correspondence with the City regarding disposal of leachate at the Vacaville Sewage Treatment Plant, and report quantities disposed to the County LEA in the quarterly reports and summarize in the annual compliance report.

RECLAMATION or RESTORATION PLAN PROVISIONS (Number 47-64)

47. Reclamation of the borrow area shall be conducted in accord with the plans submitted with the reclamation plan. An alternate reseeding program may be approved by the Zoning Administrator.

48. Settling ponds, drainage swales and diversion berms shall be constructed as required by the County Department of Resource Management, so as to eliminate adverse flooding and degradation of water quality resulting from any surface runoff. Said drainage facilities shall be established prior to any work done after October 15 and maintained in adequate working condition until such time that revegetation is permanently established on the site.

49. During borrow area excavation a drainage system shall be installed to divert surface water outside the borrow area from entering the borrow area.

50. Eighteen inches of topsoil from the soil borrow area shall be stockpiled for reclamation of the borrow areas and closure covers. Stockpiled topsoil shall be restored to borrow areas for interim reclamation, reclamation of the disturbed area along the perimeter of the borrow area lake above the water level and used for the vegetative layer of the final closure cap. Topsoil shall be restored to these areas at a minimum depth of 12 inches. Prior to spreading topsoil, the subsoil shall be ripped to a 12-inch depth and disked to promote root growth and water percolation. Prior to seeding, the topsoil shall have the same treatment. Stockpiling techniques and topsoil quality shall meet the guidelines found in the Solano County Sedimentation and Erosion Control Handbook. Soil amendments and fertilizer shall be added as determined to be necessary by the County.

51. Stockpiled topsoil shall be vegetated to protect from erosion if stored during a rainy season.

52. The borrow area shall be developed in no larger than five-acre cells. Interim reclamation areas shall be graded so that standing water does not collect in depressions. Final grading shall conform smoothly with surrounding topography.

53. Seed and mulch shall be applied by October 15 of each year to all disturbed slopes steeper than 2% and higher than 3 feet, and to all cut and fill slopes

as directed by the Solano County Department of Resource Management. On slopes, straw shall be anchored in place by punching.

54. Seed used for interim reclamation shall consist of native plants and/or plants that will not be invasive to the wetland habitat areas. Seed used for final reclamation shall consist of native plant species only, using the following mix: Stipa pulchra, 10 lbs per acre; Hordeum californicum, 10 lbs per acre; and mixed wildflowers (California poppy, lupine, etc.), 4 lbs. per acre.

55. Erosion control measures shall be inspected by permittee on a daily basis during any excavation operations occurring between October 15 and April 15. When no excavation is taking place, erosion control measures shall be inspected on a weekly basis and immediately after each storm to identify damaged areas.

56. Disturbed areas shall be repaired, re-seeded and mulched as soon as possible after damage.

57. Hours of excavation from the borrow area shall be limited to 7:00 a.m. to 6:00 p.m. Monday - Friday and 7:30 a.m. to 4:00 p.m. on Saturdays.

58. Reclamation shall include any maintenance and reseeding of reclaimed areas as necessary, to ensure that revegetation is permanently established and will be productive over the long term. The permittee shall schedule an annual inspection with the Department of Resource Management at an additional expense as listed in that Department's Fee Schedule and authorized under Chapter 1-18 of the Solano County Code. Such inspections shall occur for three (3) consecutive years after completion of reclamation activities.

59. The permittee shall provide a bond secured through a company that is rated "A" by the A.M. Best Company Guide or other financial instrument acceptable to the County in the amount of $20,000 to cover the cost of installation and maintenance of reclamation measures for a five (5) acre cell. Said instrument shall be made payable to the State Geologist and Solano County with the interest payable to depositor; shall not be released, except as authorized by the Zoning Administrator, upon receipt of a written request and satisfactory evidence that the reclamation has been completed; and may be drawn upon by the County of Solano to cover the cost of any reclamation activities undertaken by the County, if the permittee's reclamation efforts are not adequate or completed within the period of this permit. Said financial assurances may be proportionately reduced upon successful completion of phases of interim reclamation or may be modified annually in correspondence with the construction cost index. Permittee shall provide said financial assurances prior to final issuance of this permit.

60. Prior to completing excavation of the soil borrow area, the permittee shall conduct a slope stability analysis and, based on the recommendations of the analysis, develop a program for refilling the area with water which minimizes the risk of slope failure. This analysis shall be completed and submitted with the application for permit revision for closure of the site as required by Condition 11.

61. If the borrow area operation terminates at any time prior to completion of scheduled reclamation activities, the approved Reclamation Plan shall be held invalid, and a revised plan submitted to the County to reclaim the area actually worked. In this eventuality, the financial assurances shall be re-evaluated for adequacy and applied to the revised Reclamation Plan, and the revised plan shall be subject to approval of the Zoning Administrator.

62. Site inspections of the borrow area reclamation may be conducted by the Department of Resource Management annually in order to insure compliance with plans. Noncompliance with the approved Reclamation Plan or any conditions set forth therein shall be cause for revocation by the Planning Commission of said plan and shall allow the County to begin drawing on the funds to complete reclamation activities.

63. The Reclamation Plan shall be in effect until permanent revegetation has been established as documented by annual site inspections for three (3) consecutive years after completion of reclamation activities. Financial assurances for reclamation shall be retained for this period by the County to guarantee permanent revegetation.

64. The permittee shall provide calculations in the annual report on how much contaminated soil is needed for daily and intermediate cover on an annual basis and how much is being stored annually and cumulatively for use in the final cover. Any remaining contaminated soils above the amount necessary for landfill cover shall be disposed in the landfill.

65. The permittee shall obtain the necessary Authority to Construct from the Yolo-Solano Air Pollution Control District and provide copies to Solano County prior to operation of the composting facility and acceptance of designated waste.

66. The permittee shall prevent adverse impacts to health and safety by implementing the following measures:

    a. Consult with the Solano County Mosquito Abatement District regarding the retention basins prior to grading permit approval and incorporate any requirements into the design and operation of the basins.

b. The permittee shall adhere to the Solano County noise standards contained in the County General Plan. If noise complaints are received, the permittee shall investigate the source of noise complaints and make the necessary improvements in operation or environmental controls to reduce noise emissions to acceptable levels.

67. A compliance officer shall be designated for all permitted solid waste facilities on site. It shall be the responsibility of this person to prevent the off-site migration of any airborne contaminants including but not limited to dust, odors, and PM10s, as well as litter. The responsibilities of this person shall include a monitoring and record keeping program to:

a. Screen all loads for potential creation of nuisance conditions and record the actions taken by the operator to immediately abate those conditions.

b. Monitor and record the source of the load (e.g., solid waste, compostable materials, C & D, Alternative Daily Cover (ADC), biosolids, etc.).

c. Monitor and record the destination of the load or its use on site (e.g., landfilled, used for ADC, composted, etc.), or other outcome (e.g., load refused).

d. Record the specific details of each load, including tonnage, type of material, and time received. Specifically record time of day of receipt of any particularly odorous load, and the time of day of disposition, e.g., time landfilled and covered.

e. Monitor and record wind and weather conditions throughout the hours of operation, noting times of day conditions change and any modifications to site operations to prevent nuisance conditions.

f. Ensure that all food waste feedstock is incorporated within 24 hours to prevent odors.

g. Ensure compliance with all requirements of any applicable entitlement regulating the generation of airborne contaminants and litter, including but not limited to Solid Waste Facility Permit, Standardized or Full Composting Permit, Odor Impact Mitigation Protocols, Air Quality District Permit to Operate, etc.

68. The permittee shall fund and participate in a compost advisory committee, to be organized by the Department of Resource Management for the purpose of advising on compost issues.

69. The permittee shall mitigate or reduce the ROG emissions of the proposed Project to a level that does not exceed the YSAQMD ROG threshold. (Air-1a).

70. The permittee should maintain records of all materials composted (either in terms of volume or weight by material type) and submit them to the YSAQMD in addition to complying with all other applicable YSAQMD rules, regulations and permit conditions. This will enable the YSAQMD to calculate estimated ROG emissions from the composting operation so that emissions reductions can be claimed if specific controls are implemented in the future. The YSAQMD also can use the information in preparing emissions inventories that form the basis of plans developed to achieve attainment of state and national ozone standards (Air-1b).

71. The existing odor source and management techniques (Table 4.2-8 of the 2005 Subsequent EIR) shall be continued and expanded to handle the larger volume of processed material. In addition, the Permittee shall comply with the following complaint response protocol:

    a. Site receives complaint either verbally (phone call) or in written form.

    b. During regular business hours (8:00 AM to 5:00 PM), the Solano County Department of Resource Management will be notified as soon as an odor complaint is received at 707/784-6765.

    c. After business hours, odor complaints will be forwarded as soon as they are received by landfill personnel to the Department of Resource Management 24-hour complaint number (1 866 329 0932) The phone call then will be routed to a Department of Resource Management staff member for disposition.

    d. Odor complaints can also be logged in at http://www.solanocounty.com/depts/RM/environmental_health/solid_waste_comp laint.asp

    e. Odor investigations will be conducted as follows:

        i. Determine if odor is detectable by site personnel at off-site complaint location. If not detectable, complete investigation by submitting Odor Complaint Report to the Solano County Department of Resource Management within 24 hours of receiving the complaint.

        ii. If detectable at the complainant's site, determine the source. Determine if source and nature of odor is short term or long-term duration.

iii. If short term, take appropriate action to abate the source of odors. Complete investigation by submitting Odor Complaint Report to the Solano County Department of Resource Management within 24 hours of receiving the complaint. Submittal will outline the odor source and steps being taken to abate the odors. Continue to monitor and take steps to abate source of odors.

iv. If odors reoccur and become a long-term consistent problem, determine extent and nature of offsite odors. If odor source is related to weather or operations abate the problem by taking appropriate adjustments to storage, process control, and facility improvements will be made to resolve the problem. Submit Odor Complaint Report to the Solano County Department of Resource Management within 24 hours of receiving the complaint outlining the odor source and steps being taken to abate the odors. Continue to monitor and take steps to abate source of odors (Air- 2).

f. To mitigate long term consistent odors, the LEA may require an odor abatement system to be employed. The system would consist of either a vapor phase counteractant system during sludge drying operations or the use of topical as an odor neutralizer during sludge spreading or harrowing operations. The vapor phase counteractant system would consist of an automated pumping system that delivers a high-pressure distribution hose that is equipped with misting nozzles. The system produces a fog downwind of the odor area that mixes with the odor and masks or counteracts its nuisance effects. A topical agent would consist of a potassium permanganate solution applied to wet sludge as topical odor neutralizer.

g. Alternately, the LEA may require that the receipt of the odor source be discontinued, or drying operations cease. In the event odor impacts continue, the LEA may require the existing, on-site source of the odor to be land filled and covered with soil. Upon odor remediation, the site may resume operations that have implemented odor remediation strategies to the acceptance of the LEA.

72. The landscaping plant palette for the landfill support facility shall not include any invasive exotic plants listed by the California Invasive Plant Council (Cal-IPC) in their "Exotic Pest Plants of Greatest Ecological Concern in California" including all A1, A1, B, or red alert listed species (Bio-1).

73. The Recology Hay Road Landfill's existing Load Checking Program shall be modified to include site surveillance and load inspection protocols to identify the presence of hazardous waste in the recyclables loading area waste

stream. All hazards shall be removed, stored in a contained area and disposed of at a qualified hazardous waste facility (Haz-1).

74. Recology Hay Road landfill shall ensure proper labeling, storage, handling, and use of hazardous materials at the landfill support facility in accordance with best management practices, including applicable California Fire Codes and the California Department of Industrial Relations (Cal-OSHA) pursuant to Title 8 CCR including ensuring that employees are properly trained in the use and handling of these hazardous materials and that each material is accompanied by a Material Safety Data Sheet. Recology shall ensure employees are trained on Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (8 CCR, Section 5192).). and the Occupational Safety and Health Administration's (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (8 CCR, Section 5192). Recology shall also comply with California Health and Safety Code, Chapters 6.5, 6.67, 6.95 and their associated regulations in the California Code of Regulations (CCR) that regulates the legal management and disposal hazardous materials and hazardous wastes. (Haz- 2a).

75. The following construction-related Best Management Practices (BMP's) shall be implemented as a condition of Solano County grading and building permits in order to minimize the potential negative effects to groundwater and site soils from accidental releases of hazardous materials (Haz-2b).

    a. The manufacturer's recommendations on use, storage and disposal of chemical products used in construction shall be strictly adhered to;

    b. Construction equipment and vehicle gas tanks shall not be overtopped during fueling;

    c. Grease and oils shall be properly contained and removed during routine maintenance of construction equipment;

    d. Discarded containers of fuels and other chemicals shall be properly disposed of; and accidental spills of construction-related hazardous materials shall be cleaned-up consistent with the Recology Hazardous Materials Management and Emergency Response Plans

76. Recology and JPO shall continue implementation of the existing bird deterrence program and BASH strategies. Bird deterrence measures shall be adjusted as warranted to address any increased bird activity at the site including the periodic use of lethal methods, such as a depredation approach where the remains of one bird is laid out each day as a deterrence. Bombs, whistles, or other screamer devices should be deferred when aircraft are overhead (Haz-3a).

Commented [A10]: no

Commented [A11]: Ok

77. Recology shall develop and implement a program for coordination among Recology, the County Department of Resource Management and Travis Air Force Base (TAFB) to exchange information on conditions associated with the presence of ambient bird population associated with Recology and to identify the process for developing and implementing bird control strategies to avoid or mitigate potential bird impact to TAFB and lands bordering Recology to the south. (Haz-3b).

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The program shall require each entity to assign a liaison and shall identify a method of formal contact among the participating entities. Written records of discussions and coordination efforts shall be prepared and kept on file.

a. Recology Hay Road Landfill shall employ the services of a qualified individual to perform the duties of "Bird Coordinator" for the Recology.

b. Recology Hay Road Landfill shall develop a log that will be used to document current conditions associated with bird activity within and adjacent to Recology.. A preliminary document shall be prepared for review by the County Department of Resource Management and TAFB and will be finalized by Recology Hay Road Landfill pending input from these entities. The document shall include:

   i. The project area (i.e., the boundaries of areas controlled by Recology and (TAFB) and its relationship to surrounding land uses.

   ii. Project area land uses that may attract birds or provide permanent and seasonal habitats.

   iii. General bird use characteristics of the project area.

   iv. Protocols for tracking bird species, behavior and occurrence within the project area.

c. Recology Hay Road Landfill shall develop and implement a Bird Control Program (BCP) that includes supplemental measures to be implemented dependent upon ambient bird behavior observed and reported by the County Department of Resource Management, TAFB, or Recology. At a minimum, the BCP shall include the following provision:

   i. Maintenance of the landfill active face to smallest practical size.

   ii. Protocols for coordination among Recology the County Department of Resource Management, and TAFB to

exchange information and conditions associated with the presence and nuisance of the ambient bird population associated with the Recology and to identify the process for developing bird control strategies as may be necessary;

iii. Protocols for establishing an ongoing monitoring and reporting program for use in identifying bird use activities and pest behavior;

iv. Protocols for developing and implementing strategies to address observed pest behavior; and,

v. Protocols for monitoring and reporting the implementation and effectiveness of control strategies. Such protocols should include input from TAFB aircrews using methods agreed to and approved by the TAFB liaison.

d. Recology Hay Road Landfill shall obtain falconry services of a qualified firm or individual to implement the BCP. Falconry services would be retained on the basis of BCP implementation requirements and may require fulltime (40 hours/week) falconry services with overtime on an as needed basis. Falconry services may not be necessary on a year-round basis.

Any request to change or discontinue falconry services once initiated must be with the concurrence of Travis AFB and Solano County Department of Resource Management, after appropriate coordination, and only after a successful test and trial period agreed to in advance by both Travis AFB and Solano County Department of Resource Management.

e. Recology Hay Road Landfill shall develop and distribute quarterly reports assessing the effectiveness of the BCP. These reports shall include data and observations compiled for the quarter, as well as any concerns from TAFB that may have been identified and reported. The Bird Coordinator shall produce these quarterly reports with concurrence of TAFB and forward them to the County Department of Resource Management. At a minimum, these reports shall include:

i. The adequacy of the adopted abatement measures;
ii. The appropriateness of the abatement measures; and,
iii. The need for new, modified, or different mitigation measures.

If substantive issues or suggestions are identified in any of the quarterly reports or otherwise identified through meetings and discussions with TAFB and/or the County through the coordination protocols, HRLF staff shall conduct focused studies of these subjects and develop additional control

strategies as necessary. These control strategies will be presented by the Bird Coordinator for consideration at a subsequent meeting with the County Department of Resource Management and TAFB. Any such additional control strategies shall be implemented as soon as practicable, pending concurrence by the County and TAFB.

78. To facilitate emergency response, the landfill support facility shall have a separate address from the existing buildings at the HRLF. The address shall be constructed of reflective material with numbering which is a minimum of four inches in height In addition, the landfill support facility shall be equipped with fire sprinklers, a fire pump, a fire hydrant, and a fire alarm system, or other fire suppression equipment as required by the Dixon Fire Department and the Solano County Fire Marshall (Haz 4-a).

79. The project sponsor shall review and update the facility's Hazardous Materials Management Plan and Emergency Response Plan as necessary to ensure that use of hazardous materials and materials potentially encountered as a result of the proposed project are adequately addressed (Haz 4-b).

80. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared, updated and implemented to reduce potential impacts to surface water quality through the construction of the project. The SWPPP must be prepared in accordance with RWQCB Phase II storm water regulations shall include the following components (Hydro-1):

    a. BMPs to address construction-related pollutants shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain. Designated fueling areas with containment systems for runoff would be created.

    b. An erosion control plan that may include, but not be limited to, a combination of temporary sediment basins, hydroseeding of unprotected erodible soils, temporary water bars and berms across roads and level building pad areas, silt fences, straw wattles, jute netting, and erosion control mats. Side casting of soil would be prohibited. Slash and other sources of organic material would be collected and directed into the existing composting facility.

    c. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.

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d. The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor and must include both dry and wet weather inspections. In addition, monitoring would be required during the construction period for pollutants that may be present in the runoff that are not visually detectable in runoff.

81. Implementation of Mitigation Measure Geo-1 shall assure that impacts to groundwater, soils, and surface water contamination associated with improper installation are avoided (Hydro-2).

82. The office portion of the landfill support facility maintenance building shall be constructed to attenuate exterior noise level by 30 dBA within the Travis AFB 75-80 dBA CNEL, reducing the interior noise level within associated enclosed employee spaces to 45 dBA. Submitted building plans shall depict attenuation measures where appropriate such as insulation, double window glazing and other measures, and shall include signature by a certified acoustician verifying conformance with interior CNEL standards (Noi-1).

In addition, noise shall be monitored to ensure working environments meet the Cal-OSHA standards for hearing protection within shops, office and other exterior and interior workplaces within the landfill support facility. Appropriate hearing protection will be provided consistent with a standard hearing protection program.

LANDFILL TO GAS ENERGY FACILITY:

83. The container shall be painted a neutral beige color in order to visually blend in to the surroundings.

84. All requirements of the Environmental Health Division shall be met, including, but not limited to:

a. Obtain an onsite sewage permit from Resource Management according to Solano County Ordinance Chapter 27 if a new restroom/sink is installed in the new building.

b. Update the hazardous material business plan for any new hazardous materials that may be stored or used for the project.

c. Submit an application to revise the solid waste permit/amendment to the Joint Technical Document.

d. Obtain an air quality permit to the satisfaction of the Yolo-Solano Air Quality Management District.

85. The permittee shall secure and abide by the conditions of a minor grading permit for the construction of the facility.

86. The permittee shall apply for secure and abide by the conditions of a Transportation Permit for any and all overweight or oversized loads.

87. In order to minimize the risk and exposure of people to flooding, prior to issuance of a building permit, the permittee shall demonstrate compliance with the County Code Flood Damage Protection regulations.

88. Prior to any construction or improvements taking place, a Building Permit application shall first be submitted as required by the California Building Code. "Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit".

89. All requirements of the Dixon Fire Protection District shall be met, including, but not limited to:

    a. Address must be posted at the street and visible from either direction of travel. The numbers must be of 6" high and mounted on a post/sign with contrasting background.

    b. The physical address must be on any plans submitted.

    c. The driveway shall be capable of supporting a 50,000-pound fire apparatus and it can be composed of compressed gravel.

    d. If the property is secured with a wall/fence with a gate, the gate shall be setback at least 30 feet from the road and if it is mechanically operated it shall have a KNOX keyway system installed.

90. The premises shall be maintained in a neat and orderly manner and kept free of accumulated debris and junk.

91. The permittee shall take such measures as may be necessary or as may be required by the County to prevent offensive noise, lighting, dust or other impacts, which constitute a hazard or nuisance to surrounding properties.

FSEIR 2020 ENVIRONMENTAL MITIGATION MEASURES:

92. 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:

Windblown Litter from the RHR Site:

a. Portable litter control fences shall be installed directly downwind of the working face during site operations.

b. 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.

c. The maximum size of the working face shall be limited to 200' x 75' or smaller.

d. 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.

e. Fencing along the site boundary of the landfill expansion area shall be high enough to contain litter from migrating offsite.

f. 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.

g. 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 negotiate the site access agreement with adjacent property owners and submit a copy of the executed agreement to the Department of Resource Management within 90 days of the approval of Land Use Permit U-11-09 Amendment No, 2.

Windblown Litter from RHR-Related Truck Trips:

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.

Litter Control:

i. 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:~~

ii. The facility operator shall reimburse the County 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.

iii. 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.

iv. On a weekly basis, or more frequently if needed, RHR shall check for and pick up litter along adjacent properties, and along Burke Lane 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. RHR shall comply with the executed litter agreement.

93. 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.

a. 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 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.

b. 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.

c. 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:

   i. meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer;

   ii. 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;

   iii. contain no fatty acids or functionalized fatty acid esters; and

   iv. 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).

94. 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 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.

95. 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.

96. Mitigation Measure 4.4-1a: Special-Status Plant Surveys

Prior to issuance of a grading permit for the lateral expansion (Triangle) and 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 2018). Surveys will be conducted not more than one or two seasons prior to project implementation. 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. Perennial shrub species (e.g., Carquinez goldenbrus) may be identified to genus (i.e., *Isocoma*) outside of the plants bloom period. If no specimens in the *Isocoma* genus are detected during the special-status plat survey, further surveys during the species' bloom period will not be necessary to determine presence.

[See p 4.4-19 of the Draft SEIR for Table 4.4-4, Normal Blooming Period for Special-Status Plants with Potential to Occur Within the Triangle]

97. 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.

98. 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 suitable locations within or outside of the campus, and preferably within Solano County. 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:

a. 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:

   i. plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and

   ii. 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.

99. Mitigation Measure 4.4-2a: California Tiger Salamander Avoidance and Compensatory Mitigation for Habitat Loss

A. 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.

a. 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.

b. A USFWS and CDFW-approved biologist will conduct a pre-construction survey of the project site no more than two weeks before commencement of project construction activities.

c. 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 and CDFW.

d. All suitable burrows directly impacted by construction will be hand excavated under the supervision of a qualified wildlife biologist. A small excavator or backhoe could be utilized to assist in burrow excavation, under the direction 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.

e. 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 and CDFW. 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.

f. 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) each day that the 72-hour National Weather Service forecast predicts a 40 percent chance or greater of precipitation or after rain events of a tenth of an inch or greater. Construction may commence once the biologist has confirmed that no California tiger salamander are in the work area.

g. 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.

h. 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.

i. 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.

j. A speed limit of 15 mph will be maintained on dirt roads.

k. 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.

l. 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.

m. 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 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.

n. The applicant shall secure any necessary take authorization prior to project construction through formal consultation with USFWS pursuant to Section 7 of the ESA and approval from CDFW and proper take authorization under CESA.

B. 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.

a. 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 and CDFW approved conservation bank, located within Solano County to the extent feasible. Compensation plans will be subject to review and approval by USFWS and CDFW. All compensation will be acquired or secured prior to the beginning of ground disturbance.

b. 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 on lands located within Solano County, to the extent feasible, 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 and CDFW including participation within an HCP permit area.

100. Mitigation Measure 4.4-2b: Protection of Giant Garter Snake

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.

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.

a. 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, CDFW, and USFWS within 10 days of the delineation.

b. 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.

c. All construction activity within giant garter snake aquatic and upland habitat in and around the site shall be conducted between May 1 and October 1, 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.

d. 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 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. Exclusionary fencing and high-visibility fencing will be made from material that will not cause entanglement (e.g., silt fencing and stakes with flagging and/or poly wire). 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.

e. 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 and CDFW 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.

f. 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.

g. 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.

h. 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 and CDFW-approved conservation bank. The selected conservation bank will be located within Solano County, if feasible (i.e., if applicable credits are available at conservation banks in Solano County).

i. Prior to construction, USFWS shall be consulted pursuant to Section 7 of the ESA. Approval from CDFW and proper take authorization under CESA shall be obtained. 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.

101. Mitigation Measure 4.4-2c: Vernal Pool Tadpole Shrimp and Vernal Pool Fairy Shrimp Habitat Compensation for Direct Effects

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.

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 (or a reduced distance if established in the BO for the project), and before any ground-disturbing activity within 250 feet of the habitat (or a reduced distance if established in the BO for the project).

a. Habitat Preservation: The applicant, in consultation with USFWS, shall compensate for direct effects of the project on potential habitat for vernal pool 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. The selected conservation bank will be located within Solano County if feasible (i.e., if applicable credits are available at conservation banks in Solano County). Compensation credits shall be purchased prior to any ground-disturbing activities.

b. Habitat Creation: The applicant shall compensate for the direct effects of the project on potential habitat for vernal pool 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. The selected conservation bank will be located within Solano County if feasible (i.e., if applicable credits are available at conservation banks in Solano County).

c. 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 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.

d. 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.

e. The applicant shall secure any necessary take authorization prior to project construction through consultation with USFWS pursuant to Section 7 of the ESA.

f. Documentation of habitat preservation, habitat creation, and take authorization shall be provided to the County following approval by USFWS.

102. Mitigation Measure 4.4-2d: Protection of Conservancy Fairy Shrimp Habitat From Indirect Effects

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.

a. 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.

b. The project site will be graded in a manner that prevents surface water flow from the project site into the playa pool.

c. 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.

103. Mitigation Measure 4.4-2e: Protection of Burrowing Owl

Prior to ground disturbance, grading, or vegetation removal activities for the lateral expansion (Triangle), the project applicant will implement the following measures:

a. 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 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.

b. 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.

c. 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:

    i. 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.

    ii. 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.

    iii. 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, located within Solano County, 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.

d. 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 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.

104. Mitigation Measure 4.4-2f: Special-Status and Other Nesting Bird Surveys and Avoidance.

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:

a. To minimize the potential for disturbance or loss of tricolored blackbird, norther 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.

b. Prior to removal of any vegetation or any ground disturbance between February 1 and September 15, a qualified biologist will conduct protocol-level surveys for Swainson's hawk nests within 0.5 mile of the project site and for black rail within suitable habitat. Protocol-level surveys for Swainson's hawks will follow the Swainson's Hawk Technology Advisory Committee's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Protocol-level surveys for Swainson's hawk and black rail may require multiple site visits; some more than 30 days prior to project implementation. Additionally, preconstruction surveys will be conducted within 500 feet of the project site for other nesting raptors, and 100 feet for all other birds. The surveys will be conducted no more than 7 days before construction commences.

c. If no active nests are found during focused surveys, no further action under this measure will be required.

d. If active nests are located during the protocol-level and 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 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 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.

105. 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:

a. 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.

b. 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.

c. 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.

106. 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:

a. 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 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.

b. 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.

c. 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.

107. 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.

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.

a. In the event of discovery, salvage of unearthed 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

b. 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

c. 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

d. 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

e. Transferal, for storage, of cataloged fossil remains to an appropriate repository

f. 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.

* *

I hereby certify that the foregoing resolution was adopted at the regular meeting of the Solano County Planning Commission on May 7, 2020, by the following vote:

AYES: Commissioners _____

NOES: Commissioners _____

EXCUSED: Commissioners _____

By: _____
Bill Emlen, Secretary

Commented [A17]: To be updated

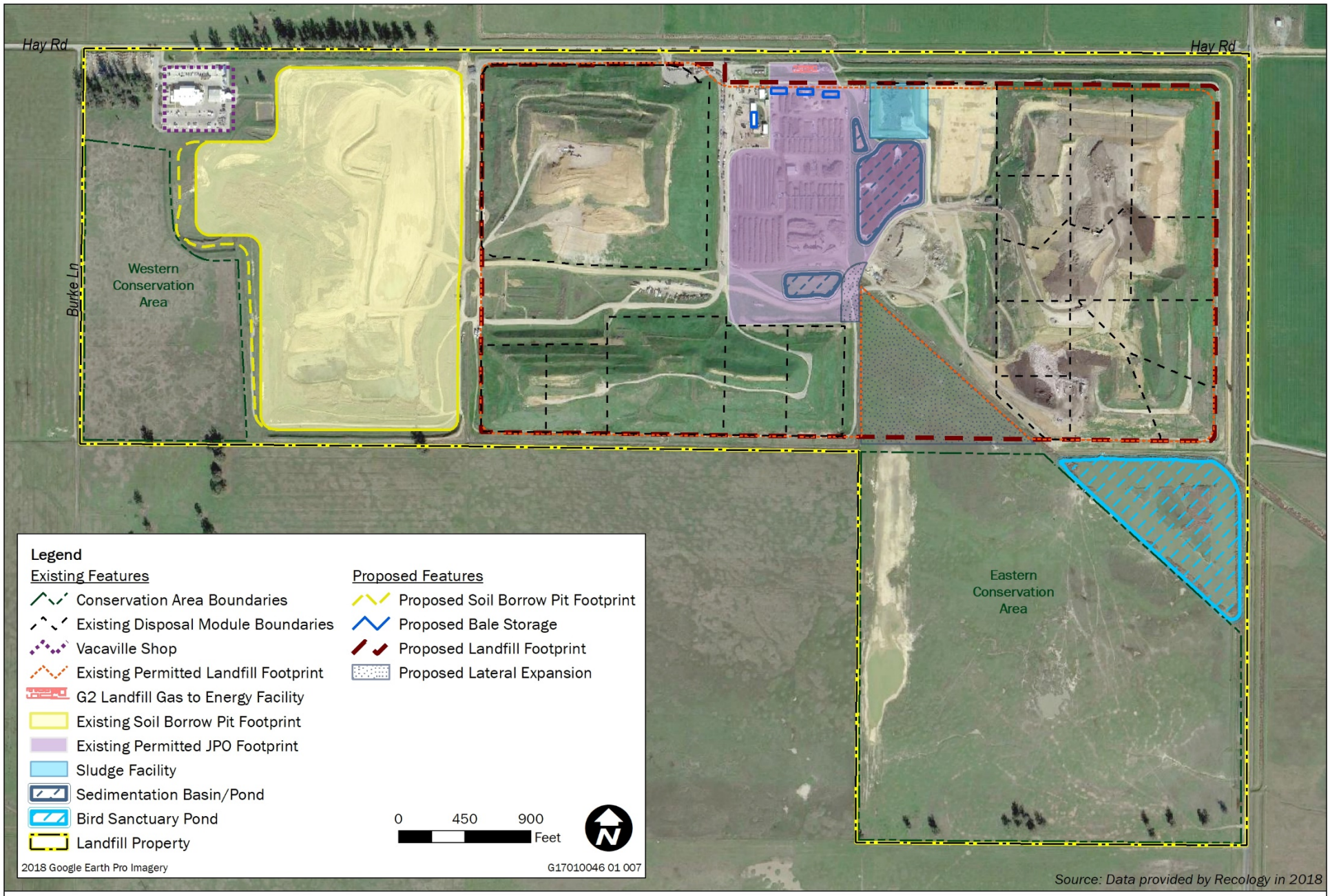

Figure 3-2 Recology Hay Road Landfill Site Plan

CEQA FINDINGS OF FACT

OF THE COUNTY OF SOLANO

for the

RECOLOGY HAY ROAD LANDFILL LAND USE PERMIT AMENDMENT NO. 2

May 8, 2020

I.
INTRODUCTION

Solano County (County), as lead agency, prepared a Subsequent Environmental Impact Report (SEIR) for the proposed amendments (Amendment No. 2) to the Recology Hay Road (RHR) Landfill Land Use Permit (LUP), hereafter referred to as the proposed project (project). The document consists of the December 2019 Draft SEIR and the April 2020 Final SEIR (State Clearinghouse No. 2018032031) (collectively referred to as the EIR). The EIR for the project presents an assessment of the reasonably foreseeable and potentially significant adverse environmental effects that may occur from construction and implementation of the project. These findings have been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and its implementing guidelines (State CEQA Guidelines) (California Code of Regulations [CCR] Title 14, Section 15000 et seq.). Solano County is the lead agency under CEQA and the Solano County Planning Commission is the decision-making authority for the project. The Planning Commission adopts these findings in that capacity.

II.
PROJECT DESCRIPTION

A. LOCATION

The RHR Landfill (project site) is located on a 640-acre property (property) at 6426 Hay Road, immediately west of State Route (SR) 113 and south of Hay Road, in the unincorporated area of Solano County. The site is approximately 5 miles southeast of the City of Vacaville and 8 miles south of the City of Dixon. The 256-acre permitted landfill disposal footprint is located within the larger 640-acre property. The RHR Landfill consists of three parcels, which are County Assessor's parcel numbers (APNs) 042-020-060, 042-020-280, and 042-020-020. The site is located in Section 2, Township 5 North, Range 1 East on the U.S. Geological Survey Dozier 7.5-minute quadrangle.

The property is bounded by Hay Road and irrigated row crop and pastureland uses to the north; irrigated pasture uses and Burke Ranch Conservation Preserve to the south and west; and SR 113 and irrigated row crop and pasture-land uses east of the project site. The nearest residential uses are located approximately 1 mile north of the project site.

B. BACKGROUND

The RHR Landfill has been operating at the site since 1964. RHR is an integrated resource recovery company that currently owns and operates the 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.[1] The Jepson Prairie Organics (JPO) Compost Facility is also located within the RHR property and serves San Francisco, surrounding Bay Area communities, and several municipalities within Solano County.[2] 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).[3] Under the current Land Use Permit U-11-09/Solid Waste Facility Permit 48-AA-0002, the 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.[4] 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.[5]

Included on top of the 256-acre permitted landfill is the JPO Compost Facility. The permitted footprint of JPO is 39 acres.[6] 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.[7] 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%).[8] 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.[9]

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[1] Central Valley Regional Water Quality Control Board. 2016 (April). *Central Valley Region Order R5-2016-0056: Waste Discharge Requirements for Recology Hay Road, DBA Jepson Prairie Organics Maintenance and Corrective ction, Solano County*. Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/solano/r5-2016-0056.pdf. Accessed April 19, 2018.

[2] Recology. n.d. Jepson Prairie Organics. Available: https://www.recology.com/recology-vacaville-solano/jepson-prairie-organics/. Accessed October 7, 2019.

[3] Recology. n.d. Jepson Prairie Organics. Available: https://www.recology.com/recology-vacaville-solano/jepson-prairie-organics/. Accessed October 7, 2019.

[4] Solano County. 2013 (July 9). Solid Waste Facility Permit 48-AA-002. Available: www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0002/Document/194927. Accessed April 17, 2018.

[5] Golder Associates, Inc. 2018 (May). *Joint Technical Document – Recology Hay Road Solano County, California.*

[6] California Department of Resources Recycling and Recovery. 2018. Solid Waste Facility Permit 48-AA-0083. Jepson Prairie Organics Composting Facility. Permit issued August 30, 2018.

[7] California Department of Resources Recycling and Recovery. 2018. Solid Waste Facility Permit 48-AA-0083. Jepson Prairie Organics Composting Facility. Permit issued August 30, 2018.

[8] Sullivan, Dan. 2011. *Web Extra: Food Waste Critical to San Francisco's High Diversion*. BioCycle.

[9] Central Valley Regional Water Quality Control Board. 2016 (April). *Central Valley Region Order R5-2016-0056: Waste Discharge Requirements for Recology Hay Road, DBA Jepson Prairie Organics Maintenance and Corrective Action, Solano County*. Available:

C. 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

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/solano/r5-2016-0056.pdf. Accessed April 19, 2018.

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.

D. PREVIOUS CEQA DOCUMENTATION

As disposal and diversion methods and needs have evolved since initial operation of the RHR Landfill, amendments to existing permits, including the currently proposed amendments to the landfill's LUP with the County, have necessitated environmental analysis pursuant to CEQA. RHR Landfill operations have been previously evaluated under CEQA in two environmental impact reports prepared in 1993 and 2005, one Initial Study/Negative Declaration (IS/ND) prepared in 2011, and three Initial Study/Mitigated Negative Declarations (IS/MNDs) prepared in 1995, 2001, and 2012. A summary of these documents is provided below. The setting discussion and summary of project impacts and mitigation measures included in the CEQA documents listed below are incorporated by reference into the SEIR, consistent with State CEQA Guidelines Section 15150.

1. 1993 EIR

In April 1993, the County certified the Final EIR (State Clearinghouse No. 92063112) for the B&J Landfill Master Development Plan,[10] in conjunction with Solano County's approval of Use Permit #U-91-28. The 1993 EIR included an evaluation of the following operational changes:

1. an overall expansion of landfill operations and development of the 640-acre project site,
2. a vertical expansion of the landfill to a maximum height of 150 feet above the natural ground surface (170 feet above msl),
3. a lateral expansion onto an adjacent 160-acre parcel,
4. creation of a soil borrow pit to provide soil for landfill cover,
5. relocation of the landfill entrance and new landfill entrance facilities,

[10] Brown and Caldwell Consultants. 1992 (December). *B&J Landfill Master Development Plan Draft Environmental Impact Report*, Volume 1- SCH 92063112.

6. and revised landfill operations,

7. increased landfill disposal capacity from 6.0 to 26.4 million cubic yards,

8. an increase in the average daily throughput to 780 tpd, and

9. modification to the landfill gas and treatment system to control additional landfill gas generation from the operational changes.

2. 1995 and 2001 IS/MNDs

Following the 1993 EIR, two IS/MNDs, issued in September 1995 (State Clearinghouse No. 1995093048) and March 2001 (State Clearinghouse No. 2001032035), were prepared to evaluate further revisions to the LUP at the RHR Landfill and were subsequently adopted by Solano County. The 1995 MND evaluated the following operational changes:

1. the addition of a composting facility for green waste and food waste,

2. the receipt and drying of sewage sludge,

3. a household hazardous waste acceptance facility,

4. a change in the landfill classification from Class III to Class II to accept designated waste, and

5. an increase in the peak tonnage of waste accepted (up to 2,400 tpd with an average of 1,200 tpd).

The 2001 MND evaluated the following changes at RHR Landfill:

1. changes in the landfill design and operations,

2. a change in the hours of operation,

3. the use of alternative daily cover materials, and

4. an increase in the permitted amount of friable asbestos received at the site.

3. 2005 Subsequent EIR

In March 2005, the County certified the Final SEIR (State Clearinghouse No. 2004032138) for the NorCal Waste Systems, Inc. Hay Road Landfill Project,[11] in conjunction with approval of further revisions to the use permit at that time. The 2005 SEIR included an evaluation of the following operational changes:

[11] EDAW. 2005 (March). *Response to Comments/Final Subsequent Environmental Impact Review for the Norcal Waste Systems, Inc. Hay Road Landfill Project*.

1. a landfill support facility, including a maintenance facility and corporation yard;

2. composting operation modifications;

3. addition of a recyclables loading area where both the public and collection vehicles deliver collected recyclables before transport to an offsite materials recovery facility;

4. a revised landfill final cover design meeting existing Central Valley Regional Water Quality Control Board (CVRWQCB) Waste Discharge Requirements (WDRs) and increasing the final permitted landfill height by 50 feet to the current 215 feet above msl; and

5. revision and update of the 1995 Solano County Use Permit covering the landfill operations.

4. 2011 IS/ND

In 2011, an IS/ND that evaluated the addition of a landfill-gas-to-energy facility at the RHR Landfill was adopted. The IS/ND evaluated the addition of a 7,500-square-foot facility with an internal combustion engine, adjacent to the existing landfill gas flare. The facility, upon completion, was estimated to provide up to 1.6 megawatts (MW) per year of renewable electricity supplies. Any excess landfill gas would be burned in the existing flare.

5. 2012 IS/MND

Finally, in October 2012, an IS/MND (State Clearinghouse No. 2004032138) that evaluated further revisions to the use permit at the RHR Landfill was adopted. The 2012 revisions included:

1. elimination of the landfill's average permitted tonnage limit;

2. the modification of the landfill's gas management system consistent with Yolo Solano Air Quality Management District (YSAQMD) Rule 3-4;

3. 12 additional onsite employees;

4. an upgrade of landfill equipment used in the disposal operations;

5. an increase in the landfill's active working face (i.e. the area where waste is deposited within the portion of the landfill actively being filled);

6. a reduction in the existing soil deficit at the site by using alternative daily cover (ex., C&D debris); and

7. implementation of odor management requirements.

E. PROJECT OBJECTIVES

As set forth in the Draft SEIR on page 3-6, the following project objectives have been identified for the project:

- 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
- to provide adequate soil cover for the landfill and avoid the import of soil.

Based on its own review of the EIR and other information and testimony received in connection with the project, the County finds these objectives to be acceptable and persuasive from a public policy standpoint. In choosing whether to approve the project and/or reject one or more alternatives, the County thus adopts these objectives, and accords them weight in considering the feasibility of alternatives set forth in the EIR. (See *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1507-1508; *Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal. App. 4th 704, 715 (*Sequoyah Hills*).)

F. DISCRETIONARY DECISIONS

As the CEQA lead agency, Solano County is responsible for considering the adequacy of the environmental analysis and determining whether the overall project should be approved. Specifically, the project applicant is requesting the following actions and planning entitlements from Solano County:

- certification of the SEIR,

- adoption of a mitigation monitoring and reporting program (MMRP) that includes all the mitigation measures identified in the Final SEIR,

- issuance of revisions to the LUP for the RHR Landfill.

III.
ENVIRONMENTAL REVIEW PROCESS

In accordance with CEQA (14 CCR Section 15082), Solano County issued a notice of preparation (NOP) on March 12, 2018 and issued a revised NOP on August 31, 2018. (References to the NOP hereafter refer to the revised NOP unless otherwise noted.) The County circulated the NOP to responsible and trustee agencies, organizations, and interested individuals to solicit comments on the proposed project. The County followed required procedures with regard to distribution of the appropriate notices and environmental documents to the State Clearinghouse. The NOP was received by the State Clearinghouse (State Clearinghouse No. 2018032031) and a 30-day public review period ended on October 2, 2018. Two public scoping meetings were conducted by the County on March 27, 2018 and September 25, 2018. The NOPs and all comments received on the NOPs are presented in Appendix A of the Draft SEIR. Concerns raised in response to the NOPs were considered during preparation of the Draft SEIR.

The SEIR includes an analysis of the following issue areas:

- Aesthetics
- Air Quality
- Archaeological, Historical, and Tribal Cultural Resources
- Biological Resources
- Energy
- Geology, Soils, Mineral, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation

(Draft SEIR, p. 1-5.)

The County published the Draft SEIR for public and agency review on December 10, 2019. A 45-day public review period was provided, ending on January 23, 2020.

Consistent with Section 15202 of the State CEQA Guidelines, a public hearing on the Draft SEIR was conducted on January 16, 2020, to provide an overview of the Draft SEIR and to invite public comments. During the public review period, the County received one comment letter from a federal agency, four letters from state agencies, and one letter from an organization. Those comments relevant to CEQA were addressed in compliance with the State CEQA Guidelines (Sections 15088, 15132). The Final SEIR was released on April 24, 2020 and was made available for review by commenting agencies, in accordance with CEQA requirements.

The Final SEIR includes: comments received on the Draft SEIR; responses to these comments; and revisions to the Draft SEIR, as necessary, in response to these comments or to amplify or clarify material in the Draft SEIR. The Draft and Final SEIR were made available for public review on the County's website at https://www.solanocounty.com/depts/rm/documents/eir/default.asp. As discussed in **Section XIV**, below, none of the changes to the Draft SEIR, or information added to the Draft SEIR, constitutes "significant new information" requiring recirculation of the Draft SEIR pursuant to PRC Section 21092.1 and State CEQA Guidelines Section 15088.5.

Together, the December 2019 Draft SEIR and the April 2020 Final SEIR constitute the Subsequent Environmental Impact Report (SEIR) for the project. The Planning Commission certified the SEIR on May 7, 2020.

IV.
RECORD OF PROCEEDINGS

In accordance with PRC Section 21167.6(e), the record of proceedings for the County's decision on the project includes the following documents:

- The NOP for the project and all other public notices issued by the County in conjunction with the project;
- All comments submitted by agencies or members of the public during the comment period on the NOP;
- The Draft SEIR for the project and all appendices;
- All comments submitted by agencies or members of the public during the comment period on the Draft SEIR;
- The Final SEIR for the project, including comments received on the Draft SEIR, responses to those comments, and appendices;
- Documents cited or referenced in the Draft SEIR and Final SEIR;
- The MMRP for the project;
- All findings and resolutions adopted by the Planning Commission in connection with the project and all documents cited or referred to therein;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the project prepared by the County, consultants to the County, or responsible or trustee agencies with respect to the County's compliance with the requirements of CEQA and with respect to the County's action on the project;
- All documents submitted to the County by other public agencies or members of the public in connection with the project, up through the close of the final public hearing;

- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the County in connection with the project;

- Any documentary or other evidence submitted to the County at such information sessions, public meetings, and public hearings;

- Any and all resolutions adopted by the County regarding the project, and all staff reports, analyses, and summaries related to the adoption of those resolutions;

- Matters of common knowledge to the County, including, but not limited to federal, state, and local laws and regulations;

- Any documents expressly cited in these findings, in addition to those cited above; and

- Any other materials required for the record of proceedings by PRC Section 21167.6(e).

The documents constituting the record of proceedings are available for review by responsible agencies and interested members of the public during normal business hours at the Solano County Department of Resource Management, Solano County Government Center (675 Texas Street, Suite 5500, Fairfield, CA 94533)

V.
CONSISTENCY WITH APPLICABLE PLANS

The Planning Commission finds that the project is consistent with the *Solano County General Plan*, the County's zoning and development policies, as well as other applicable plans, including the *Travis Air Force Base Land Use Plan*. The Commission agrees with, and is persuaded by, the reasoning set forth in the SEIR, including the introduction to Chapter 4, "Environmental Setting, Impacts, and Mitigation Measures," under the subheading, "Impact Issue Areas not Warranting Detailed Evaluation," regarding the project's consistency with applicable plans and policies. In making these findings, the Commission ratifies, adopts, and incorporates into this discussion, the reasoning and determinations of the SEIR relating to consistency with applicable plans and the goals and policies within those plans. The Commission has reviewed the project in relation to the *Solano County General Plan* and the County's zoning and development policies, and finds that the project, as proposed for approval, will be consistent with and in furtherance of said plans and policies.

VI.
FINDINGS REQUIRED UNDER CEQA

PRC Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The same statute provides that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." Section 21002 goes on to provide that "in the event [that] specific economic, social, or other

conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The mandate and principles announced in PRC Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. For each significant environmental effect identified in an EIR for a project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first such finding is that "changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR." The second permissible finding is that "such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding, and such changes have been adopted by such other agency or can and should be adopted by such other agency." The third potential finding is that "specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR." (StateCEQA Guidelines Section 15091.) PRC Section 21061.1 defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors." The State CEQA Guidelines Section 15364 adds another factor: "legal" considerations. (See *Citizens of Goleta Valley v. Bd. of Supervisors* [*Goleta II*] (1990) 52 Cal.3d 553, 565.)

The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.) Moreover, "'feasibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors." (*Ibid.*; see also *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1001 ("*CNPS*").)

For purposes of these findings, the term "avoid" refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less-than-significant level. In contrast, the term "substantially lessen" refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce that effect to a less-than-significant level. These interpretations appear to be verified by the holding in *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 519-521 ("*Laurel Hills*"), in which the Court of Appeal held that an agency had satisfied its obligation to substantially lessen or avoid significant effects by adopting numerous mitigation measures, not all of which rendered the significant impacts in question less than significant.

Although the State CEQA Guidelines Section 15091 requires only that approving agencies specify that a particular significant effect is "avoid[ed] *or* substantially lessen[ed]," these findings, for purposes of clarity, in each case will specify whether the effect in question has been reduced to a less-than-significant level, or has simply been substantially lessened but remains significant. Moreover, although Section 15091, read literally, does not require findings to address

environmental effects that an EIR identifies as merely "potentially significant," these findings will nevertheless fully account for all such effects identified in the SEIR.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency. (State CEQA Guidelines Section 15091(a), (b).)

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (StateCEQA Guidelines Sections 15093, 15043(b); see also PRC Section 21081(b).) The California Supreme Court has stated, "[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (*Goleta II*, *supra*, 52 Cal.3d at p. 576.)

The Planning Commission has adopted the first permissible finding, concluding that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the SEIR. As noted above, after the implementation of mitigation measures, all of the project's significant environmental impacts would be mitigated to less-than-significant levels. Thus, the County is not required to adopt a Statement of Overriding Considerations for the project.

VII.
LEGAL EFFECT OF FINDINGS

These findings constitute the County's best efforts to set forth the evidentiary and policy bases for its decision to approve the project in a manner consistent with the requirements of CEQA. To the extent that these findings conclude that various mitigation measures outlined in the SEIR are feasible and have not been modified, superseded or withdrawn, the County hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the Planning Commission adopts a resolution approving the project.

VIII.
MITIGATION MONITORING AND REPORTING PROGRAM

PRC Section 21081.6 (a)(1) requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." A MMRP has been prepared for the project, and is being approved by the Planning Commission by the same Resolution that has adopted these findings. The County will use the MMRP to track compliance with project mitigation measures. The MMRP provides a list of all adopted project

mitigation measures, identifies the parties responsible for implementing such measures, and identifies the timing for implementing each measure. The MMRP will remain available for public review during the compliance period. The MMRP is attached to and incorporated into the environmental document approval resolution and is approved in conjunction with certification of the EIR and adoption of these Findings of Fact.

IX.
SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The potential environmental impacts that would result from implementation of the project are summarized in Table 2-1 in the Executive Summary of the Draft SEIR, as updated by the revisions to the Draft SEIR set forth in the Final SEIR. In some cases, impacts that have been identified would be less than significant. In other instances, incorporation of the mitigation measures proposed in the Draft SEIR and Final SEIR would reduce the impacts to levels that are less than significant. Further and as noted in the Final SEIR, two cumulative impacts that were previously identified as significant and unavoidable are no longer considered applicable to CEQA analysis and have been removed. Following certification of an update to the StateCEQA Guidelines in December 2018, an apparent gap between PRC Section 21099 and CEQA Guidelines Section 15064.3 was created that removed consideration of level of service (LOS) as part of the CEQA Guidelines before implementing vehicle miles travelled (VMT) as the appropriate metric for evaluating transportation impacts. Many lead agencies, like Solano County, elected to continue evaluating transportation using Level of Service before July 1, 2020 due to the interrelationship between general plan goals and policies and CEQA. However, on December 18, 2019 and during public review of the Draft SEIR, the Third District Court of Appeal ruled in favor of the City of Sacramento's approval and adoption the City of Sacramento 2035 General Plan and certification of the Environmental Impact Report (EIR) for the City of Sacramento 2035 General Plan Update. The decision in the *Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609 is notable for its ruling on the applicability of State CEQA Guidelines Section 15064.3 as it relates to projects for which draft EIRs are published before July 1, 2020 (i.e., the VMT impact analysis opt-in date). The ruling issued by the Third District affirms that upon certification of the guidelines by the Secretary of the Natural Resources Agency (i.e., on December 28, 2018), automobile delay no longer constitutes a significant impact on the environment under CEQA and that it is optional for a lead agency to analyze transportation impacts using VMT until July 1, 2020, after which it becomes mandatory.
With respect to the RHR Land Use Permit Amendment No. 2 Draft SEIR, impacts and mitigation measures from the Draft SEIR associated with automobile delay are considered to be no longer applicable within the context of CEQA and have been removed from the Final SEIR.

Mitigation measures appear in the SEIR and the MMRP, and are listed in these Findings (see **Section XII**, below). The County has attempted to ensure that the measures set forth in each of these documents are consistent with one another. These measures may have been refined and clarified over time. It is possible that such revisions or clarifications have been made in one document, but not another. The Planning Commission finds that any such inconsistency is inadvertent. In the event of such inconsistency, the language of a measure in one document shall be applied in a manner that harmonizes the measure with the corresponding measure in other

documents, such that the most stringent version of the measure shall apply unless clearly modified via an errata.

The County's findings with respect to the project's significant and potentially significant effects and mitigation measures are set forth in **Section XII**, below. This section does not attempt to describe the full analysis of each environmental impact contained in the SEIR. Instead, the section provides a summary description of each impact, describes the applicable mitigation measures identified in SEIR and adopted by the Planning Commission, and states the Commissions's findings on the significance of each impact after imposition of the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the SEIR, and these findings hereby incorporate by reference the discussion and analysis in those documents supporting the SEIR's determinations regarding mitigation measures and the project's mitigation measures designed to address those impacts. In making these findings, the Commission ratifies, adopts, and incorporates into these findings the analysis and explanation in the SEIR, and ratifies, adopts, and incorporates in these findings the determinations and conclusions of the SEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

The Planning Commission has adopted all of the mitigation measures identified in these sections. To the extent any of the mitigation measures are within the jurisdiction of other agencies, the Commission finds those agencies can and should implement those measures within their jurisdiction and control.

X.
FINDINGS REGARDING RECIRCULATION OF THE DRAFT SEIR

The Planning Commission adopts the following findings with respect to whether to recirculate the Draft SEIR. Under Section 15088.5 of the State CEQA Guidelines, recirculation of an EIR is required when "significant new information" is added to the EIR after public notice is given of the availability of the Draft EIR for public review but prior to certification of the Final EIR. The term "information" can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

(State CEQA Guidelines Section 15088.5.)

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is "not intend[ed] to promote endless rounds of revision and recirculation of EIRs." (*Laurel Heights Improvement Assn. v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132.) "Recirculation was intended to be an exception, rather than the general rule." (*Ibid.*)

The Final SEIR also includes revisions to the text of the Draft SEIR (see Final SEIR, Chapter 4, "Revisions to the Draft EIR") As discussed in the Final SEIR, none of the information added to the Draft SEIR altered the significance conclusions. Rather, the new information amplified and clarified the information provided in the Draft SEIR. None of the revisions or updates to the Draft SEIR's analyses represents "significant new information" as that term is defined by the State CEQA Guidelines Section 15088.5(a).

The County finds that recirculation of the Draft SEIR is not required: (1) because the new information added to the EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR (State CEQA Guidelines Section 15088.5(b); and (2) because no "substantial adverse" impact would result from any of the revisions to the portions of the Draft EIR that were not recirculated (State CEQA Guidelines Section 15088.5(e)).

XI.
PROJECT ALTERNATIVES

A. BASIS FOR ALTERNATIVES FEASIBILITY AND ENVIRONMENTAL IMPACT ANALYSIS

CEQA mandates that every EIR evaluate a no project alternative, plus a reasonable range of potentially feasible alternatives to the project or its location that would avoid or substantially lessen the significant impacts of the project while still achieving most of the project objectives. (See State CEQA Guidelines Section 15126.6(a)(b).). The Planning Commission finds that the range of alternatives studied in the SEIR reflects a reasonable range of alternatives.

These findings consider the feasibility of each alternative analyzed in the SEIR. Under CEQA, "'(f)easible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (State CEQA Guidelines Section 15364.) As described above, the concept of feasibility permits agency decisionmakers to consider the extent to which an alternative is able to meet some or all of a project's objectives. In addition, the definition of feasibility encompasses desirability to the extent that an agency's determination of infeasibility represents a reasonable

balancing of competing economic, environmental, social, and technological factors. (See *CNPS*, *supra*, 177 Cal.App.4th 957, 1001.) An "alternative that 'is impractical or undesirable from a policy standpoint' may be rejected as infeasible." (*Ibid*.) Additionally, an alternative "'may be found infeasible on the ground it is inconsistent with the project objectives as long as the finding is supported by substantial evidence in the record." (*Ibid*.)

CEQA also contains the principle that a proposed project or feasible alternative may be rejected when there is another feasible alternative available that would lessen the identified potential impacts. "The required findings constitute the principal means chosen by the Legislature to enforce the state's declared policy 'that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects ... .'" (*City of Marina v. Board of Trustees of California State University* (2006) 39 Cal.4th 341, 350, quoting Public Resources Code § 21002.) Therefore, these findings consider that, among feasible alternatives, one feasible alternative may be considered superior, and therefore approved, if it would generate lesser adverse environmental impacts compared to other feasible alternatives.

B. DESCRIPTION OF ALTERNATIVES AND FEASIBILITY ASSESSMENT

Section 15126.6 of the CEQA Guidelines stipulates that EIRs must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." As noted above, the No Action Alternative would not meet any of the basic project objectives. Notwithstanding, CEQA requires EIRs to describe and evaluate a no project (or no action) alternative "to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project" (CEQA Guidelines Section 15126.6[e][1]). This purpose has been achieved in the SEIR.

The Draft SEIR identified and compared the significant environmental impacts of the alternatives listed below. In accordance with the State CEQA Guidelines Section 15126.6, the following alternatives were evaluated:

- Alternative 1: No Project;
- Alternative 2: Vertical Expansion Alternative; and
- Alternative 3: Recology Ostrom Road Expansion.

The feasibility of each of the alternatives other than the No Project alternative is addressed below. The Comparison of Environmental Impacts among the alternatives is addressed separately in Section C, below.

1. Alternative 1: No Project

Description

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.

2. Alternative 2: Vertical Expansion Alternative

Description

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 in the Draft SEIR). This alternative would result in no lateral expansion of the landfill into the Triangle and no increase to existing tonnage limit of 2,400 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 cubic yards 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

Finding of Feasibility/Infeasibility

No evidence was found during the SEIR analysis to indicate that economic, legal, social, technological, or other considerations would make this alternative infeasible. Therefore, the Planning Commission determines that Alternative 2 is feasible, meaning that it is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

3. Alternative 3: Recology Ostrom Road Expansion

Description

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.[12] The facility's maximum permitted capacity is 43,467,231 cubic yards and maximum

[12] California Regional Water Quality Control Board, Central Valley Region. 2018. Order R5-2018-0007, Waste Discharge Requirements for Recology Ostrom Road. Available:

permitted throughput is 3,000 tons per day.[13] With a remaining capacity of 24,395,000 tons as of June 2016, ROR Landfill is estimated to reach capacity by 2102.[14] 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 (see Table 4.11-6 in Section 4.11, "Transportation," of the Draft SEIR) 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.

Finding of Feasibility/Infeasibility

No evidence was found during the SEIR analysis to indicate that economic, legal, social, technological, or other considerations would make this alternative infeasible. Therefore, the Planning Commission determines that Alternative 3 is feasible, meaning that it is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

C. COMPARISON OF ENVIRONMENTAL IMPACTS

As described in the previous section, Alternative 1 would not attain any of the basic project objectives. The following section, therefore, focuses on the significant environmental effects of the two feasible action alternatives to determine which alternative (among Alternatives 2 and 3) would be most effective in reducing environmental effects. This is similar to the identification of the environmentally superior alternative as already conducted in the Draft SEIR (see Section 6.1.1, "Environmentally Superior Alternative," therein).

Table 6-2 in Chapter 6, "Alternatives," of the Draft SEIR identifies the environmental impacts of the proposed project and provides a tabular comparison of the alternatives in contrast to the proposed project.

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https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/yuba/r5-2018-0007.pdf. Accessed August 21, 2019. Page 2.

[13] California Department of Resources Recycling and Recovery. 2007. Solid Waste Information System: Facility Detail. Recology Ostrom Road LF Inc. (58-AA-0011). Available: https://www2.calrecycle.ca.gov/swfacilities/Directory/58-AA-0011. Accessed August 21, 2019.

[14] California Regional Water Quality Control Board, Central Valley Region. 2018. Order R5-2018-0007, Waste Discharge Requirements for Recology Ostrom Road. Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/yuba/r5-2018-0007.pdf. Accessed August 21, 2019. Page 2.

As described above, Alternative 3 would involve expansion of the existing ROR Landfill in Yolo County instead of at the RHR Landfill in Solano County. In general, the same types of impacts would be generated, though they would occur at a different location. Specifically, and as shown in Table 6-2, Alternative 3 would result in less impacts for geology, soils, mineral, and paleontological resources compared with the proposed project because no paleontological resources have been previously identified in Yolo County. Alternative 3 would have similar impacts for aesthetics; archaeological, historic, and tribal cultural resources; biological resources; hazards and hazardous materials; hydrology and water quality; and noise due to the similar nature of expanding an existing landfill. Finally, Alternative 3 would have greater impacts for air quality and greenhouse gas emissions; energy; and transportation due to the need to transport waste from RHR Landfill customers (i.e., Solano County, San Francisco Bay Area, and Sacramento Valley) to the ROR Landfill in Yolo County; this greater distance would result in additional operational emissions related to truck trips, greater fuel consumption from operations, and new or exacerbated localized traffic impacts near the ROR Landfill. In summary, 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 the ROR Landfill. With respect to objectives, this alternative would allow for the continued operation of the existing landfill within existing permit limits but would not achieve any of the project objectives related to operational efficiencies that would occur with implementation of the proposed project.

As shown in Table 6-2, Alternative 2 would result in lesser impacts in all impact areas except for aesthetics compared to the project, primarily due to less land disturbance. Alternative 2 would have greater aesthetic impacts due to the increased visibility and height of the landfill. Regarding transportation impacts, Alternative 2 would avoid the considerable contribution to significant and unavoidable cumulative intersection (i.e., SR 113/Midway Road and SR 12/SR 113) and roadway segment (i.e., Midway Road between I-80 and Porter Road) operational impacts in the vicinity of the RHR Landfill associated with the project. However, 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. 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.

D. REJECTION OF ALTERNATIVES 1, 2, AND 3; AND APPROVAL OF PROPOSED PROJECT

As described above, the No Project Alternative would not attain any project objectives. Also as described above, although Alternatives 2 and 3 were each determined to be feasible and would each achieve some or all of the project objectives, the Planning Commission rejects Alternatives 2 and 3 from further consideration because Alternative 3 would result in greater environmental effects than the proposed project and Alternative 2 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 (see Section C, above, for further details).

After thoroughly considering the project objectives, issues, alternatives, and analyses presented in the SEIR, including public and agency comments, the Planning Commission determines to approve the proposed project as the environmentally superior alternative. The project, with incorporation of the required mitigation measures, would reduce potential environmental impacts in comparison to the other action alternatives. In addition, having reviewed the project objectives, the Commission finds that the project satisfies all of the project objectives.

XII.
FINDINGS REGARDING IMPACTS THAT ARE NOT SIGNIFICANT OR THAT CAN BE MITIGATED BELOW A LEVEL OF SIGNIFICANCE

SECTION 4.1: AESTHETICS

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

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:

- Windblown Litter from the RHR Site:

  - 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.

  - 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 negotiate the site access agreement with adjacent property owners and submit a copy of the executed agreement to the Department of Resource Management within 90 days of the approval of Land Use Permit U-11-09 Amendment No, 2.

- Windblown Litter from RHR-Related Truck Trips:

  - 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:

  - The facility operator shall reimburse the County 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 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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measure 4.1-1, which is a continuation of existing litter control measures from the RHR landfill's existing LUP (U-11-09), measures provided in Chapter 9 of the 1993 EIR (p. 9-17), and Mitigation Measure 1 from the RHR Landfill's 2012 IS/MND, would reduce potentially significant impacts related to long-term adverse changes in visual character because the potential for an increase in scattering of windblown litter onto adjacent parcels and roads would be reduced with implementation of required litter control measures. In addition, the Road Damage and Fee Agreement is updated regularly and will continue to be implemented. With implementation of Mitigation Measure 4.1-1, this impact would be reduced to a less-than-significant level.

Impact 4.1-3: Potential to Substantially Damage or Change Views from Any Scenic Resources Within a Designated Scenic Corridor. 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.2: AIR QUALITY

Impact 4.2-1: Construction-Related Emissions of Criteria Air Pollutants and Precursors. Project construction would generate emissions of reactive organic gases (ROG), oxides of nitrogen (NO_X), respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}), and fine particulate matter with aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$) 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 PM_{10} that would exceed Yolo-Solano Air Quality Management District (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 the Sacramento Valley Air Basin (SVAB) with respect to the national ambient air quality standards (NAAQS)

and California ambient air quality standards (CAAQS) for ozone, the CAAQS for PM_{10}, 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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 San Francisco Bay Area Air Basin (SFBAAB) that exceed Bay Area Air Quality Management District (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.

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.

- **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 with the California Air Resources Board's (CARB) 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.

- **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:

  - 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.[15]

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measure 4.2-2 would ensure that the project-related increase in truck-generated emissions of NO_X in the SFBAAB would not exceed BAAQMD's recommended threshold of 54 lb/day or 10 tons/year. This could be achieved through implementation of one or more of the options (i.e., Option A, B,

[15] Sacramento Metropolitan Air Quality Management District. 2015 (May). *LUTRANews, Volume 9, Issue 2*. Page 3.

and/or C) listed under Mitigation Measure 4.2-2. With implementation of the mitigation measure, this impact would be reduced to a less-than-significant level.

Impact 4.2-3: Exposure of Offsite Sensitive Receptors to Toxic Air Contaminants. Emissions of toxic air contaminants (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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.3: ARCHAEOLOGICAL, HISTORICAL, 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 subsurface unique archaeological resources. This would be a potentially significant impact.

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 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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

The certified 1993 EIR for the landfill included similar mitigation (Recommendation 11.a.) to halt construction activities in the event of discover. Mitigation Measure 4.3-1 would replace the previously adopted mitigation measure. Implementation of Mitigation Measure 4.3-1 would reduce impacts associated with archaeological resources to a less-than-significant level because it would require the performance of feasible, professionally accepted, and legally compliant procedures for the discovery of any previously undocumented archaeological resources.

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.

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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measure 4.3-2 would reduce impacts to a less-than-significant level by requiring pre-construction training for construction personnel and ensuring that proper care and protocol of potentially undiscovered tribal cultural resources be taken.

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.4: BIOLOGICAL RESOURCES

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.

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 in the Draft SEIR and MMRP), 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.[16] Surveys will be conducted not more than one or two seasons prior to project implementation. 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. Perennial shrub species (e.g., Carquinez goldenbush) may be identified to genus (i.e., *Isocoma*) outside of the plants bloom period. If no specimens in the *Isocoma* genus are detected during the special-status plant survey, further surveys during the species' bloom period will not be necessary to determine presence.

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.

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 suitable locations within the site or offsite locations, preferably in Solano County. 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:

- 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:
    - 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.

If offsite mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as

[16] California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Accessed February 18, 2020.

those listed above and other details, as appropriate to target the preservation of long term viable populations.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measures 4.4-1a through 4.4-1c would reduce significant impacts on special-status plants to a less-than-significant level because these measures would require identification and avoidance of special-status plants or provide compensation for loss of special-status plants through enhancement of existing populations, creation and management of offsite populations, conservation easements, or other appropriate measures.

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.

Mitigation Measure 4.4-2a: California Tiger Salamander Avoidance and Compensatory Mitigation for Habitat Loss. Prior to issuance of a grading permit for the lateral expansion (Triangle), 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.

- 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 and CDFW-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 and CDFW.

- All suitable burrows directly impacted by construction will be hand excavated under the supervision of a qualified wildlife biologist. A small excavator or backhoe could be utilized to assist in burrow excavation, under the direction 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.

- 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 and CDFW. 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) each day that the 72-hour National Weather Service forecast predicts a 40 percent chance or greater of precipitation or after rain events of a tenth of an inch or greater. 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 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.

- The applicant shall secure any necessary take authorization prior to project construction through formal consultation with USFWS pursuant to Section 7 of the ESA and approval from CDFW and proper take authorization under CESA.

Prior to issuance of a grading permit of the lateral expansion (Triangle) and 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.

- 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 and CDFW-approved conservation bank. The conservation bank will be located within Solano County, if feasible (i.e., if applicable credits are available at conservation banks in Solano County). Compensation plans will be subject to review and approval by USFWS and CDFW. All compensation will be acquired or secured prior to the beginning of ground disturbance

- In-kind habitat compensation in Solano County 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 on lands located within Solano County, to the extent feasible, 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 and CDFW-approved conservation bank; 3) restore habitat to support the Central California tiger salamander; or 4) other method as determined by USFWS and CDFW including participation within a HCP permit area.

Mitigation Measure 4.4-2b: Protection of Giant Garter Snake. 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.

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.

- 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, CDFW, and USFWS 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 October 1, 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 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. Exclusionary fencing and high-visibility fencing will be made from material that will not cause entanglement (e.g., silt fencing and stakes with flagging and/or poly wire). 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.

- 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 and CDFW 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.

- 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. The selected conservation bank will be located within Solano County, if feasible (i.e., if applicable credits are available at conservation banks in Solano County).

- Prior to construction, USFWS shall be consulted pursuant to Section 7 of the ESA. Approval from CDFW and proper take authorization under CESA shall be obtained. 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." [17] 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.

Mitigation Measure 4.4-2c: Vernal Pool Tadpole Shrimp and Vernal Pool Fairy Shrimp Habitat Compensation for Direct Effects. 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.

The following mitigation shall occur before the approval of any grading or 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.

- Habitat Preservation: The applicant, in consultation with USFWS, shall compensate for direct effects of the project on potential habitat for vernal pool 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. The selected conservation bank will be located within Solano County if feasible (i.e., if applicable credits are available at conservation

[17] USFWS. 1997 (November). *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.*

banks in Solano County). 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, and vernal pool tadpole shrimp at a ratio of 1:1, by purchasing vernal pool creation credits from a USFWS-approved conservation bank. The selected conservation bank will be located within Solano County if feasible (i.e., if applicable credits are available at conservation banks in Solano County).

- 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 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.

- 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.

Mitigation Measure 4.4-2d: Protection of Conservancy Fairy Shrimp Habitat From Indirect Effects. 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.

- 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.

Mitigation Measure 4.4-2e: Protection of Burrowing Owl. Prior to ground disturbance, grading, or vegetation removal activities for the lateral expansion (Triangle), the project applicant will implement the following measures:

- 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 *Staff Report on Burrowing Owl Mitigation*.[18]

- 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.[19] 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.

- 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)

[18] California Department of Fish and Wildlife. 2012. *Staff Report on Burrowing Owl Mitigation*. Sacramento, CA.
[19] California Department of Fish and Wildlife. 2012. *Staff Report on Burrowing Owl Mitigation*. Sacramento, CA.

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:

- 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. The conservation bank will be located within Solano County, if feasible (i.e., if applicable credits are available at conservation banks in Solano County).

- 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 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.

Mitigation Measure 4.4-2f: Special-status and Other Nesting Bird Surveys and Avoidance. Prior to issuance of a grading permit for the lateral expansion (Triangle) or any ground disturbances, the applicant will implement the following measures to reduce impacts on special-status bird species:

- 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 16-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 September 15, a qualified biologist will conduct protocol-level surveys for Swainson's hawk nests within 0.5 mile of the project site and for black rail within suitable habitat. Protocol-level surveys for Swainson's hawks will follow the Swainson's Hawk Technical Advisory Committee's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Protocol-level surveys for Swainson's hawk and black rail may require multiple site visits; some more than 30 days prior to project implementation. Additionally, preconstruction surveys will be conducted within 500 feet of the project site for other nesting raptors, and 100 feet for all other birds. The surveys will be conducted no more than 7 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 protocol-level and 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 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 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.

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:

- 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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measure 4.4-2a would reduce impacts on California tiger salamander to a less-than-significant level because California tiger salamanders and their habitat would be avoided and protected from construction activities, and the project applicant would compensate for loss of suitable occupied habitat because of construction activities.

Implementation of Mitigation Measure 4.4-2b would reduce impacts on giant garter snake to a less-than-significant level because giant garter snakes and habitat would be avoided and protected from construction activities, and the project applicant would compensate for loss of suitable occupied habitat because of construction activities.

Implementation of Mitigation Measure 4.4-2c would reduce significant impacts on vernal pool fairy shrimp, and vernal pool tadpole shrimp and suitable habitat to a less-than-significant level because it would offset the impact through preserving vernal pool habitat at a ratio of 2:1 and the creation of vernal pool habitat at a ratio of 1:1 within a USFWS-approved mitigation bank or onsite habitat enhancement and protection subject to USFWS approval.

Implementation of Mitigation Measure 4.4-2d would reduce significant impacts on conservancy fairy shrimp habitat to a less-than-significant level because it would prevent indirect effects to suitable habitat for this species within the playa pool by preventing sediment discharge from the project site.

Implementation of Mitigation Measure 4.4-2e would reduce potential impacts on burrowing owl to a less-than-significant level because burrowing owls would be avoided and protected from construction activities, or the project applicant would compensate for project-related loss of suitable occupied habitat.

Implementation of Mitigation Measure 4.4-2f would minimize impacts on nesting special-status birds, raptors, and other migratory birds by requiring pre-construction surveys and protection of active nests within and adjacent to the project site. Implementation of Mitigation Measure 4.4-2g would reduce impacts to Swainson's hawk foraging habitat by requiring compensation for habitat loss. With implementation of these mitigation measures and for the aforementioned reasons, impacts would be less than significant.

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.

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:

- 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.[20] This delineation shall be submitted to and verified by USACE. If, based on the verified delineation, it 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.

- 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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measure 4.4-3 would reduce impacts to wetlands, other waters of the United States, and waters of the state to a less-than-significant level because implementation of the measure would result in no net loss of functions

[20] ICF. 2017 (June). *Recology Hay Road Facility Aquatic Resources Delineation Report for the "Triangle Parcel."* Prepared for Recology, San Francisco, CA.

and acreage of wetlands, vernal pools, and other waters through implementation of USACE mitigation guidelines.

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

Mitigation Measures: 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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of 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 would result in consistency with the Solano County General Plan. Therefore, no resulting conflicts would occur and this impact would be less than significant.

SECTION 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.6: GEOLOGY, SOILS, MINERAL, AND PALEONTOLOGICAL RESOURCES

Impact 4.6-1: 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Impact 4.6-2: Destruction of a Unique Paleontological Resource. Portions of the 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.

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.

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.

- In the event of discovery, salvage of unearthed 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.

FINDING

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the - SEIR. (PRC Section 21081(a)(1); State CEQA Guidelines Section 15091(a)(1).) The effect as mitigated will be less than significant.

Implementation of Mitigation Measure 4.6-1 would reduce significant impacts on previously-unknown paleontological resources to a less-than-significant level because construction workers would be alerted to the possibility of encountering paleontological resources and, if resources were encountered, fossil specimens would be appropriately recorded and treated, including potential curation.

SECTION 4.7: GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Impact 4.7-1: Generation of Greenhouse Gas Emissions and Consistency with GHG Reduction Targets/Plan. 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 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.8: HAZARDS AND HAZARDOUS MATERIALS

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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 6,000cubic 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Impact 4.8-4: Exposure of People and the Environment to Hazards Related to LFG. The RHR Landfill is located approximately four miles northeast of the landfill and within the Travis Air Force Base (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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.9: HYDROLOGY AND WATER QUALITY

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 stormwater pollution prevention plan (SWPPP) and associated best management practices (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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Impact 4.9-2: Violation of Water Quality Standards or Waste Discharge Requirements Related to Construction Activities. 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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 CVRWQCB, 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.10: NOISE

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

SECTION 4.11: TRANSPORTATION

Impact 4.11-1: 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.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

CHAPTER 5: CUMULATIVE IMPACTS

Aesthetics: With project-specific mitigation, the project would implement litter control measures that would minimize the potential for additional windblown litter resulting from project implementation. The proposed project, in combination with cumulative development, would not make a considerable contribution to skyglow in the project vicinity because lighting currently exists onsite and, with the exception of occasional portable nighttime lighting use that is consistent with the landfill's light control program, no additional sources of lighting or glare are included as part of the project. While the proposed project would result in changes in the immediate viewshed, there would be no significant contribution to cumulative long-distance views. Therefore, the project would not result in a considerable contribution to a significant cumulative visual resources impact, and the impact would be less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Air Quality (Short-Term Construction-Related Impacts): Emissions of ROG, NO_X, and PM_{10} generated during construction of the project would be less than YSAQMD's applicable mass emission thresholds and, therefore, the contribution by project construction to the nonattainment condition would not be cumulatively considerable. Therefore, the project would result in a less-than-significant cumulative short-term construction-related emissions impact.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Air Quality (Long-Term Operational Impacts): With project-specific mitigation, the project would generate emissions that are less than YSAQMD and BAAQMD thresholds for emissions from an individual project, which were established to reach attainment with air quality standards in the SVAB and SFBAAB, respectively. The project's long-term operational emissions would not considerably contribute emissions which would exceed applicable air quality standards. Therefore, operational emissions generated by the project would result in a less-than-significant cumulative air quality impact.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Archaeological, Historic, and Tribal Cultural Resources: Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California PRC Sections 5097, 21080.3.2, and 21084.3 (a), as well as implementation of Mitigation Measures 4.3-1 and 4.3-2, would ensure that treatment and disposition of unique archaeological resources are handled by a professional archaeologist, qualified under the Secretary of the Interior's Professional Qualification Standards, and tribal cultural resources, including human remains, occurs in a manner consistent with the California Native American Heritage Commission guidance. As a result, the project's contribution to cumulative impacts would not be cumulatively considerable. Therefore, cumulative impacts related to archaeological and tribal cultural resources are considered less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Biological Resources: The proposed project could disturb areas that include special-status plant species, vernal pools, and habitat for special-status species, which are considered significant impacts without mitigation. However, with implementation of Mitigation Measures 4.4-1a through 4.4-1c, 4.4-2a through 4.4-2g, and 4.4-3, as described in Section 4.4, "Biological Resources" of this SEIR, the project's contribution to these impacts would be reduced to a less-than-significant level. Therefore, while the overall cumulative condition is adverse, the project's contribution to cumulative biological resource impacts would not be considerable, and the project would have a less-than-significant cumulative impact on biological resources.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Energy: The project's contribution to cumulative energy demand impacts would not be cumulatively considerable. Therefore, no mitigation measures are necessary to reduce the project's contribution to cumulative impacts to energy. The project would have a less-than-significant cumulative impact on energy.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Geology, Soils, Minerals, and Paleontological Resources: Due to the site-specific nature of geology, soils, and paleontological impacts and necessary compliance with uniform site development standards, construction standards, and County standards, as well as implementation of Mitigation Measure 4.6-1, the proposed project would not result in a considerable contribution to any cumulative impact related to geology, soils, and paleontological resources; the cumulative impact of the project would be less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Greenhouse Gas Emissions: The analysis under Impact 4.7-1 concludes that the level of GHG emissions associated with implementation of the project would not be substantial or conflict with the state's ability to meet its statewide GHG targets and, therefore, would not be cumulatively considerable. The impact would be less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Hazards and Hazardous Materials: Through continued implementation of practices and procedures at the existing landfill, the proposed project would not result in a considerable contribution to a cumulative impact related to hazards or hazardous materials. Cumulative impacts related to hazards and hazardous materials would be less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Hydrology and Water Quality: Because of the hydrologically-isolated nature of the existing landfill and the control and monitoring systems that would be expanded as part of the proposed project, construction and operation of the proposed project would not represent a substantial contribution to off-site hydrology and water quality conditions and would not be cumulatively considerable such that a new significant cumulative impact would occur. This would be a less-than-significant cumulative impact.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Noise: Because the incremental contributions of the proposed project during construction and operation is expected to be similar to the existing noise environment and distance to receptors from landfill-related noise sources, the project would not have a cumulatively considerable contribution to any cumulative impact related to noise; therefore, the cumulative impact would be less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

Transportation: Through continued compliance with the Road and Litter Agreement between Recology and Solano County, the proposed project would not result in a considerable contribution to a cumulative impact related to damage to local roadways. Cumulative impacts related to roadway damage would be less than significant.

FINDING

Under CEQA, no mitigation measures are required for impacts that are less than significant. (PRC Section 21002; State CEQA Guidelines Sections 15126.4(a)(3), 15091.)

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RECOLOGY HAY ROAD LANDFILL LAND USE PERMIT AMENDMENT NO. 2 PROJECT MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.), Solano County prepared a Subsequent Environmental Impact Report (SEIR) for the proposed Recology Hay Road (RHR) Landfill Land Use Permit Amendment No. 2 Project that identified potentially significant impacts related to: aesthetics, air quality, cultural resources, biological resources, and paleontological resources. The SEIR also identifies mitigation measures that would reduce the impacts to less-than-significant levels or that would eliminate these impacts all together.

CEQA and the State CEQA Guidelines (PRC Section 21081.6 and CEQA Guidelines Sections 15091[d] and 15097, respectively) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required because the SEIR identifies potential significant adverse impacts related to the project implementation, and mitigation measures have been identified to reduce those impacts. Adoption of the MMRP would occur along with approval of the project.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner prior to implementation of the proposed ordinance. The attached table has been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies the impact, mitigation measures (as amended through the Final SEIR), monitoring responsibility, mitigation timing, and provides space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the SEIR. Mitigation measures that are referenced more than once in the Draft SEIR are not duplicated in the MMRP table.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, Solano County Planning Services Division of the Department of Resource Management (Solano County) is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure, and for demonstrating that the action has been successfully completed. Solano County, at its discretion, may delegate implementation actions or portions thereof to a licensed contractor or other designated agent, but it remains ultimately responsible for implementation.

As required by Section 21081.6 of the Public Resources Code, Solano County or its designee is the custodian of documents and other material which constitutes the record of proceedings upon which the action on the project was based.

Inquiries should be directed to:

Solano County
Department of Resource Management
Attn: Nedzlene Ferrario, Senior Planner
675 Texas Street, Suite 5500
Fairfield, CA 94533
E-mail: NNFerrario@SolanoCounty.com

Solano County is responsible for overall administration of the MMRP and for verifying that staff members, Recology, and/or the construction contractor have completed the necessary actions for each measure.

Solano County is responsible for overall administration of the MRRP and for verifying that County staff members and/or the construction contractor has completed the necessary actions for each measure. The County may designate a project manager to oversee implementation of the MMRP. Duties of the project manager include the following:

- ensure routine inspections of the construction site are conducted by appropriate County staff; check plans, reports, and other documents required by the MMRP; and conduct report activities;
- serve as a liaison between the County and the contractor or project applicant regarding mitigation monitoring issues;
- complete forms and maintain reports and other records and documents generated for the MMRP; and
- coordinate and ensure that corrective actions or enforcement measures are taken, if necessary.

The responsible party for implementation of each item will identify the staff members responsible for coordinating with the County on the MMRP.

REPORTING

Solano County shall document and describe compliance with the required mitigation measures either within the attached table or separate monitoring documentation.

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP table are described below.

- Mitigation Measure – Provides the verbatim text of the adopted mitigation measure.
- Timing – Identifies the time frame in which the mitigation will be implemented.
- Implementing Party/Agency – Identifies the party responsible for implementation.
- Enforcement/Monitoring Party/Agency – Identifies the party responsible for enforcing compliance with the requirements of the mitigation measure.
- Monitoring Frequency – Identifies the frequency of monitoring of mitigation measure implementation to be undertaken by the enforcement/monitoring party/agency.
- Dated Signature for Verification of Compliance – Provides space for the person (either project manager or his/her designee) responsible for verifying compliance with the requirements of the mitigation measure to sign off on such compliance.

RHR Landfill Land Use Permit Amendment No. 2 Project - Mitigation Monitoring and Reporting Program

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
4.1 Aesthetics					
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: Windblown Litter from the RHR Site: ▪ 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. ▪ 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 comply with the executed ~~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: ▪ 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	RHR to continue to comply with executed site access agreements with adjacent property owners; litter management plan; and litter reimbursement agreements	Solano County Planning Services Division of the Department of Resource Management (Solano County) and RHR Compliance Officer	Solano County and Solano County Local Enforcement Agency (LEA)	Litter checks and pick-up on a weekly basis or more frequently, if needed Notifications from Solano County regarding litter requires response and removal from RHR within twenty-four (24) hours	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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: ▪ 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 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. RHR shall comply with the executed litter agreement. ~~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.~~					

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
4.2 Air Quality					
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. ▪ 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 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. ▪ 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.	Within 60 days of use permit approval	Solano County and RHR Compliance Officer	Bay Area Air Quality Management District (BAAQMD)	To be determined by BAAQMD	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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: ▪ 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).					
4.3 Archaeological, Historic, and Tribal Cultural Resources					
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 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	During construction	Construction contractor and RHR Compliance Officer	Solano County	During construction if resources are discovered. If no resources are discovered, no further mitigation is required.	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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.					
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.	Prior to ground disturbance activities for the borrow pit and lateral expansion area (Triangle).	RHR Compliance Officer and construction contractor	Solano County	One time	
4.4 Biological Resources					
Mitigation Measure 4.4-1a: Special-Status Plant Surveys Prior to issuance of a grading permit for the lateral expansion (Triangle) and 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 20~~09~~18). Surveys will be conducted not more than one or two seasons prior to project implementation. 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. Perennial shrub species (e.g., Carquinez goldenbrus) may be identified to genus (i.e., *Isocoma*) outside of the plants bloom period. If no specimens in the *Isocoma* genus are detected during the special-status plat survey, further surveys during the species' bloom period will not be necessary to determine presence. [See p 4.4-19 of the Draft SEIR for Table 4.4-4, Normal Blooming Period for Special-Status Plants with Potential to Occur Within the Triangle]	One to two seasons prior to ground disturbance in lateral expansion area (Triangle).	Solano County and RHR Compliance Officer	California Department of Fish and Wildlife (CDFW)	To be determined by CDFW	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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.	Prior to ground disturbance activities within the lateral expansion area (Triangle).	Solano County, construction contractor, and RHR Compliance Officer	California Department of Fish and Wildlife (CDFW)	Annually, as part of on-site biological monitoring conducted as part of existing landfill operations	
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 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: ▪ 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: ▪ 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.	When rare plant surveys are conducted onsite	Solano County and RHR Compliance Officer	CDFW and U.S. Fish and Wildlife Service (USFWS)	As needed/upon observance	
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. ▪ 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.	At least two-weeks prior to deepening and widening of the borrow pit and commencement of ground-disturbing activities within grassland and vernal pools	Solano County, construction contractor, and RHR Compliance Officer	CDFW and USFWS	For work conducted between November 1st and May 31st, weekly monitoring by a qualified biologist; more frequent monitoring during qualifying rain events	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
▪ A USFWS and CDFW-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 and CDFW. ▪ All suitable burrows directly impacted by construction will be hand excavated under the supervision of a qualified wildlife biologist. A small excavator or backhoe could be utilized to assist in burrow excavation, under the direction 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. ▪ 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 and CDFW. 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~~ each day that the 72-hour National Weather Service forecast predicts a 40 percent chance or greater of precipitation or after rain events of a tenth of an inch or greater. 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.				Any other monitoring requirements TBD by CDFW and/or USFWS	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
▪ 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 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. ▪ The applicant shall secure any necessary take authorization prior to project construction through formal consultation with USFWS pursuant to Section 7 of the ESA and approval from CDFW and proper take authorization under CESA. 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. ▪ 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- and CDFW-approved conservation bank. Compensation plans will be subject to review and approval by USFWS and CDFW. 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					

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
tiger salamander; or 4) other method as determined by USFWS and CDFW including participation within a HCP permit area.					
Mitigation Measure 4.4-2b: Protection of Giant Garter Snake 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. 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. ▪ 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, CDFW, and USFWS 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~~October 1, 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	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.	Solano County, construction contractor, and RHR Compliance Officer	CDFW and USFWS	Daily when construction activities occur within 300 feet of aquatic habitat.	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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 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. Exclusionary fencing and high-visibility fencing will be made from material that will not cause entanglement (e.g., silt fencing and stakes with flagging and/or poly wire). 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. ▪ 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 and CDFW 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.					

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
▪ 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. ▪ 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 and CDFW-approved conservation bank. The selected conservation bank will be located within Solano County, if feasible (i.e., if applicable credits are available at conservation banks in Solano County). ▪ Prior to construction, USFWS shall be consulted pursuant to Section 7 of the ESA. Approval from CDFW and proper take authorization under CESA shall be obtained. 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.					
Mitigation Measure 4.4-2c: Vernal Pool Tadpole Shrimp and Vernal Pool Fairy Shrimp Habitat Compensation for Direct Effects 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. 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 (or a reduced distance if established in the BO for the project), and before any ground-disturbing activity within 250 feet of the habitat (or a reduced distance if established in the BO for the project). ▪ 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. The selected conservation bank will be located within Solano County if feasible (i.e., if applicable credits are available at conservation banks in	Prior to approval of improvement plans for the lateral expansion and any project phase that would allow work within 250 feet of vernal pools.	Solano County, construction contractor, and RHR Compliance Officer	USFWS	One time prior to construction; additional measures related to take authorizations and their frequency of monitoring shall be determined by USFWS	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
Solano County). 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. The selected conservation bank will be located within Solano County if feasible (i.e., if applicable credits are available at conservation banks in Solano County). ▪ 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 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. ▪ 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.					
Mitigation Measure 4.4-2d: Protection of Conservancy Fairy Shrimp Habitat From Indirect Effects 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. ▪ 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.	During the dry season and prior to any ground-disturbing activities within or adjacent to the onsite playa pool (in Triangle area)	Solano County, construction contractor, and RHR Compliance Officer	Solano County and USFWS	One time	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
▪ 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.					
Mitigation Measure 4.4-2e: Protection of Burrowing Owl Prior to ground disturbance, grading, or vegetation removal activities for the lateral expansion (Triangle), the project applicant will implement the following measures: ▪ 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 *Staff Report on Burrowing Owl Mitigation* (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	Prior to ground disturbance, grading, or vegetation removal activities within the lateral expansion area (Triangle), conduct focused surveys for burrowing owls during one nonbreeding season (September 1 through January 31) and one breeding season (February 1 through August 31)	Solano County and RHR Compliance Officer	CDFW	If occupied burrows are found during focused surveys, during construction that occurs between September 1 and January 31 burrowing owls shall be evicted from the site. A burrowing owl exclusion plan shall be prepared and submitted to CDFW. If occupied burrows are found during focused surveys, during construction that occurs during the breeding season (February 1 through August 31), no disturbance of buffers shall occur and protective buffers shall be established. If no occupied burrows are present, no	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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. ▪ 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: ▪ 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,				further mitigation needed.	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
site management roles and responsibilities, vegetation 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.					
Mitigation Measure 4.4-2f: Special-status and Other Nesting Bird Surveys and Avoidance 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: ▪ 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 16-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~~ September 15, a qualified biologist will conduct ~~preconstruction~~ protocol-level surveys for Swainson's hawk nests within 0.5 mile of the project site ~~for Swainson's hawks,~~ and for black rail within suitable habitat. Protocol-level surveys for Swainson's hawks will follow the Swainson's Hawk Technical Advisory Committee's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. Protocol-level surveys for Swainson's hawk and black rail may require multiple site visits; some more than 30 days prior to project implementation. Additionally, preconstruction surveys will be conducted within 500 feet of the project site for other nesting raptors, and 100 feet for all other birds. The surveys will be conducted no more than ~~30~~ 7 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 protocol-level and 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	Prior to removal of any vegetation or any ground disturbance between February 1 and September 15.	Solano County and RHR Compliance Officer	CDFW	During construction that occurs between September 1 and January 31 remove trees when no active nests are present. 7-14 days prior to ground disturbing or vegetation removal activities that occur between February 1 and August 31 conduct pre-construction surveys. During construction install appropriate buffers if occupied nests are present. If no occupied nests, no further mitigation needed.	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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 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.					
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: ▪ 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.	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.	Solano County and RHR Compliance Officer		One time.	
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: ▪ 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 is determined that fill of waters of	Prior to ground disturbance, grading, or vegetation removal activities within undeveloped areas of the project site (including ditches).	Solano County and RHR Compliance Officer	U.S. Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW	TBD by USACE, RWQCB, and CDFW	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
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. ▪ 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.					
4.6 Geology, Soils, Mineral, and Paleontological Resources					
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. 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.	Prior to initiation of earthmoving activities associated with the Triangle or deepening and widening of the borrow pit.	Solano County, construction contractor, and RHR Compliance Officer	Solano County	As needed/upon observance	

Mitigation Measures	Timing of Initial Action	Implementing Party/Agency	Enforcement/ Monitoring Party/Agency	Monitoring Frequency	Verification
▪ In the event of discovery, salvage of unearthed 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.					