MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT: Use Permit Application No 2016-0055 – Recology Blossom Valley Organics - North

LOCATION OF PROJECT: 3909 and 3432 Gaffery Road, east of Koster Road and west of Welty Road, in the Vernalis Area. (APN Nos. 016-003-010 and 016-016-023).

PROJECT DEVELOPER: Recology Blossom Valley Organics - North
P.O. Box 128
Westley, CA 95387

DESCRIPTION OF PROJECT: Request to amend Use Permit 2006-0037, to continue operation of the composting site by reorganizing and relocating the composting operations conducted on the property located north of Gaffery Road (APN 016-003-010) and to establish a maintenance and truck washing station on property south of Gaffery Road (APN: 016-016-023).

Based upon the Initial Study, dated **November 2, 2016**, the Environmental Coordinator finds as follows:

1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.

2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.

3. This project will not have impacts which are individually limited but cumulatively considerable.

4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The aforementioned findings are contingent upon the following mitigation measures which shall be incorporated into this project:

A. MM AIR-1 - Fugitive Dust Control

The owner/operator shall sufficiently implement at least one of the control measures listed below to limit visible dust emissions (VDE) to 20 percent opacity or to comply with the conditions for a stabilized surface as defined in Rule 8011. The opacity limit may be achieved through implementation of any combination of the following control measures to the extent needed:

On-Site Transporting of Bulk Materials:

- Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20 percent opacity; or
- Load all haul-trucks such that the freeboard (the amount of material transported that rises above the walls of the truck bed) is not less than six (6) inches when material is transported across any paved public access road; or

- Apply water to the top of the load sufficient to limit VDE to 20 percent opacity; or
- Cover haul trucks with a tarp or other suitable cover.

Off-Site Transporting of Bulk Materials:

- Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; and
- Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate; and
- Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved public access road and apply water to the top of the load sufficient to limit VDE to 20 percent opacity; or cover haul trucks with a tarp or other suitable closure.

Unpaved Road Segments:

- On each day that 75 or more vehicle daily trips (VDT), or 25 or more VDT with three (3) or more axles, will occur on an unpaved road segment, the owner/operator shall limit VDE to 20 percent opacity and comply with the requirements of a stabilized unpaved road by application and/or re-application/maintenance of at least one (1) of the following control measures, or shall implement an approved Fugitive PM10 Management Plan:

    - Watering;
    - Uniform layer of washed gravel;
    - Chemical/organic dust suppressants;
    - Vegetative materials;
    - Paving;
    - Road-mix;
    - Any other method(s) that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20 percent opacity and meets the conditions of a stabilized unpaved road.

Unpaved Vehicle/Equipment Parking and Traffic Areas:

The control measures listed below shall be implemented on unpaved surface areas dedicated to any vehicle and equipment parking and traffic activity in order to limit VDE to 20 percent opacity and comply with the requirements of a stabilized unpaved road as specified in Rule 8011. If vehicle activity remains exclusively within an unpaved vehicle/equipment traffic area, Section 5.3 may be implemented to limit VDE to 20 percent opacity.

- Where 50 or more annual average daily trips (AADT) will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20 percent opacity and comply with the requirements of a stabilized unpaved road by the application and/or reapplication/maintenance of at least one of the following control measures:

    - Watering;
    - Uniform layer of washed gravel;
    - Chemical/organic dust suppressants;
    - Vegetative materials;
    - Paving;
    - Road-mix.

B. MM AIR-2 - Odor Complaint Response

- When the site receives an odor complaint, the Odor Management Plan shall be implemented. The OMP requires use of a third-party answering service. When complaints are received by the third-party answering service, an e-mail shall be sent to both Blossom Valley Organics – North (BVON) personnel and Stanislaus County alerting them of the incident. Complaints received by BVON will be forwarded to the Lead Enforcement Agency (LEA) within 24 hours of receipt or by close of business of the first business day after a weekend complaint.
- Upon notification of a complaint by the third-party service, or upon direct receipt of a complaint by the facility, a facility investigator will use an olfactometer device to determine if the odor is detectable both at the complaint location and on-site at the facility border in the area of the prevailing wind direction.
- If BVON is found to be the source of acute malodorous conditions, then the site will work to eliminate the source of the malodor and an Odor Complaint Investigation Report (OCIR) will be submitted to the LEA within 48 hours of receiving the complaint or by close of business of the first business day after a weekend complaint. The OCIR shall detail the complaint, the investigation carried out, the prevailing weather conditions at the time of complaint and investigation, and the activities occurring on-site at the time of complaint and investigation.

C. MM AIR-3- Facility Improvement and Process Adjustments to Reduce Odors

Facility improvements and adjustments to process controls used to eliminate the source of malodorous conditions shall include, but are not limited to, the following:

- Processing all incoming compostable feedstock materials into active windrows within 72 hours
- Adequately blending feedstocks and/or adjusting food material to green material ratios to achieve desired carbon to nitrogen levels. Windrows typically have up to a one-to-one ration of food material, not comprising more than 50% of food content, to green material by weight;
- Monitoring feedstock porosity;
- Evaluating and altering moisture management operations, which shall include adding sufficient water to achieve desired moisture;
- Temperature balancing through regulation of airflow within the windrows;
- Adjusting pile sizes;
- Improving site drainage.

Odor controls on the compost pad include:

- Collection and incorporation of organics from aisles between windrows;
- Use of microbial inoculants or lime on pad surfaces and water collection systems;
- Incorporating high organic content liquids into the composting process, both as an inoculant and for moisture control.

D. MM AIR-4 - Facility-wide ASP System Implementation

State Water Resources Control Board Water Quality Order 2015-0121-DWQ (included in Appendix A of the Initial Study) establishes a timeline for compliance with the Compost General Order, as well as monitoring and reporting procedures. The project shall comply with the provisions of the order, as detailed in the Notice of Applicability for coverage under the General Order issued by the Central Valley RWQCB on January 26, 2016.

E. MM CUL-1 – Cultural Materials

An archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology should be present during the initial phase of ground disturbance in order to check for the inadvertent exposure of cultural materials. This may be followed by regular periodic or "spot-check" archaeological monitoring during ground disturbance as needed, but full-time archaeological monitoring is not required at this time. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until an archaeologist has evaluated the situation. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, shell artifacts, or features including hearths, structural remains, or historic dumpsites. The archaeologist shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate forms and will be submitted to the County of Stanislaus, the Central California Information Center (CCIC), and the State Historic Preservation Office (SHPO), if required.

F. MM CUL-2 – Fossil-Bearing Deposits

In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the County of Stanislaus for review and approval prior to implementation, and the applicant shall adhere to the recommendations in the plan.

G. MM CUL-3 – Protection of Human Remains

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the

landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.
- The descendant identified fails to make a recommendation.
- The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the Native American Heritage Commission.

H. MM GEO-1: - Erosion Control

In the event that windrows are permanently removed from the site, erosion control measures appropriate to local conditions shall be put in place. Measures could include the planting of vegetation or agricultural crops to decrease loss of soil by erosion.

I. MM HAZ-1 – Vector Control

To minimize potential for fly nuisance conditions, the applicant shall contract with a licensed pest management service to develop and implement a fly control plan that includes the use of measures such as:

- Adult fly knockdown agents including organic certified sprays as well as EPA Exempt (25(b)) options, fly specific bacterial and fungal sprays (Elector PSP—Spinosad, fungal pathogen—Beauveria bassiana), botanical insecticides—pyrethrurn, Pyrethrins + synergists), short residual sprays with rapid degradation.
- Granular fly baits in selected areas applied in bait trays, on bait cards or as scatter baits.
- Insect Growth Regulators (IGR) such as Tekko 10, Tekko Pro or Neporex to break the life cycle of flies by preventing molting, metamorphosis and reproduction.
- Insecticide (deltamethrin) impregnated mesh used for stable fly control.

- Increased frequency for turning of green waste to disrupt fly breeding and attraction and to make the material less conducive to flies.
- Expanded monitoring of flies on-site and in the surrounding area to determine what the seasonal fly pressure and to establish the normal background level of flies as a benchmark for future remedial action.

J. MM HYD-1 – Storm Water Pollution Prevention Plan (SWPPP)

The applicant shall prepare and implement a SWPPP as required under the General Construction Permit for Discharges of Storm Water Associated with Construction Activities, for all construction phases of the project. The SWPPP shall identify pollutant sources that may affect the quality of stormwater discharge and shall require the implementation of BMPs to reduce pollutants in stormwater discharges. BMPs include temporary erosion control measures (such as fiber rolls, staked straw bales), landscaping, and sediment basins.

K. MM HYD-2 – Surface and Groundwater Quality

In order to comply with the Regional General Order from the SWRCB, the project shall implement periodic monitoring and inspections of surface and groundwater quality to ensure protection of beneficial uses. Mitigation for surface waters is outlined in the Design Construction and Operation Requirements. Drainage conveyance systems and ditches must be properly sloped to minimize ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches must be adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions resulting in contamination, pollution, or nuisance. Ditches must be inspected and cleaned out prior to the wet season every year.

L. MM NOI-1 – Noise Impacts

Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all construction equipment have appropriate sound muffling devices, which are properly maintained and used at all times such equipment is in operation.
- The construction contractor shall ensure that all internal combustion-engine-driven equipment is equipped with mufflers that are in good operating condition and appropriate for the equipment.
- The construction contractor shall ensure that “quiet” models of air compressors and other stationary construction equipment are utilized where such technology exists.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall prohibit unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes).
- All noise producing construction activities, including deliveries of materials and warmup of equipment shall be limited to the hours of 7:00 a.m. and 7:00 p.m. daily.

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California.

Initial Study prepared by: Miguel Galvez, Deputy Director

Submit comments to: Stanislaus County
Planning and Community Development Department
1010 10th Street, Suite 3400
Modesto, California 95354

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Mitigation Monitoring and Reporting Program for the Recology Blossom Valley Organics North Facility Initial Study/Mitigated Negative Declaration Stanislaus County, California

Prepared for:
Stanislaus County Planning and Community Development
1010 10th St., Suite 3400
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Contact: Mary Bean, Project Director
Andrew Hill, Project Manager

Report Date: December 7, 2016

AN ADEC INNOVATION

EXHIBIT G

Table 1: Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3. Air Quality					
MM AIR-1: Fugitive Dust Control The owner/operator shall sufficiently implement at least one of the control measures listed below to limit visible dust emissions (VDE) to 20 percent opacity or to comply with the conditions for a stabilized surface as defined in Rule 8011. The opacity limit may be achieved through implementation of any combination of the following control measures to the extent needed: *On-Site Transporting of Bulk Materials:* • Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20 percent opacity; or • Load all haul trucks such that the freeboard (the amount of material transported that rises above the walls of the truck bed) is not less than six (6) inches when material is transported across any paved public access road; or • Apply water to the top of the load sufficient to limit VDE to 20 percent opacity; or • Cover haul trucks with a tarp or other suitable cover. *Off-Site Transporting of Bulk Materials:* • Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; and • Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate; and • Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved public access road and apply water to the top of the load sufficient to limit VDE to 20 percent opacity; or cover haul trucks with a tarp or other suitable closure.	Regular inspections of the site to ensure fugitive dust control measures are implemented	Ongoing	Stanislaus County Planning and Community Department and/or Stanislaus County Department of Environmental Resources.		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Unpaved Road Segments: • On each day that 75 or more vehicle daily trips (VDT), or 25 or more VDT with 3 or more axles, will occur on an unpaved road segment, the owner/operator shall limit VDE to 20 percent opacity and comply with the requirements of a stabilized unpaved road by application and/or re-application/maintenance of at least one of the following control measures, or shall implement an approved Fugitive PM10 Management Plan: - Watering; - Uniform layer of washed gravel; - Chemical/organic dust suppressants; - Vegetative materials; - Paving; - Roadmix; - Any other method(s) that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20 percent opacity and meets the conditions of a stabilized unpaved road. *Unpaved Vehicle/Equipment Parking and Traffic Areas:* The control measures listed below shall be implemented on unpaved surface areas dedicated to any vehicle and equipment parking and traffic activity in order to limit VDE to 20 percent opacity and comply with the requirements of a stabilized unpaved road as specified in Rule 8011. If vehicle activity remains exclusively within an unpaved vehicle/equipment traffic area, Section 5.3 may be implemented to limit VDE to 20 percent opacity. • Where 50 or more annual average daily trips (AADT) will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20 percent opacity and	Regular inspections of the site to ensure fugitive dust control measures are implemented	Ongoing	Stanislaus County Planning and Community Department and/or Stanislaus County Department of Environmental Resources.		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
comply with the requirements of a stabilized unpaved road by the application and/or reapplication/maintenance of at least one of the following control measures: - Watering; - Uniform layer of washed gravel; - Chemical/organic dust suppressants; - Vegetative materials; - Paving; - Roadmix.					
MM AIR-2: Odor Complaint Response • When the site receives an odor complaint, the Odor Management Plan shall be implemented. The OMP requires use of a third party answering service. When complaints are received by the third party answering service, an email shall be sent to both BVON personnel and Stanislaus County alerting them of the incident. Complaints received by BVON will be forwarded to the Lead Enforcement Agency (LEA) within 24 hours of receipt or by close of business of the first business day after a weekend complaint. • Upon notification of a complaint by the third-party service, or upon direct receipt of a complaint by the Facility, a Facility investigator will use an olfactometer device to determine if the odor is detectable both at the complaint location and on-site at the Facility border in the area of the prevailing wind direction. • If BVON is found to be the source of acute malodorous conditions, then the site will work to eliminate the source of the malodor and an Odor Complaint Investigation Report (OCIR) will be submitted to the LEA within 48 hours of receiving the complaint or by close of business of the first business day after a weekend complaint. The OCIR shall	Confirm required actions have been performed by documenting OCIRs	Ongoing	Stanislaus County Department of Public Works, Stanislaus County Planning and Community Department and/or Stanislaus County Department of Environmental Resources		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
detail the complaint, the investigation carried out, the prevailing weather conditions at the time of complaint and investigation and the activities occurring on-site at the time of complaint and investigation.					
MM AIR-3: Facility Improvement and Process Adjustments to Reduce Odors Facility improvements and adjustments to process controls used to eliminate the source of malodorous conditions shall include, but are not limited to, the following: • Processing all incoming compostable feedstock materials into active windrows within 72 hours • Adequately blending feedstocks and/or adjusting food material to green material ratios to achieve desired carbon to nitrogen levels. Windrows typically have up to a one-to-one ration of food material, not comprising more than 50% of food content, to green material by weight; • Monitoring feedstock porosity; • Evaluating and altering moisture management operations, which shall include adding sufficient water to achieve desired moisture; • Temperature balancing through regulation of airflow within the windrows; • Adjusting pile sizes; • Improving site drainage. Odor controls on the compost pad include: • Collection and incorporation of organics from aisles between windrows; • Use of microbial inoculants or lime on pad surfaces and water collection systems; • Incorporating high organic content liquids into the composting process, both as an inoculant and for moisture control.	Confirm required actions have been performed through on-site inspection	Ongoing	Stanislaus County Planning and Community Department		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM AIR-4: Facility-wide ASP System Implementation State Water Resources Control Board Water Quality Order 2015-0121-DWQ (included in Appendix A) establishes a timeline for compliance with the Compost General Order, as well as monitoring and reporting procedures. The project shall comply with the provisions of the order, as detailed in the Notice of Applicability for coverage under the General Order issued by the Central Valley RWQCB on January 26, 2016.	Review of Report of Waste Discharge and Annual Monitoring and Maintenance Report	Annually per Order 2015-0121-DWQ	Central Valley RWQCB		
5. Cultural Resources					
MM CUL-1: An archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology should be present during the initial phase of ground disturbance in order to check for the inadvertent exposure of cultural materials. This may be followed by regular periodic or "spot-check" archaeological monitoring during ground disturbance as needed, but full-time archaeological monitoring is not required at this time. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until an archaeologist has evaluated the situation. The Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The archaeologist shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in	On-site inspection	During construction of on-site improvements or in the event resources are found	Stanislaus County Planning and Community Department		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate forms and will be submitted to the County of Stanislaus, the Central California Information Center (CCIC), and the State Historic Preservation Office (SHPO), if required.					
MM CUL-2: In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the County of Stanislaus for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.	Review of construction specifications; on-site inspection/monitoring; review of data recovery plan	During construction of on-site improvements or in the event resources are found	Stanislaus County Planning and Community Department		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM CUL-3: In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. 2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.	Review of Native American Heritage Commission correspondence; on-site inspection/monitoring by Stanislaus County and the Applicant	In the event human remains are found during site disturbance/ construction of on-site improvements	Stanislaus County Planning and Community Department/Native American Heritage Commission		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• The descendant identified fails to make a recommendation. • The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the Native American Heritage Commission.					
6. Geology and Soils					
MM GEO-1: In the event that windrows are permanently removed from the site, erosion control measures appropriate to local conditions shall be put in place. Measures could include the planting of vegetation or agricultural crops to decrease loss of soil by erosion.	Review of proposed mitigation plan. Annual on-site inspection and confirmation of implementation of approved mitigation in a timely manner.	Annually, with submittal of Report of Waste Discharge and Annual Monitoring and Maintenance Report	Stanislaus County Planning and Community Department		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
8. Hazards and Hazardous Materials					
MM HAZ-1: To minimize potential for fly nuisance conditions, the applicant shall contract with a licensed pest management service to develop and implement a fly control plan that includes the use of measures such as: • Adult fly knockdown agents including organic certified sprays as well as EPA Exempt (25(b)) options, fly specific bacterial and fungal sprays (Elector PSP—Spinosad, fungal pathogen—*Beauveria bassiana*), botanical insecticides—pyrethrurn, Pyrethrins + synergists), short residual sprays with rapid degradation. • Granular fly baits in selected areas applied in bait trays, on bait cards or as scatter baits. • Insect Growth Regulators (IGR) such as Tekko 10, Tekko Pro or Neporex to break the life cycle of flies by preventing molting, metamorphosis and reproduction. • Insecticide (deltamethrin) impregnated mesh used for stable fly control. • Increased frequency for turning of green waste to disrupt fly breeding and attraction and to make the material less conducive to flies. • Expanded monitoring of flies on-site and in the surrounding area to determine what the seasonal fly pressure and to establish the normal background level of flies as a benchmark for future remedial action.	Review of fly control plan; submittal of on-site inspection logs.	Ongoing	Stanislaus County Planning and Community Development/ Stanislaus County Department of Public Health		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
9. Hydrology and Water Quality					
MM HYD-1: The Applicant shall prepare and implement a SWPPP as required under the General Construction Permit for Discharges of Storm Water Associated with Construction Activities, for all construction phases of the project. The SWPPP shall identify pollutant sources that may affect the quality of stormwater discharge and shall require the implementation of BMPs to reduce pollutants in stormwater discharges. BMPs include temporary erosion control measures (such as fiber rolls, staked straw bales), landscaping, and sediment basins.	Review of plan; on-site inspection	Prior to issuance of first building permit	Regional Water Quality Control Board/Stanislaus County Planning and Community Development		
MM HYD-2: In order to comply with the Regional General Order from the SWRCB, the project shall implement periodic monitoring and inspections of surface and groundwater quality to ensure protection of beneficial uses. Mitigation for surface waters is outlined in the Design Construction and Operation Requirements. Drainage conveyance systems and ditches must be properly sloped to minimize ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches must be adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions resulting in contamination, pollution, or nuisance. Ditches must be inspected and cleaned out prior to the wet season every year.	Review of Report of Waste Discharge and Annual Monitoring and Maintenance Report	Annually per Order 2015-0121-DWQ	Regional Water Quality Control Board/Stanislaus County Department of Public Health		

Table 1 (cont.): Recology Blossom Valley Organics North Facility Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
12. Noise					
MM NOI-1: Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts: • The construction contractor shall ensure that all construction equipment have appropriate sound muffling devices, which are properly maintained and used at all times such equipment is in operation. • The construction contractor shall ensure that all internal combustion-engine-driven equipment is equipped with mufflers that are in good operating condition and appropriate for the equipment. • The construction contractor shall ensure that "quiet" models of air compressors and other stationary construction equipment are utilized where such technology exists. • The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. • The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. • The construction contractor shall prohibit unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes). • All noise producing construction activities, including deliveries of materials and warmup of equipment shall be limited to the hours of 7:00 a.m. and 7:00 p.m. daily.	Record in contract specifications; periodic submittal of on-site inspection/monitoring reports	Prior to and during construction of on-site improvements	Stanislaus County Planning and Community Development and/or Stanislaus County Department of Environmental Resources		

I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

_____ _____

David Taylor, General Manager
Recology Blossom Valley Organics North

Date

Stanislaus County
Striving to be the Best

APPLICATION QUESTIONNAIRE

Please Check all applicable boxes

APPLICATION FOR:

Staff is available to assist you with determining which applications are necessary

- ☐ General Plan Amendment
- ☐ Rezone
- ☒ Use Permit
- ☐ Variance
- ☐ Historic Site Permit
- ☐ Subdivision Map
- ☐ Parcel Map
- ☐ Exception
- ☐ Williamson Act Cancellation
- ☐ Other _____

PLANNING STAFF USE ONLY:

Application No(s): PLN 2016-0055
Date: _____
S 9 T 4 R 6
GP Designation: AGRICULTURE
Zoning: A-2-40
Fee: $ 3,152.00
Receipt No. 532883
Received By: RW
Notes: _____

In order for your application to be considered COMPLETE, please answer all applicable questions on the following pages, and provide all applicable information listed on the checklist on pages i – v. Under State law, upon receipt of this application, staff has 30 days to determine if the application is complete. We typically do not take the full 30 days. It may be necessary for you to provide additional information and/or meet with staff to discuss the application. Pre-application meetings are not required, but are highly recommended. An incomplete application will be placed on hold until all the necessary information is provided to the satisfaction of the requesting agency. An application will not be accepted without all the information identified on the checklist.

Please contact staff at (209) 525-6330 to discuss any questions you may have. Staff will attempt to help you in any way we can.

PROJECT INFORMATION

PROJECT DESCRIPTION: (Describe the project in detail, including physical features of the site, proposed improvements, proposed uses or business, operating hours, number of employees, anticipated customers, etc. – Attach additional sheets as necessary)

Please note: A detailed project description is essential to the reviewing process of this request. In order to approve a project, the Planning Commission or the Board of Supervisors must decide whether there is enough information available to be able to make very specific statements about the project. These statements are called "Findings". It is your responsibility as an applicant to provide enough information about the proposed project, so that staff can recommend that the Commission or the Board make the required Findings. Specific project Findings are shown on pages 17 – 19 and can be used as a guide for preparing your project description. (If you are applying for a Variance or Exception, please contact staff to discuss special requirements).

Please see enclosed Project Description.

EXHIBIT H

PROJECT SITE INFORMATION

Complete and accurate information saves time and is vital to project review and assessment. Please complete each section entirely. If a question is not applicable to your project, please indicated this to show that each question has been carefully considered. Contact the Planning & Community Development Department Staff, 1010 10th Street – 3rd Floor, (209) 525-6330, if you have any questions. Pre-application meetings are highly recommended.

ASSESSOR'S PARCEL NUMBER(S): **Book** 016 **Page** 003 **Parcel** 010

Additional parcel numbers: 016-016-023 (3432 Gaffery Road, Stanislaus County)

Project Site Address or Physical Location: 265-010-21 (San Joaquin County)

Property Area: Acres: 161.72 or Square feet: _____

Current and Previous Land Use: (Explain existing and previous land use(s) of site for the last ten years)

Compost facility

List any known previous projects approved for this site, such as a Use Permit, Parcel Map, etc.: (Please identify project name, type of project, and date of approval)

Use Permit No. 2006-37 approved 3/20/08; Use Permit No. 98-19 approved 1/7/99

Use Permit No. PA-1200022 (San Joaquin County) approved 11/1/12

Existing General Plan & Zoning: General Plan: agriculture; Zoning: A-2-40

Proposed General Plan & Zoning: N/A
(if applicable)

ADJACENT LAND USE: (Describe adjacent land uses within 1,320 feet (1/4 mile) and/or two parcels in each direction of the project site)

East: organics recycling operation (Sun Dry Products, Inc. composting facility)

West: Delta Mendota Canal and agricultural land

North: apricot orchard

South: almond orchard

WILLIAMSON ACT CONTRACT:

Yes ☒ **No** ☐

Is the property currently under a Williamson Act Contract?
Contract Number: 75-1888

If yes, has a Notice of Non-Renewal been filed?

Date Filed: No

Yes ☐ No ☒ Do you propose to cancel any portion of the Contract?

Yes ☐ No ☒ Are there any agriculture, conservation, open space or similar easements affecting the use of the project site. (Such easements do not include Williamson Act Contracts)

If yes, please list and provide a recorded copy: _____

SITE CHARACTERISTICS: (Check one or more) Flat ☒ Rolling ☐ Steep ☐

VEGETATION: What kind of plants are growing on your property? (Check one or more)

Field crops ☐ Orchard ☒ Pasture/Grassland ☐ Scattered trees ☐

Shrubs ☐ Woodland ☐ River/Riparian ☐ Other ☒

Explain Other: Landscaping along frontage of Gaffery Road in process. Almond orchard on southern parcel.

Yes ☐ No ☒ Do you plan to remove any trees? (If yes, please show location of trees planned for removal on plot plan and provide information regarding transplanting or replanting.)

GRADING:

Yes ☒ No ☐ Do you plan to do any grading? (If yes, please indicate how many cubic yards and acres to be disturbed. Please show areas to be graded on plot plan.) Approximately 5.6 acres of ground disturbance for the wastewater infrastructure project.

STREAMS, LAKES, & PONDS:

Yes ☐ No ☒ Are there any streams, lakes, ponds or other watercourses on the property? (If yes, please show on plot plan)

Yes ☐ No ☒ Will the project change any drainage patterns? (If yes, please explain – provide additional sheet if needed) _____

Yes ☐ No ☒ Are there any gullies or areas of soil erosion? (If yes, please show on plot plan)

Yes ☐ No ☒ Do you plan to grade, disturb, or in any way change swales, drainages, ditches, gullies, ponds, low lying areas, seeps, springs, streams, creeks, river banks, or other area on the site that carries or holds water for any amount of time during the year? (If yes, please show areas to be graded on plot plan)

Please note: If the answer above is yes, you may be required to obtain authorization from other agencies such as the Corps of Engineers or California Department of Fish and Game.

STRUCTURES:

Yes ☒ No ☐ Are there structures on the site? (If yes, please show on plot plan. Show a relationship to property lines and other features of the site.

Yes ☐ No ☒ Will structures be moved or demolished? (If yes, indicate on plot plan.)

Yes ☒ No ☐ Do you plan to build new structures? (If yes, show location and size on plot plan.)

Yes ☐ No ☒ Are there buildings of possible Historical significance? (If yes, please explain and show location and size on plot plan.) _____

PROJECT SITE COVERAGE:

Existing Building Coverage: 8582 Sq. Ft.

Proposed Building Coverage: N/A Sq. Ft.

Landscaped Area: 3000 Sq. Ft.

Paved Surface Area: 4980 Sq. Ft.

BUILDING CHARACTERISTICS:

Size of new structure(s) or building addition(s) in gross sq. ft.: (Provide additional sheets if necessary) The proposed truck wash will be approximately 5432 sq. ft. The 22-ft. tall litter fence is proposed to be extended approximately 1800 ft.

Number of floors for each building: N/A

Building height in feet (measured from ground to highest point): (Provide additional sheets if necessary) N/A

Height of other appurtenances, excluding buildings, measured from ground to highest point (i.e., antennas, mechanical equipment, light poles, etc.): (Provide additional sheets if necessary)

Existing and proposed litter fence is 22 ft. high.

Proposed surface material for parking area: (Provide information addressing dust control measures if non-asphalt/concrete material to be used)

No changes are proposed for the current asphalt parking area.

UTILITIES AND IRRIGATION FACILITIES:

Yes ☒ No ☐ Are there existing public or private utilities on the site? Includes telephone, power, water, etc. (If yes, show location and size on plot plan)

Who provides, or will provide the following services to the property?

Electrical: PG&E

Telephone: AT&T

Water**: None - bottled water; proposed private well

Sewer*: None - portable toilets are pumped

Gas/Propane: None

Irrigation: Del Puerto Irrigation District - canal water

***Please Note: A "will serve" letter is required if the sewer service will be provided by City, Sanitary District, Community Services District, etc.**

****Please Note: A "will serve" letter is required if the water source is a City, Irrigation District, Water District, etc., and the water purveyor may be required to provide verification through an Urban Water Management Plan that an adequate water supply exists to service your proposed development.**

Will any special or unique sewage wastes be generated by this development other than that normally associated with resident or employee restrooms? Industrial, chemical, manufacturing, animal wastes? (Please describe:)

Wastewater generated from composting operations flows to drainage ditches and is directed to treatment/storage ponds. That water may be reused as process water for the composting operations. Please see enclosed Project Description.

Please Note: Should any waste be generated by the proposed project other than that normally associated with a single family residence, it is likely that Waste Discharge Requirements will be required by the Regional Water Quality Control Board. Detailed descriptions of quantities, quality, treatment, and disposal may be required.

Yes ☐ **No** ☒ Are there existing irrigation, telephone, or power company easements on the property? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Do the existing utilities, including irrigation facilities, need to be moved? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Does the project require extension of utilities? (If yes, show location and size on plot plan.)

AFFORDABLE HOUSING/SENIOR:

Yes ☐ **No** ☒ Will the project include affordable or senior housing provisions? (If yes, please explain)

RESIDENTIAL PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Total No. Lots: N/A Total Dwelling Units: N/A Total Acreage: N/A

Net Density per Acre: N/A Gross Density per Acre: N/A

(complete if applicable)	Single Family	Two Family Duplex	Multi-Family Apartments	Multi-Family Condominium/ Townhouse
Number of Units:	N/A	N/A	N/A	N/A
Acreage:	N/A	N/A	N/A	N/A

COMMERCIAL, INDUSTRIAL, MANUFACTURING, RETAIL, USE PERMIT, OR OTHER PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Square footage of each existing or proposed building(s): Office - 3650 sq. ft.; Scale House - 400 sq. ft.; Maintenance Shop - 3328 sq. ft.; Employee Break Rooms - 1204 sq. ft.

Type of use(s): Current buildings include an office, scale house, maintenance shop, and employee break rooms. No new buildings are proposed.

Days and hours of operation: The Facility operates/receives materials 24 hours/day, 7 days/week. Grinding operations occur from 5am-10pm Monday through Saturday and Sunday in an emergency. See enclosed Project Description.

Seasonal operation (i.e., packing shed, huller, etc.) months and hours of operation: N/A

Occupancy/capacity of building: Maximum building occupancies: Office - 40 people; Scale House - 10 people; Maintenance Shop - 175 people; Employee Break Rooms - 60 people

Number of employees: (Maximum Shift): 75 (Minimum Shift): 1-2

Estimated number of daily customers/visitors on site at peak time: 15

Other occupants: N/A

Estimated number of truck deliveries/loadings per day: 80-120

Estimated hours of truck deliveries/loadings per day: The Facility receives materials 24 hours per day.

Estimated percentage of traffic to be generated by trucks: 95%

Estimated number of railroad deliveries/loadings per day: N/A

Square footage of:

Office area: 1200 sq. ft. Warehouse area: N/A

Sales area: N/A Storage area: N/A

Loading area: N/A Manufacturing area: N/A

Other: (explain type of area) N/A

Yes ☐ No ☒ Will the proposed use involve toxic or hazardous materials or waste? (Please explain)

Toxic or hazardous materials or waste are not accepted on-site. Please see enclosed Project Description which includes a Load Checking Protocol.

ROAD AND ACCESS INFORMATION:

What County road(s) will provide the project's main access? (Please show all existing and proposed driveways on the plot plan)

Koster Road to the west; Gaffery Road to the south

Yes ☐ No ☒ Are there private or public road or access easements on the property now? (If yes, show location and size on plot plan)

Yes ☐ No ☒ Do you require a private road or easement to access the property? (If yes, show location and size on plot plan)

Yes ☒ No ☐ Do you require security gates and fencing on the access? (If yes, show location and size on plot plan)

Please Note: Parcels that do not front on a County-maintained road or require special access may require approval of an Exception to the Subdivision Ordinance. Please contact staff to determine if an exception is needed and to discuss the necessary Findings.

STORM DRAINAGE:

How will your project handle storm water runoff? (Check one) ☐ Drainage Basin ☐ Direct Discharge ☐ Overland

☒ Other: (please explain) Storm water will be conveyed to lined treatment/storage ponds. See Project Description.

If direct discharge is proposed, what specific waterway are you proposing to discharge to? The Facility is covered under the State Water Resources Control Board's Industrial General Permit for storm water discharge. See NOI attached.

Please Note: If direct discharge is proposed, you will be required to obtain a NPDES permit from the Regional Water Quality Control Board, and must provide evidence that you have contacted them regarding this proposal with your application.

EROSION CONTROL:

If you plan on grading any portion of the site, please provide a description of erosion control measures you propose to implement.

Standard construction erosion control best management practices will be utilized.

Please note: You may be required to obtain an NPDES Storm Water Permit from the Regional Water Quality Control Board and prepare a Storm Water Pollution Prevention Plan.

ADDITIONAL INFORMATION:

Please use this space to provide any other information you feel is appropriate for the County to consider during review of your application. (Attach extra sheets if necessary)

Please see enclosed Project Description.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - STORM WATER PERMIT REQUIREMENTS

Storm water discharges associated with construction activity are a potentially significant source of pollutants. The most common pollutant associated with construction is sediment. Sediment and other construction related wastes can degrade water quality in creeks, rivers, lakes, and other water bodies. In 1992, the State Water Resources Control Board adopted a statewide General Permit for all storm water discharges associated with construction activity that disturbs five or more acres of land. Effective March 10, 2003, all construction sites disturbing one or more acres of land will be required to obtain permit coverage. The General Permit is intended to ensure that construction activity does not impact water quality.

You need to obtain General Permit coverage if storm water discharges from your site and either of the following apply:

- Construction activities result in one or more acres of land disturbance, including clearing, grading, excavating, staging areas, and stockpiles or;
- The project is part of a larger common plan of development or sale (e.g., subdivisions, group of lots with or without a homeowner's association, some lot line adjustments) that result in one or more acres of land disturbance.

It is the applicants responsibility to obtain any necessary permit directly from the California Regional Water Quality Control Board. The applicant(s) signature on this application form signifies an acknowledgment that this statement has been read and understood.

STATE OF CALIFORNIA HAZARDOUS WASTE AND SUBSTANCES SITES LIST (C.G.C. § 65962.5)

Pursuant to California Government Code Section 65962.5(e), before a local agency accepts as complete an application for any development project, the applicant shall consult the latest State of California Hazardous Waste and Substances Sites List on file with the Planning Department and submit a signed statement indicating whether the project is located on a site which is included on the List. The List may be obtained on the California State Department of Toxic Substances Control web site (http://www.envirostor.dtsc.ca.gov/public).

The applicant(s) signature on this application form signifies that they have consulted the latest State of California Hazardous Waste and Substances List on file with the Planning Department, and have determined that the project site ☐ **is or** ☒ **is not** included on the List.

Date of List consulted: 6/10/16

Source of the listing: _____

(To be completed only if the site is included on the List)

ASSESSOR'S INFORMATION WAIVER

The property owner(s) signature on this application authorizes the Stanislaus County Assessor's Office to make any information relating to the current owners assessed value and pursuant to R&T Code Sec. 408, available to the Stanislaus County Department of Planning and Community Development.

Recology
WASTE ZERO

Use Permit Project Description

Recology Blossom Valley Organics – North (Vernalis)

3909 Gaffery Road
Vernalis, CA 95385

June 2016

Prepared by

Recology Blossom Valley Organics – North (Vernalis)
P.O. Box 128
Westley, CA 95387
Phone (209) 833-3392
Fax (209) 833-7990

BLOSSOM VALLEY ORGANICS – NORTH (VERNALIS)
PROJECT DESCRIPTION

This project description is intended to provide information requested by the Stanislaus County Planning Department regarding improvements made to the Recology Blossom Valley Organics North (BVON) Composting Facility (Facility) since the March 20, 2008 issuance of the current Conditional Use Permit (No. 2006-37), site improvements that are currently in process, as well as proposed future improvements. Please note, the primary contacts for this Use Permit application are:

Name: Laura J. Ferrante, Environmental Projects Analyst
Email: lferrante@recology.com
Address: 50 California Street, 24th Floor
San Francisco, CA 94111
Telephone: 916-425-2277

Name: David Taylor, General Manager
Email: dtaylor@recology.com
Address: 3909 Gaffery Road
Vernalis, CA 05385
Telephone: 209-395-9506

This project description includes the following sections:

- **SITE DESCRIPTION**
- **NATURE OF THE CURRENT COMPOSTING PROCESS**
  - Receiving
  - Processing
  - Active Composting
  - Curing and Screening
  - Testing and Shipment
- **FEEDSTOCK**
- **CONTROL OF RESIDUALS**
- **LOAD CHECKING PROTOCOL**
  - Personnel and Training
  - Load Checking Activities
  - Management of Wastes
  - Procedures for Handling Rejected Loads
  - Record Keeping Procedures
- **ODOR CONTROL**
- **LITTER CONTROL**
- **DUST CONTROL**
- **VECTOR CONTROL**
  - Flies
  - Birds

- Rodents
- **LIQUID AND DRAINAGE CONTROL**
- **FACILITY IMPROVEMENTS**
  - Improvements to the Facility Since the Issuance of the 2008 Conditional Use Permit:
    1. Relocation of the Receiving and Processing Area for Incoming Feedstock
    2. Addition of Second On-site Process Water Well in the Northwestern Corner of the Facility
    3. Asphalt Paving and Installation of Rumble Strips at the Facility Entrance and Exit
    4. Installation of 22-Foot Tall Litter and Dust Fence along 800 Feet of Gaffery Road
    5. Additional Operational Improvements
  - Facility Improvements Currently in Process:
    1. Wastewater Infrastructure Improvements
    2. New Well for the Public Water System on the Southern Parcel in the Maintenance Shop Area
  - Proposed Future Facility Improvements:
    1. Expansion of the 22-Foot Tall Litter and Dust Fence
    2. An Additional Processing Line for Incoming Feedstock
    3. Fully Contained Equipment Wash on the Southern Parcel in the Maintenance Shop Area
    4. Pilot Scale to Full Scale Aerated Static Pile System
    5. Additional Improvements
- **ADDITIONAL USE PERMIT APPLICATION REQUIREMENTS**
  - Findings
    1. Use Permit: Agricultural Uses – Tier Two
    2. Williamson Act

A description of the BVON facility, the composting process used on-site, nuisance management protocols, and the existing and proposed improvements are provided below.

SITE DESCRIPTION

The BVON facility has been used for permitted composting operations since 1991. Existing operations encompass approximately 161.72 acres, including 112.45 acres of Assessor's Parcel Number (APN) 016-003-010, in Stanislaus County; 10.82 acres of APN 265-010-21 in San Joaquin County; and 38.47 acres of APN 016-016-023 in Stanislaus County, which comprises the 2.17-acre maintenance shop area. The site is located on a compacted, well-drained clay loam soil and a paved area that was historically an airport runway. The topography is generally flat, with minor graded slopes to promote drainage and collection of stormwater run-off. Since the issuance of the 2008 Conditional Use Permit (No. 2006-37), on March 20, 2008, and the Solid Waste Facility Permit (SWFP) 50-AA-0020, on August 20, 2008, the Facility is permitted to receive for composting up to 2,000 tons per day (TPD) of green, agricultural, and food materials, as defined in Title 14 of the California Code of Regulations (14 CCR, §17852). Incoming

material is sorted and processed to remove non-compostable residuals within 72 hours of receipt at the Facility, as provided in the Facility's September 9, 2015 CalRecycle-approved Report of Composting Site Information (RCSI).

The Facility operates and receives materials 24 hours per day, seven days per week. Grinding operations occur from 5:00 A.M. to 10:00 P.M., Monday through Saturday, and on Sundays in the event of an emergency. Activities occurring at night may include fire watch, windrow turning, final screening of finished compost, and processing of incoming feedstock when necessary.

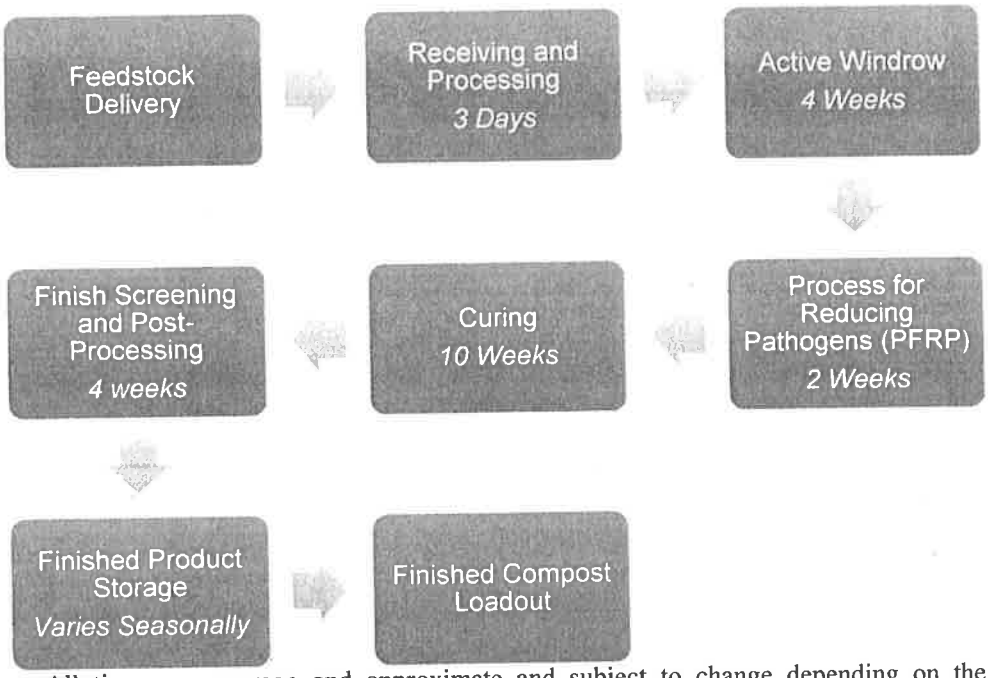
Currently, the Facility receives 80 to 120 trucks per day, including walking floors, belt trailers, transfer trucks, and pickups. Additionally, about 68 compost hauling vehicles per day leave the Facility carrying finished product. Typical truck routes to the Facility are as follows:

1. From Interstate 5: Take Highway 132 East to South Koster Road and then left onto Gaffery Road.
2. From Highway 33 South: Take Highway 33 North to Gaffery Road and then left onto Gaffery Road
3. From Highway 33 North: Take Highway 33 South to McCraken Road and then right onto Gaffery Road.

NATURE OF THE CURRENT COMPOSTING PROCESS

Overall, the composting operations consist of the following processing steps: receiving, processing, active composting, curing and screening, and testing and shipment. The specific locations of the various operations on the compost pad are dynamic and are subject to change depending on the current processing operation, stockpile fire concerns, incoming feedstock characteristics, product sales, and variable vector, dust, and odor control activities. The current composting process takes approximately 90 to 120 days to complete from the active composting phase through the curing phase. The composting processing steps are described in more detail below.

Process Flow Diagram



Note: All times are average and approximate and subject to change depending on the conditions measured throughout the various processes.

Receiving

Feedstock material, delivered to the Facility by company and commercial vehicles, enters the Facility through the main entrance on Gaffery Road, located at the southeastern corner of the main parcel, and stops at the scale house, located near the site entrance, to weigh-in. At the scale house, the loads are weighed and characterized with respect to material source and type. Note, if any portion of the inbound load contains food material, that entire load is characterized as a food material load, even if the load is 95% green content and only 5% food content. At this stage, loads also undergo initial load checking to identify and remove any prohibited materials. Please see the "Load Checking Protocol" section below for a discussion of rejected loads.

Following this initial processing of acceptable loads at the scale house, the haulers are directed to the feedstock receiving and processing area for unloading. The receiving and processing area is approximately 7.5 acres in size and is located near the center of the site along the eastern property boundary. Upon entering the receiving area, the trucks deposit their contents, as directed by Facility personnel. A stationary hydraulic tipper is available for unloading. Additionally, a front-end loader is stationed in this area to assist with consolidating the material in a stockpile area.

Initial removal of residuals is conducted by Facility load checkers and equipment operators at the time of deposition. These activities focus on visual inspection and removal of items which may be hazardous, harm equipment, or impede the composting process. Please see the "Load Checking Protocol" section below for more details on removal of prohibited materials. Additional inspections are also performed during the processing phase (see the following

"Processing" subsection) and during the "turning" or "mixing" of windrows as part of the active composting phase. The load checkers and equipment operators also identify any unusually or atypically moisture-rich or putrescible loads, other than normal food material loads, that may require priority processing (i.e., ideally by the end of the working day, but no longer than 48 hours) to avert potential nuisance conditions.

Once unloaded, the empty vehicles exit the receiving and processing area, typically using the same route with which they entered, and proceed to the site exit, which is covered with 50 feet of rumble strips to knock off debris prior to exiting the Facility and minimize track out. Vehicles that do not have a tare weight on file with the Facility stop at the scale again before exiting the Facility. Please note, there is not currently a truck wash facility on-site, though a fully-contained equipment wash is proposed as part of this application to be located in the maintenance shop area on the southern parcel. Please see the "Proposed Future Facility Improvements" section below. Once installed, Recology trucks will utilize the equipment wash at the maintenance facility prior to leaving the site.

Processing

Incoming feedstock is to be processed and put into active windrows within 72 hours of receipt at the Facility, as provided in the Facility's September 9, 2015 CalRecycle-approved Report of Composting Site Information (RCSI). The front-end loader moves feedstock material from the unloading area to the preprocessing equipment line, which includes a slow-speed shredder, a trommel screen, and a manual picking/sorting station which currently has two suction fans and where removal of non-compostable residuals occurs. Feedstock materials are initially size-reduced through the slow-speed shredder and may be additionally size-reduced using a four-inch pre-screen. Unders and overs from the pre-screening process, materials smaller than the four-inch screen and materials larger than the four-inch screen, respectively, are incorporated directly into windrows using side dump trailers. Size reduction operations are performed if such provisions will enhance the composting process for selected feedstock materials, such as tree stumps; bulky, oversized wood waste; and large tree branches, or in cases where materials can be ground to produce a marketable product. Note that grinding activities conform to California Occupational Safety and Health Administration (Cal/OSHA) and Recology, Inc. health and safety reminders.

This preprocessing system helps to remove non-compostable residuals and sizes the compostable feedstock. Residuals that get caught by the vacuum on the sorting line are moved directly into tarped 50-yard containers while residuals that do not get caught by the vacuum on the sorting line are collected from the floor of the sorting line and moved into an approximately 25-foot by 12-foot bunker with 12-foot walls. All collected residuals are stored in these containers in the preprocessing area and are surrounded by mobile fencing. Residuals are transported off-site to a permitted facility for waste disposal or recycling within seven days, as per Title 14 of the California Code of Regulations (14 CCR, §17867(a)(10)).

Active Composting

After preprocessing, the feedstock material is stockpiled at the end of the equipment line where it is loaded into a side dump trailer with a front-end rubber tire wheel loader and transported to one of the active composting areas and built into windrows. No additives are mixed with the feedstocks or active compost.

The primary composting process employed at the Facility is a Windrow Composting Process. In this process, feedstock is arranged into elongated windrows that are approximately 600 feet long, up to 18 feet wide, and typically up to nine feet tall. These windrow dimensions are described in the Facility's September 9, 2015 CalRecycle-approved RCSI and are compliant with the Facility's Solid Waste Facility Permit (SWFP) and Title 14 operating standards. The Facility may have in excess of 75, but not more than 180, windrows of this size. Additional CalRecycle-approved windrow dimensions are described below.

A six-inch cap of finished compost overs is placed on the peak of the active compost windrows to reduce odors and maintain compliance with the San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4566, which was implemented in 2011 as a measure to control volatile organic compounds (VOCs) emissions from composting operations. Additionally, windrows are separated by approximately eight feet to allow sufficient room for access to implement moisture conditioning and dust control activities.

The active compost process consists of the rapid decomposition of the feedstock at or above 122 degrees Fahrenheit. Temperature and oxygen levels are managed by controlling moisture content and turning or agitating the pile mechanically, in this case by using a windrow turning machine equipped with an integrated watering system. The windrow turner is connected to one of several upright water pipes throughout the site which convey water from on-site water storage. Additionally, the site may use up to four water trucks to perform this same function in areas of the site where the underground water system is not installed. A hose attachment on the windrow turner enables moisture to be added to the windrows while turning. The operator monitors the moisture, temperature, and related metrics of the compost piles, adding moisture and turning the material as needed.

Following this rapid decomposition phase is the Process to Further Reduce Pathogens (PFRP), as per Title 14 of the California Code of Regulations (14 CCR, §17868.3). The PFRP requires that active compost windrows in a windrow composting process maintain a temperature of at least 131 degrees Fahrenheit for a period of 15 days or longer and be turned at least five times during that period.

Additionally, as the need arises, such as the during an equipment breakdown, an Unground Static Pile Process may be employed as a variation of the Windrow Composting Process. In the Unground Static Pile Process, feedstock that is not size-reduced is incorporated into windrows that are approximately 600 feet long, up to 25 feet wide, and up to 15 feet tall. This composting process and associated windrow dimensions are similarly described in the Facility's September 9, 2015 CalRecycle-approved RCSI and are compliant with the Facility's SWFP and Title 14 operating standards. Please note, pile sizes may be revised in the future as composting processes

and technology changes. Any changes, however, would be approved through the CalRecycle permit process.

In the Unground Static Pile Process, feedstock is unloaded into piles and laborers remove accessible non-compostable residuals prior to incorporating the material into windrows. Additionally, during the active composting phase, a vacuum truck passes in between the windrows to pick up any fugitive non-compostable residuals from the turning process. Residuals are stored in the preprocessing area prior to off-site disposal as described above in the "Processing" subsection. These windrows are watered using a series of perforated pipes which are placed on top of the windrows and soaked overnight so they can be turned the following morning using a rubber tire front-end wheel loader. The water pipes are moved to the next oversized windrow scheduled to be turned so that they can be soaked overnight and subsequently turned.

Please note, another composting process that is not currently in use at the Facility, the Aerated Static Pile (ASP) system, will be discussed below under the "Proposed Future Facility Improvements" section. Adding an aeration system only changes the active composting phase of the process. Similar to the existing Windrow Composting Process detailed above, processed feedstock materials will be combined, mixed, and shaped into windrows for composting. Typically, the high efficiency of aeration systems allows for larger active composting piles. The material will be moisture conditioned and kept at the appropriate temperatures for pathogen reductions. Instead of turning, proper oxygen will be provided by the forced aeration system. After the active composting process, the material will go through a curing phase, followed by screening and testing, as described in the below subsections. The Facility is scheduled to begin conducting an ASP pilot project in the summer of 2016.

Curing and Screening

Upon completion of the active composting phase, including the PFRP, the compost material goes through a curing phase to finalize material stabilization and cooling in preparation for the final screening process. The curing process helps bring compost to full maturity. During this time, windrows that are almost ready to be screened may be combined by pushing the windrows together and then shaping them with the windrow turner. The compost material is typically allowed to cure for approximately four weeks, during which time air and water are added and windrows are turned at least one time per week to further reduce temperatures. Regular testing and temperature monitoring of the material indicates when the curing phase is complete.

Once curing is complete, the material is taken from the windrows and moved to the finish screen area. There the material is screened and separated into two products, the unders and the overs from the finish screen process. The unders are the finished compost product that is ready for sale. This material is stockpiled and temporarily stored in the screening/stockpiling area until it is sold. The overs are the larger organic fraction of the material that did not breakdown completely during the composting process. The overs are processed in a water float tank to remove any remaining undesirable material, such as film plastic, rocks, and/or metal. Residuals are stored in the preprocessing area and disposed of properly at permitted facilities off-site within seven days, as described above in the "Processing" subsection. The remaining organic material

is incorporated back into the composting process or is ground and beneficially reused, such as, but not limited to, for erosion control or as a biocover placed on the peak of the active compost windrows to reduce odors and VOCs and maintain compliance with the SJVAPCD Rule 4566.

Testing and Shipment

The finished compost product is sampled and tested to verify compliance with metal and pathogen reduction provisions stipulated in 14 CCR, §17868.1 through §17868.3. Finished product is stored on-site until it is loaded out for delivery. Transfer trucks are loaded with finished material by front-end loaders and weighed at the scale in the finished compost area prior to departing the site through the main exit. Material is transported off-site to agricultural markets in Stanislaus County, Central California, and Northern California.

FEEDSTOCK

The Facility is permitted to accept up to 2,000 tons per day (TPD) of feedstock. There is no limit on the amount of a certain type of feedstock that may be received. Current incoming feedstock is estimated at 40% food material, however, if any portion of an inbound load contains food material, that entire load is characterized as a food material load, even if the load is 95% green content and only 5% food content. The following descriptions outline the types of feedstock, as defined in Title 14 of the California Code of Regulations (14 CCR, §17852), that are currently composted and managed at the Facility:

- *Green Material:* Any plant material, except food material and vegetative food material, that is separated at the point of generation, contains no greater than 1.0 percent of physical contaminants by dry weight, and meets the requirements of 14CCR, §17868.5. Green material includes, but is not limited to, tree and yard trimmings, untreated wood wastes, natural fiber products, wood waste from silviculture and manufacturing, and construction and demolition wood waste.

- *Agricultural Material:* Waste material of plant or animal origin which results directly from the conduct of agriculture, animal husbandry, horticulture, aquaculture, vermiculture, viticulture, and similar activities undertaken for the production of food or fiber for human or animal consumption or use, which is separated at the point of generation, and which contains no other solid waste. Agricultural material includes, but is not limited to, manures, orchard and vineyard prunings, grape pomace, and crop residues.

- *Food Material:* A waste material of plant or animal origin that results from the preparation or processing of food for animal or human consumption, and that is separated from the municipal solid waste stream. Food material includes, but is not limited to, food waste from food facilities as defined in Health and Safety Code, §113789 (such as restaurants), grocery stores, institutional cafeterias (such as prisons, schools, and hospitals), and residential food scrap collection.

Packaging incidental to commercial food waste acceptance is allowed through the CalRecycle permitting process. This is described in the Facility's September 9, 2015 CalRecycle-approved RCSI. Please see the "Nature of the Current Composting Process" section above and the "Control of Residuals" section below for a detailed discussion of how non-compostable residuals are sorted from the above mentioned feedstocks, managed, and properly recycled or disposed.

It should be noted that due to the higher density of food material, green, and/or agricultural material is blended with the food material feedstock to promote better aeration and moisture distribution characteristics. Current windrow composition is typically up to a one-to-one ratio of food material, not comprising more than 50% of food content, to green material by weight, but may be changed to control for odor, porosity, and finished product quality, among other things. Feedstocks are blended prior to processing, and windrow composition is monitored by the receiving operator.

Some cured compost is blended with additives or amendments to provide attributes for certain compost products based on market demand. Materials that may be kept on-site for potential use as additives or amendments, include, but are not limited to, wood chips, clean soils, clay, other compost, zinc sulfate, potash sulfate, sulfur, boron, phosphorus, oyster shells, bedding sand, gypsum, lime, and dolomite. Other similar materials may be used should market conditions dictate or site conditions require their use. The Facility uses amendments to create custom blends of compost as requested by customers. Amendments are typically stored in the finished compost area. The frequency and volume of the use of additives or amendments is determined by market demand and storage capacity on site.

CONTROL OF RESIDUALS

As described above in the "Nature of the Current Composting Process" section, incoming material is

- Screened for non-compostable residuals, such as metal, plastic, or other non-organic recyclables or waste, upon receipt at the Facility (please see the "Load Checking Protocol" section below for more details on how other prohibited materials are handled at the Facility);
- Screened and sorted to remove non-compostable materials during the preprocessing phase, as described in the "Processing" subsection above; and
- Screened again after it has undergone the active compost, PFRP, and curing phases and has become finished product.

Residuals removed during the composting process are stored or stockpiled in tarped containers or high-walled bunkers surrounded by mobile fencing in the preprocessing area before being transported off-site to a permitted facility for waste disposal or recycling within seven days. Please see the "Nature of the Current Composting Process" section above.

Additionally, the Facility's Litter Management Plan helps control residuals on-site. Litter control efforts include, but may not be limited to:

- Portable and/or permanent litter fencing to prevent litter from blowing off-site;
- Daily patrolling of windrow and processing areas by Facility personnel to collect any litter on-site;
- Temporarily discontinuing screening of material during times of high winds to prevent potential litter from spreading on-site or off-site;
- Spraying water during operational processes that may release small-sized litter; and/or
- Off-site litter pick-up by Facility personnel in the event any litter has escaped on-site litter control measures.

Please see the "Litter Control" section below and the attached Litter Management Plan for more details.

BVON has been working with our customers in an effort to improve the overall quality of the inbound materials received at the Facility. These efforts include, but are not limited to, the following:

- Utilizing our Waste Zero Specialists at a number of the Safeway and Save Mart distribution centers to discuss means to improve the quality of material the customers are sending to the Facility and to improve the overall recovery effort of these distribution centers.
- Utilizing on-site personnel to grade the inbound loads, take photographs, and report to the scale house the quality of the inbound loads on a daily basis. The reports and photographs are matched up with customers' weigh tickets. At the end of the day, any customer whose loads required downgrading is emailed with a copy of the corresponding weigh ticket, in an effort to identify residual products contained in their loads. Follow-up emails and/or phone calls are made to the customers to review BVON's inbound quality expectations.
- Charging customers who bring in loads containing excess residuals a higher tip fee for said loads. BVON hopes that by charging the higher tip fees, the Facility can recover our fees and costs associated with excess residual disposal for said loads and also encourage the customer to improve the overall quality of the material they are collecting and sending to the Facility for processing. Please see the "Load Checking Protocol" below, specifically the "Procedures for Rejected Loads" subsection, for details on how rejected loads are handled.

LOAD CHECKING PROTOCOL

The Facility's load checking protocol establishes procedures to identify and remove hazardous and otherwise prohibited wastes from feedstock materials delivered to the Facility. Please note, plastic bags and other non-compostable residuals incidental to food material collection is screened out during feedstock preprocessing, as described in the "Processing" subsection above, and is not typically the main focus of the load checking protocol. As described in the Facility's

September 9, 2015 CalRecycle-approved Report of Composting Site Information (RCSI) wastes prohibited from receipt at the Facility include, but are not limited to, municipal solid waste, televisions and computer monitors, electronic devices, computers, radios, phones, household batteries, fluorescent tubes, mercury thermometers and switches, flammable liquid, paint, pesticides and poisons, aerosols, car batteries, oil, compressed gas cylinders, acids/caustics, PCBs/light ballasts, explosives, radioactive waste, infectious or medical waste, pharmaceuticals, treated wood, and any other wastes prohibited by the Solid Waste Facility Permit or the Use Permit. Definitions of these wastes can be found in statute, regulation, or permit conditions. In addition, the Facility may deem other wastes as prohibited at the Facility.

The load checking program consists of five elements:

1. Personnel and Training
2. Load Checking Activities
3. Management of Wastes
4. Procedures for Handling Rejected Loads
5. Record Keeping Procedures

Personnel and Training

Once compost feedstock arrives at the Facility entrance, it is subject to any combination of the load checking activities described below in the "Load Checking Activities" subsection. Although the majority of load checking activities are conducted by the load checker, other personnel assist with certain load checking duties, including the equipment operator, the spotter, the working foreman, and the Recology Environmental Compliance Department personnel.

The load checker's primary responsibility is surveillance of incoming loads for hazardous and other prohibited wastes, such as radioactive, medical, liquid, designated, or other wastes requiring special treatment or handling as described in the Facility's Solid Waste Facility Permit. The load checker can conduct load checking activities, such as customer notification, site surveillance, and waste inspection, at any location within the Facility; however, these activities are typically conducted at the feedstock receiving area. As the primary site employee implementing the load checking program, the load checker is responsible for a number of other activities. These include addressing customer concerns, refusing prohibited wastes, and responding to emergencies. The load checker also maintains written records of load checking activities at the site, typically on the Site Surveillance Form and the Waste Inspection Form.

The equipment operator uses heavy equipment to process the compost feedstock at the Facility, as described in the "Processing" subsection above. This activity provides the opportunity for review of the material immediately before processing or incorporation into a windrow. Situated in the equipment cab, the equipment operator can generally identify prohibited wastes. If prohibited wastes are identified, the equipment operator contacts a properly trained employee, such as a load checker or supervisor, and relays relevant information, such as the type of material suspected and whether emergency procedures are necessary. The equipment operator may also assist the load checker during waste inspections by mechanically spreading the load.

The spotter primarily directs traffic into position to unload, but the spotter has the opportunity to survey loads before and during the unloading process. If prohibited wastes are suspected in the load, the spotter notifies the customer of the Facility's waste acceptance policy and informs the customer that wastes cannot be accepted at the facility. The spotter then notifies the load checker or working foreman of the suspected prohibited wastes.

The working foreman, in addition to supervising facility operations, provides backup for the load checker and may perform some of the load checker's duties if prohibited waste is discovered when the load checker is not present. These load checking duties typically include addressing customer concerns; refusing prohibited wastes; placing prohibited wastes in the hazardous materials storage container, a covered shipping container located by the scale house; and responding to emergencies. Upon the load checker's return, the working foreman reports any load checking activities conducted during the load checker's absence.

The Recology Environmental Compliance Department personnel assist Facility personnel as needed. Their responsibilities typically include assisting with questions regarding the acceptability of certain wastes, conducting periodic audits, providing training for load checking personnel, providing guidance on company and facility policies, and responding to questions about the load checking program.

Load checking program personnel undergo training before they undertake their responsibilities. Typical training may include the effects of hazardous substances on human health and the environment; identification of prohibited materials; emergency notification and response procedures; selection and proper use of personal protective equipment; management of prohibited wastes; and record keeping. Records documenting the successful completion of training requirements are kept on file at the Facility office for at least three years.

Load Checking Activities

Load checking activities include customer notification, site surveillance, and load inspection. It should be noted that every load checked is not subject to all load checking activities. There are two reasons for this. First, the program intentionally includes an element of randomness. That is, each activity can occur randomly as loads arrive at the facility. Second, subjecting each load checked to all load checking activities could significantly increase the time the customer must remain at the Facility. Additionally, there is no fixed sequence to the activities described; several activities may be undertaken simultaneously or independently and may target specific or random loads. To prevent customers from circumventing the program, it is extremely important that the schedule for conducting load checking activities not become predictable.

Notifying customers that certain wastes are unacceptable for receipt at the Facility is a key component of the load checking program. It is the customer's responsibility to ensure they deliver acceptable wastes, as described in the "Feedstock" section above. Customers are notified that they retain responsibility for any prohibited wastes detected in their load. Notification includes signs, notices, and verbal communication, such as inquiring about a customer's load.

Vehicles entering the facility are subject to surveillance by site personnel. Incoming loads may be visually screened initially by the weigh master or other entrance personnel for the presence of prohibited wastes. In addition, the customer may be queried as to whether they have any hazardous or otherwise prohibited wastes. If prohibited waste is not visible or suspected, the vehicle is allowed to proceed to the receiving area. If prohibited wastes are observed or suspected, the customer is reminded of the Facility's prohibited waste policy and is not allowed to unload the prohibited waste. The weigh master notifies the load checker or working foreman of the load and records observations on the Site Surveillance Form.

When the load arrives at the receiving area, the spotter directs the vehicle where to unload. This is also an opportunity to visually survey the material for prohibited wastes. If prohibited wastes have been previously identified, the spotter will observe the customer to confirm the prohibited wastes are not unloaded. If prohibited wastes are discovered or suspected by the spotter, or if the customer is uncooperative, the spotter notifies the load checker or working foreman. Please see the "Procedures for Rejected Loads" subsection below for details on how prohibited wastes are handled.

The load checker generally conducts surveillance of the incoming waste at the receiving area. At this point, surveillance of the load involves observing the material as it is unloaded from the vehicle. The load checker will examine some of the material more closely to confirm the status of the material in the event hazardous or prohibited materials are observed. If the material is deemed acceptable, it can be unloaded. If the material is deemed unacceptable, the customer is required to retain the material that is prohibited. The customer must demonstrate, to the satisfaction of Recology Environmental Compliance Department personnel, that the material is acceptable by presenting material safety data sheets (MSDSs), laboratory tests, or other proof of acceptability. Observations of this activity are recorded by the reviewing environmental staff and in the Site Surveillance Form.

If a more detailed review of the material load is desired, a Load Inspection is performed. Load Inspections involve a more thorough examination of the material than surveillance. Loads can be randomly or intentionally selected for inspection. Inspections are documented in the Load Inspection Form. To perform a Load Inspection, the load checker instructs the driver to unload the material onto a designated area. The load checker then inspects and carefully examines the material for the presence of prohibited wastes. Any material suspected of being hazardous or otherwise prohibited is returned to the customer when possible. See the "Procedures for Handling Rejected Loads" subsection below for more details.

Management of Wastes

When possible, prohibited wastes identified at the facility are returned to the generator. If the generator is not on site, or if the waste is from an unknown or recalcitrant generator, the waste must be stored in the Facility's hazardous materials storage container, a covered shipping container located by the scale house, until removal. Wastes from unknown or recalcitrant generators are designated for off-site disposal and must also be packaged for shipment. Each of these waste management activities is described below.

Procedures for Handling Rejected Loads

Waste return procedures in instances where the generator is known, unknown, and recalcitrant are discussed in the following sections.

- **Known Generators**
  If the generator of the prohibited wastes is known and is on-site, the load checker informs the generator that the wastes are not acceptable at the Facility and that the generator is responsible for properly managing and disposing of the waste. The load checker records information pertaining to the types of wastes rejected and the generator (e.g., vehicle identification) on the Waste Inspection Form. If the load checker is not on-site, the spotter or weigh master will contact the working foreman to work with the generator.

- **Unknown Generators**
  If prohibited wastes are found at the Facility and the generator cannot be identified, the wastes become the responsibility of BVON as the Facility owner. The wastes are stored in the hazardous material storage container, a covered shipping container located by the scale house, until arrangements for shipment are made.

- **Recalcitrant Generators**
  If recalcitrant generators can be convinced to accept responsibility for the prohibited wastes, then the wastes are managed consistent with the procedures described previously for known generators. If recalcitrant generators do not accept responsibility for the prohibited wastes, then the wastes are managed consistent with the precedures described previously for unkonwn generators.

Record Keeping Procedures

A variety of records and reports, including those required by regulations, are maintained either in the scale house or the Facility office. These include, but are not limited to, inspection records, incident reports, and training records. Copies of the records and reports are kept at the scale house or Facility office for inspection by the US Environmental Protection Agency (EPA), California EPA, or any other federal, state, or local enforcement agency. All records and reports are maintained for a minimum of three years.

ODOR CONTROL

Odor at the composting facility is controlled primarily by the following:

- Processing all incoming compostable feedstock materials into active windrows within 72 hours, as described above in the "Nature of the Current Composting Process" section;
- Adequately blending feedstocks and/or adjusting food material to green material ratios to achieve desired carbon to nitrogen levels. Windrows typically have up to a one-to-one ratio of food material, not comprising more than 50% of food content, to green material by weight;

- Monitoring feedstock porosity;
- Evaluating and altering moisture management operations, which may include adding sufficient water to achieve desired moisture;
- Temperature balancing through regulation of airflow within the windrows;
- Adjusting pile sizes;
- Improving site drainage; and
- Other technologies, facility improvements, or changes to process controls as deemed necessary and appropriate by BVON to eliminate the source of malodor.

The above described methods are consistent with industry practices. Odor controls on the compost pads include:

- Collection and incorporation of organics from aisles between windrows;
- Use of microbial inoculants or lime on pad surfaces and water collection systems; and
- Incorporating high organic content liquids into the composting process, both as an inoculant and for moisture control.

Additionally, a six-inch biocover is applied to the peak of the active composting windrows during the first 15 days of composting to reduce odors and VOCs in accordance with the SJVAPCD Rule 4566.

The site will be upgrading the storm water run-off conveyance system and the storm water treatment and storage ponds in 2016. Below grade solid pipes will convey the storm water from the active pads to storm water treatment and storage ponds. Each pond will be equipped with aerators to maintain aerobic conditions and minimize potential to emit odors.

Facility personnel monitor on-site odor with an olfactometer device and record the readings twice per week. They monitor 20 locations both on-site and off-site up to two and half miles from the Facility. In the event of an odor complaint with respect to the composting operations, the complaint is addressed in accordance with the Facility's Odor Management Plan. The Odor Management Plan discusses procedures for addressing complaints, including utilization of a third party complaint hotline that alerts both Facility management and Stanislaus County in the event a complaint is made. When complaints are received by the third party answering service, an email is sent to both the Facility and Stanislaus County alerting them of the incident. Upon notification of a complaint by the third party service, or upon direct receipt of a complaint by the Facility, Facility personnel will use an olfactometer device to determine if the odor is detectable both at the complaint location and on-site at the Facility border in the area of the prevailing wind direction. Additionally, Facility personnel will use a pocket weather tracker to document other meteorological conditions, such as wind direction and speed, heat, humidity, and precipitation. Complaints received by the Facility are forwarded to the lead enforcement agency (LEA) within 24 hours of receipt or by close of business on the first business day after a weekend complaint. The submittal will note that an investigation will be conducted and an Odor Complaint Investigation Report (OCIR) will follow within 48 hours of receipt of the initial complaint or by close of business on the first business day after a weekend complaint.

Please see the separate "Odor Management Plan" for more details.

LITTER CONTROL

In addition to the processing of incoming feedstock to minimize the amount of non-compostable residuals, the site employs a litter control protocol. Litter control is conducted by four Facility personnel who patrol the interior of the Facility throughout the day and four Facility personnel who patrol the site perimeter and Gaffery Road daily. Aisles between windrows and vessels, receiving and load-out areas, and entrance and exit roads are inspected daily and accumulated litter is removed. Litter control efforts include:

- Portable and/or permanent litter fencing to prevent litter from blowing off-site;
- Daily patrolling of windrow and processing areas by Facility personnel to collect any litter on-site;
- Temporarily discontinuing screening of material during times of high winds to prevent potential litter from spreading on-site or off-site;
- Spraying water during operational processes that may release small-sized litter; and/or
- Daily litter patrol by four Facility personnel on Gaffery Road from Koster Road to Welty Road. These Facility employees also patrol and clean the almond orchards and the water spillways located to the southwest of the property.

A vacuum truck is used to pick up on-site and off-site litter, and a second litter truck has been ordered and is expected to arrive in the summer of 2016. The Facility utilizes portable internal litter fences placed strategically around the Facility. A 22-foot high mesh permanent dust and litter fence is located along 800 feet of Gaffery Road on the southern boundary of the main parcel. The litter fence may be increased in height, as necessary, and a cantilevered top may be added as well to prevent litter from blowing over the top of the fence. An extension of the litter and dust fence is planned to be installed along the eastern side of the Facility. Additionally, BVON plans to add approximately 300 feet of litter fencing on the internal portion of the Facility's access road at both the entrance and the exit to further limit the potential for wind blown litter to leave these open exit points of the existing fencing.

In 2013, the materials receiving and processing area was relocated from the front of the Facility to a central area of the Facility along the eastern property line. This location assists with the containment of litter and prevents off-site migration along both Gaffery Road and the Delta-Mendota Canal. A second processing line is planned for the receiving and processing area, which will act to further remove non-compostable material from the compostable feedstock.

Please see the separate "Litter Management Plan" for more details.

DUST CONTROL

The primary sources of dust at the Facility include the unloading of material, material processing, turning of windrows, and material screening. The primary means of dust control on-site is moisture conditioning using a water truck. Windrows are watered during the construction of the windrows and during turning, both as part of the composting process and as a method of dust control, in compliance with the SJVAPCD Rule 4566. Additionally, periodic watering of roads and aisles minimizes dust from incoming vehicles. Material turning and/or screening is scheduled so as to minimize dust creation and dispersal. Facility personnel will periodically water the outside of windrows, utilizing the water cannons on the water trucks, prior to turning as an additional measure to limit dust generation during the turning process. Weather conditions are monitored with an on-site weather station so that grinding and screening can be curtailed during times of high winds, as necessary, to minimize off-site dust. During the grinding of wood or extremely dry loads, water is dispensed from the water truck, as needed, to control dust. Dust suppression systems are installed on some of the Facility's equipment, and is utilized as needed. The aforementioned suppression systems are very similar to a fire suppression system; however, they utilize a high pressure head that emits a very fine mist to cascade on the conveyor belts and/or trommels to trap the dust to the unit and limit its airborne potential. A permanent dust and litter fence was installed along 800 feet of Gaffery Road, which further increases dust control at the site. An extension of the dust and litter fence is planned along the eastern side of the Facility and at the site entrance and exit, as described above. Additionally, the Facility utilizes a street sweeper with watering capability daily along Gaffery Road from Koster Road to Welty Road.

VECTOR CONTROL

The primary vectors associated with composting projects are flies, birds, and local rodents, such as ground squirrels. In general, well-managed compost piles do not provide a stable habitat for birds, rats and other rodents, flies, or other vectors. Vectors can be kept to a minimum by using good housekeeping procedures, such as cleaning all spills between the windrows, ensuring the timely incorporation of feedstock into windrows, and managing stockpiles.

Flies

Flies may be controlled with the use of fly predators, microbial treatments, traps, or other means. Additionally, the Facility has engaged the services of an entomologist to analyze the conditions at the Facility and propose possible mitigation measures. The entomologist is scheduled to begin analyzing the Facility's flies in the summer of 2016 when the flies begin to appear and continue to observe them as fly conditions and environments change seasonally into spring of 2017. The expert will analyze the types of flies at the Facility, breeding practices of the species that are found, distances these flies are able to travel, and additional means to control the generation of flies at the Facility. Following this analysis, the entomologist will provide BVON with a report of recommendations and train Facility personnel on site-specific best management practices for fly control.

Birds

Manual and/or automated noise devices may be used to discourage and scare the bird population. Additionally, the Facility employs a falconer on-site 50 hours per week, year round. The falconer uses predator birds to control pest birds. Other measures or technology will be used, as necessary, as they become available to make the environment undesirable to birds.

Rodents

Typically, the amount of activity inherent in the composting process, such as unloading materials, sorting and processing, creating windrows, turning and watering windrows, screening finished compost, and loading trucks, does not provide a welcoming environment for rodents. Additionally, timely processing of incoming material to begin the active composting phase and the proper management of windrows and stockpiles prevent the creation of harborages of food sources for rodents and other vectors.

LIQUID AND DRAINAGE CONTROL

The sources of potential wastewater generation at the Facility include moisture conditioning performed during the course of the composting operation and run-on/run-off associated with rainfall events. Control provisions employed to minimize and/or manage wastewater resulting from these sources include the use of an integrated watering system that incorporates water into windrows as they are turned, as well as monitoring the moisture conditioning to minimize excess water infiltrating through the feedstock. In addition, the Facility's surface is designed to flow to drainage ditches which direct the flow of liquids to a retention pond. Liquids from this pond are reincorporated into the composting process.

Additionally, a perimeter berm and inwardly sloped site entrances typically prevent storm water from discharging off-site. However, in the unlikely event of a storm water discharge, the Facility is covered under the California State Water Resources Control Board (SWRCB) Industrial General Permit (IGP) for storm water discharges. The site has two outfalls. One is located at the southeastern corner of the western most storage pond on the main parcel. The other outfall is on the eastern corner of the maintenance shop parcel on the south side of Gaffery Road. Storm water from the compost operations area is contained within the compost operations area run-off containment system and is prevented from discharging off-site by a perimeter berm.

Surface water from the operations area drains toward the east via shallow drainage swales and flows into two drainage channels located along the eastern boundary and central portion of the site. Each shallow channel drains toward the south and into a sedimentation basin for containment. Drainage from the southwestern portion of the operations area flows through the drainage swales to the western most sedimentation basin for containment
Surface water from both the paved and unpaved areas surrounding the maintenance shop, located to 3432 Gaffery Road, generally drains across the site to the southeast by surface sheet flow, exits the maintenance facility industrial area through breaks in the berm near the southeast

corner, and infiltrates in the surrounding orchard or flows toward a sediment basin located in the northeast corner of the orchard. Site entrances are sloped to drain into the facility.

The Facility is also covered under the SWRCB's General Waste Discharge Requirements for Composting Operations (Compost General Order). To be compliant with the Compost General Order, BVON proposes improvements to the capture, conveyance, and treatment of wastewater on-site, though general drainage patterns will remain the same. This project will include reducing the permeability of the working surfaces to prevent infiltration of wastewater, installing below grade conveyance pipes to direct wastewater to the ponds, and expanding and lining the existing treatment and storage ponds. Please see the "Facility Improvements Currently in Process" section below for more details on this Wastewater Infrastructure project.

FACILITY IMPROVEMENTS

Since 2010, when Recology acquired the Facility, improvements have continued to be made to control and minimize potential nuisance conditions at the composting site. The existing, in process, and proposed improvements are outlined below.

Improvements to the Facility since the Issuance of the 2008 Conditional Use Permit

1. Relocation of the Receiving and Processing Area for Incoming Feedstock

BVON relocated the materials receiving and processing area from the previous location near the Facility entrance to a more central area of the Facility located along the eastern property line. The relocation of the processing area to a more central location has improved the ability to contain any litter on-site. This area was also improved with a surface of concrete and cement treated base. A preprocessing line was also installed in the receiving area that includes a slow speed shredder, a picking/sort line, and a trommel screen to help remove non-compostable residuals and size the compostable feedstock.

2. Addition of a Second On-site Process Water Well in the Northwestern Corner of the Facility

In 2014, a second on-site water well was located in the northwestern corner of the Facility in San Joaquin County. This well is used for process water for operations in both San Joaquin and Stanislaus Counties. The water is pumped to a retention basin in Stanislaus County, and is then used for moisture conditioning and dust control.

A new water well for public consumption is planned in Stanislaus County in the maintenance shop area south of Gaffery Road. Please see the "Facility Improvements Currently in Process" section, specifically the "Public Water System" subsection, below for more details.

3. Asphalt Paving and Installation of Rumble Strips at the Facility Entrance and Exit

Asphalt paving and installation of 50 feet of rumbled strips at the Facility entrance and exit have been completed to reduce track out onto Gaffery Road.

4. Installation of a 22-Foot Tall Litter and Dust Fence along 800 Feet of Gaffery Road

A 22-foot tall mesh litter and dust fence was constructed along an 800-foot portion of Gaffery Road to aid in reducing off-site litter and dust. Additional litter fencing is proposed for the eastern property line as well as at the Facility entrance and exit, as described in the "Proposed Future Facility Improvements" section below.

5. Additional Operational Improvements

BVON adjusted the windrow sizes to better manage feedstock. Feedstocks are arranged into windrows approximately 600 feet long, up to 18 feet wide, and typically up to nine feet tall. Windrow dimensions discussed above are described in the Facility's September 9, 2015 CalRecycle-approved Report of Composting Site Information (RCSI) and are compliant with the Facility's Solid Waste Facility Permit (SWFP) and Title 14 operating standards. Windrows are separated by approximately eight feet to allow sufficient room to implement moisture conditioning and dust control activities, as described in the "Nature of the Current Composting Process" and "Dust Control" sections above.

In the event the need arises, such as during an equipment breakdown, an Unground Static Pile Process may also be employed as a variation of the Windrow Composting Process. In the Unground Static Pile Process, feedstock that is not size reduced is incorporated into a pile. These windrows are approximately 600 feet long, up to 25 feet wide, and up to 15 feet tall. Feedstock is unloaded into piles and laborers remove accessible non-compostable residuals prior to incorporating the material into piles. These windrows would be turned by a rubber tire front-end wheel loader. This composting process and associated windrow dimensions are also described in the Facility's September 9, 2015 CalRecycle-approved RCSI and are compliant with the Facility's SWFP and Title 14 operating standards.

An integrated watering system has also been designed to accommodate the windrow sizes. The windrow turner is connected to one of several upright water pipes throughout the site, which convey water form on-site water storage. Additionally, the site may use up to four water trucks to perform this same function in areas of the site where the underground water system is not installed. A hose attachment on the windrow turner enables moisture to be added to the windrow while turning.

BVON has also implemented the use of a six-inch biocover over the peak of the active compost windrows in accordance with the SJVAPCD Rule 4566. A six-inch cap of finished compost overs is placed on the peak of the windrow, which reduces odors and VOCs.

Finally, a third party answering service has been set up to receive any complaints. If a complaint is received from a nearby residence or possible odor receptor, it will be investigated and a

response will be issued. The phone number is 855-706-7930. When complaints are received by the service, an email is sent to both BVON and Stanislaus County alerting them of the incident.

Facility Improvements Currently in Process

1. Wastewater Infrastructure Improvements

BVON is proposing improvements to the capture, conveyance, and treatment of wastewater on-site, in accordance with the General Waste Discharge Requirements for Composting Operations adopted in 2015 by the California State Water Resources Control Board. The Facility plans to reduce the permeability of the working surfaces to prevent infiltration of wastewater and expand and line the existing storage ponds with 160 mil HDPE liner underlain with a geosynthetic clay liner (GCL). All wastewater will drain to below grade conveyance pipes and be directed to the lined treatment and storage ponds. In addition to liner systems, each pond will have a pan lysimeter for leakage monitoring and an aeration system to control and prevent odors and mosquito harborage. The treatment pond will utilize three 15-horsepower floating aerators, while the east and west storage ponds will utilize three 15-horsepower brush aerators. To further safeguard groundwater through early detection of leaks, groundwater monitoring wells have been installed up gradient and down gradient of the storage ponds. Wastewater will be treated on-site in an aeration pond and stored in the storage ponds until reused as process water for composting.

Due to the large capital expenditure required to perform these improvements, the Water Board has adopted a six-year implementation schedule. The first phase of implementation at the site will be the stormwater conveyance and storage facilities. The Water Board is requiring the first phase improvements be completed by November 30, 2016. Following this, the Facility will complete approximately 20% of the working surface improvements every year by November 30, starting in 2016. Full build out to comply with the General Waste Discharge Requirements for Composting Operations must be completed by November 30, 2021. Please see the attached Notice of Applicability for the General Waste Discharge Requirements for Composting Operations issued by the Central Valley Regional Water Quality Control Board (CVRWQCB) on January 27, 2016.

2. New Well for the Public Water System on the Southern Parcel in the Maintenance Shop Area

BVON is working with the Stanislaus County Department of Environmental Resources to come into compliance with the water system requirements of the California Health and Safety Code (CHSC). Design of a public water supply system is currently in process. Upon County approval, the Facility will site, drill, and install a potable water supply well and drinking water treatment system.

Proposed Future Facility Improvements

1. Expansion of the 22-Foot Tall Litter and Dust Fence

The existing 22-foot tall mesh litter and dust fence is proposed to be extended along a portion of the eastern property line. A cantilevered top will be added to the entire fence to prevent litter from blowing over the top of the fence. Additionally, a similar 22-foot tall mesh fence with a cantilevered top is proposed for the site entrance and exit.

2. An Additional Processing Line for Incoming Feedstock

BVON will install a second processing line identical and adjacent to the existing processing line in the receiving and processing area for incoming feedstock. This second processing line will aid in removing non-compostable residuals from the incoming material during the sorting and processing phase and sizing the remaining compostable feedstock.

3. Fully Contained Equipment Wash on the Southern Parcel in the Maintenance Shop Area

A fully contained equipment wash will be installed in the shop area located south of Gaffery Road. The equipment wash will collect, filter, and re-use wash water.

4. Pilot Scale to Full Scale Aerated Static Pile System

BVON will conduct a pilot scale test of an Aerated Static Pile (ASP) System in contemplation of converting the operation to that system. This composting process involves the breakdown of organic material by aerobic bacteria in the presence of oxygen. The provision of oxygen, or aeration, is a key component in the composting process. Forced air systems, or aeration systems, utilize technology to provide a consistent source of oxygen for the composting process. Aeration systems not only provide more efficiency, but can also reduce the space and time needed for the process. Additionally, constant airflow has the potential to provide significant odor control by reducing anaerobic conditions. Aeration systems can also reduce emissions of volatile organic compounds (VOCs) that would otherwise escape into the atmosphere. Aeration systems are considered an approved technology for VOC reduction under the SJVAPCD Rule 4566.

BVON proposes the construction and operation of an ASP system for active composting of feedstock containing food material. The ASP system will begin with a small scale pilot project to test efficiencies of the system. The pilot system is currently scheduled to be operational in July 2016 and run for at least six months to collect sufficient data for analysis and development of a larger scale system. Upon the completion of a successful pilot project, BVON intends to expand the ASP system and implement it on a larger scale. The larger scale project is intended to be implemented in two phases. Currently, Phase One is scheduled to begin in the summer of 2017, and Phase two is scheduled to be completed in the summer of 2018. Operations will remain within the 2,000 TPD permit limit.

5. Additional Improvements

BVON has ordered a second, larger vacuum truck that is expected to be received in the summer of 2016. This second truck will supplement the existing one in litter pick up on-site and off-site. Similarly to non-compostable residuals collected during the composting process described above, any litter collected is stored or stockpiled in tarped containers or high-walled bunkers surrounded by mobile fencing in the preprocessing area before being transported off-site to a permitted facility for recycling or disposal within seven days. Please see the "Nature of the Current Composting Process" section above.

An expansion to the employee break room and existing scale house is planned at the Facility to provide more space to employees in these areas.

ADDITIONAL USE PERMIT APPLICATION REQUIREMENTS

Findings

The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use, and that it will not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

The on-site composting operations are consistent with the Agricultural Zoning and general plan designations. The operational improvements documented in this Use Permit application do not change or expand existing on-site operations. Additionally, the Project Description describes current and proposed mitigation measures for potential nuisances, including dust, litter, odor, and vectors.

1. Use Permit: Agricultural Uses – Tier Two

1. *The establishment as proposed will not be substantially detrimental to or in conflict with agricultural use of other property in the vicinity; and*

The establishment as proposed will not be substantially detrimental to or in conflict with agricultural use of other property in the vicinity. The operational improvements documented in this Use Permit application do not change or expand existing use or on-site operations.

2. *The establishment as proposed will not create a concentration of commercial and industrial uses in the vicinity; and*

The establishment as proposed will not create a concentration of commercial and industrial uses in the vicinity. The operational improvements documented in this Use Permit application do not change or expand existing use or on-site operations.

3. *It is necessary and desirable for such establishment to be located within the agricultural areas as opposed to areas zoned for commercial or industrial usage.*

It is necessary and desirable for such establishment to be located within the agricultural area as opposed to areas zoned for commercial or industrial usage. The operation produces high quality soil amendments utilized for the agricultural industry for application on vineyards, orchards, and other agricultural fields.

2. Williamson Act

Must be submitted with any request involving parcel(s) enrolled under the California Land Conservation Act of 1965 – as required by Government Code Section 51.238.1.

1. *The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district.*

The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district. The operational improvements documented in this Use Permit application do not change or expand existing use or on-site operations. The operation produces high quality soil amendments utilized for the agricultural industry for application on vineyards, orchards, and other agricultural fields.

2. *The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district. Uses that significantly displace agricultural operations on the subject contract parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.*

The use of the subject parcels for composting operations will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcels or on other contracted lands in the A-2 zoning district. The operational improvements documented in this Use Permit application do not change or expand existing on-site operations. The operation produces high quality soil amendments utilized for the agricultural industry for application on vineyards, orchards, and other agricultural fields.

3. *The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.*

The use will not impact any adjacent contracted land from agricultural or open-space use as no physical or operational expansion is proposed.

Litter Management Plan

Recology Blossom Valley Organics – North (Vernalis)

3909 Gaffery Road
Vernalis, CA 95385

June 2016

Prepared by

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EXHIBIT I

BLOSSOM VALLEY ORGANICS – NORTH (VERNALIS)
LITTER MANAGEMENT PLAN

The Recology Blossom Valley Organics – North (BVON) Composting Facility (Facility) strives to ensure that the Facility is managed to minimize any potential nuisance issues. One of those potential nuisance issues is the control and management of litter. Litter may include: papers, plastics, and other materials that may become airborne and carried away by the wind primarily through the transport and unloading of materials or during the processing of materials. This Litter Management Plan (LMP) identifies best management practices and additional enhancements to improve current control measures and offers directions that may be implemented by the Facility operator for the management and control of litter.

Litter Control Best Management Practices

The control of litter is an integral part of the daily operations of the Facility. The primary goal of the Facility operations is to implement best management practices and have all litter contained within the site.

The Facility employs the following best management practices to control litter:

1) Transport Vehicles

Pursuant to California law, all trucks entering and exiting the Facility are required to be covered. This cover is required on-site until the trucks arrive at the unloading or loading areas within the Facility. This policy is strictly enforced by BVON personnel. The Facility is open to commercial haulers only and not to the public.

2) Operational Controls

Litter control at the Facility is conducted by BVON laborers, who patrol the site and the site perimeter daily. These employees utilize the following measures:

a) Four Facility personal perform regular, daily patrol of on-site areas, including the site perimeter, aisles between windrows, receiving areas, and load-out areas in addition to entrance and exit roads, with removal of any accumulated litter;
b) Dispatch of an additional four Facility personnel daily along Gaffery Road and the site perimeter. Off-site areas include, but are not limited to, Gaffery Road, Koster Road, and adjoining properties (with permission by property owners) including the Delta Mendota canal and West Side canals. Every attempt will be made to obtain permission of nearby property owners;
c) Use of temporary contract workers if additional assistance is required beyond BVON personnel;
d) Temporarily discontinuing screening of material during times of high winds to prevent potential littler from spreading on-site or off-site;
e) Spraying water during processes that may release small sized litter;
f) Employing portable lifts to retrieve litter that may be distributed by the wind into trees and bushes on Facility property and/or adjoining properties;

g) Use of a vacuum truck to collect litter that accumulates on litter fences, in other areas of the Facility, or off-site. A second litter truck has been ordered and is expected to arrive in the summer of 2016;
h) If possible, adjustment of unloading areas on windy days to minimize effects of wind (i.e., tipper facing into wind adjacent to the leeward sidewall, or sheltered by equipment or feedstock piles);
i) Routine monitoring of Koster and Gaffery Roads for litter. All necessary safety precautions are followed;
j) Providing BVON management contact numbers on Facility entrance sign and to neighbors.

3) Litter Fencing

Permanent and portable litter fencing is used throughout the Facility to capture any windblown litter and to minimize any off-site migration. Use of litter fences includes the following:

i. Installation of permanent fencing along Gaffery Road.
   a) Installation of a 22-foot high litter fence along 800 feet of the property that fronts Gaffery Road.
   b) Installation of additional litter fencing along a portion of the eastern property line is proposed.
   c) Installation of approximately 300 feet of litter fencing on the internal portion of the Facility's access road at both the entrance and exit is proposed.

ii. Litter fencing will be increased in height, as necessary, to keep all sized litter particles within the Facility boundaries. Additionally, a cantilevered top may be added to all above mentioned permanent litter fences to prevent litter from blowing over the top of the fence.

iii. The use of portable skid-mounted litter fences will be provided, as needed, for deployment downwind, and as close as practical, to the unloading, processing, and/or screening areas.

4) Relocation of Materials Processing Area

BVON has relocated the materials processing and receiving area from the previous location near the Facility entrance to a more central area of the Facility located along the eastern property line. Relocating the processing area to a more central location within the Facility has improved the ability to contain any litter from migrating off-site along both Gaffery Road and the Delta Mendota canal.

The Facility is regulated by the California Department of Resources Recycling and Recovery (CalRecycle). CalRecycle is responsible for ensuring that all conditions in the Facility's Solid Waste Facility Permit (SWFP) are being complied with and inspects the Facility on a monthly basis. In addition to the above noted measures, the Facility is required to comply with all State Minimum Standards which set forth performance standards and requirements for the operation of

solid waste facilities. This includes setting levels for the amount of contaminants in feedstocks as well as the control and disposition of litter.

The management of litter at the Facility is a daily, on-going activity. In most instances the above practices and techniques will properly manage litter effectively. However, should an occasion or situation arise where additional measures need to be employed, BVON will respond to this situation as expeditiously as possible.

Odor Management Plan

Recology Blossom Valley Organics – North (Vernalis)

3909 Gaffery Road
Vernalis, CA 95385

June 2016

Prepared by

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EXHIBIT J

BLOSSOM VALLEY ORGANICS – NORTH (VERNALIS)
ODOR MANAGEMENT PLAN

Background and Introduction

This Odor Management Plan (OMP) is intended to provide information requested by the Stanislaus County Planning Department regarding odor control at the Recology Blossom Valley Organics – North (BVON) Composting Facility (Facility).

While total elimination of odor from composting systems is not possible, the OMP and the measures outlined herein are targeted toward the systematic reduction of on-site sources of malodor and the minimization of potential off-site nuisance odor impacts.

I. Odor Monitoring Protocol

The Facility's existing operations encompass approximately 161.72 acres in both Stanislaus County and San Joaquin County at 3909 and 3432 Gaffery Road. This includes 112.45 acres of Assessor's Parcel Number (APN) 016-003-010, in Stanislaus County; 10.82 acres of APN 265-010-21, in San Joaquin County; and 38.47 acres of APN 016-016-023 in Stanislaus County, which comprises the 2.17-acre maintenance shop area.

The Facility is located in an unincorporated area along the western margin of the San Joaquin Valley, approximately ten miles southeast of the City of Tracy and 17 miles southwest of the City of Modesto. The Facility is located in Section 9 of Township 4 South, Range 6 East, Mount Diablo Base and Meridian, Stanislaus and San Joaquin Counties, California.

Land use within one mile of the site is primarily agricultural, consisting of fruit and almond orchards. The nearest business is an organics recycling facility located adjacent to the eastern boundary. The nearest off-site residence is located approximately 500 feet to the east of the Facility. No residential developments are located near the facility.

If a complaint is received from a nearby residence or possible odor receptor, then the alleged odor will be investigated. The facility recently provided a third-party answering service complaint phone number for odor complaints. The phone number is 855-706-7930. When complaints are received by the service, an email is sent to both BVON personnel and Stanislaus County alerting them of the incident. The investigator will use an olfactometer device to determine if the odor is detectable both at the complaint location and on-site at the Facility border in the area of the prevailing wind direction. The investigator will record the source, intensity, duration, weather conditions, character, and/or other information to assess odor impacts. Additionally, the investigator will use a pocket weather tracker to document other meteorological conditions, such as wind direction and speed, heat, humidity, and precipitation. If no odors are detected at that location, the investigator records "No Odor Present" on the Odor Monitoring Data Sheet.

II. Meteorological Conditions

Climate at the site is typical of that found in the Central Valley. Summers are hot and dry, while winters are mild. Further details regarding the overall climatological characteristics in proximity of the site, including temperature, precipitation, evaporation, and wind, are provided below:

a. The mean daily maximum temperature in July and August exceeds 90 degrees Fahrenheit (°F), with frequent daily highs of over 100°F. January minimum temperatures average about 40°F, with maximum temperatures in the mid-50s.

b. Rainfall is seasonal, with a majority of the precipitation occurring from October through May. The average annual precipitation for the project area is 13.19 inches, with January representing the wettest month at approximately 2.61 inches.

c. According to the California Climate Data Archive, available evaporation data recorded between 1965 and 1977 for Manteca, which is in the same area as the project site, reveals a mean annual Pan A evaporation of 69.17 inches. A minimum mean monthly evaporation of 1.16 inches occurs in December, and a maximum mean monthly evaporation of 11.64 inches occurs in July.

d. Over the course of the year, typical wind speeds vary from zero miles per hour (mph) to 16 mph, rarely exceeding 20 mph. The highest average wind speed of nine mph occurs around late May, at which time the average daily maximum wind speed is 16 mph. The lowest average wind speed of four mph occurs in January, at which time the average daily maximum wind speed is nine mph. The wind is most often out of the northwest (34% of the time) and north (16% of the time). The wind is least often out of the southwest (1% of the time), northeast (1% of the time), and south (2% of the time).

III. Complaint Response Protocol

When an odor complaint is received an Odor Complaint Investigation will be conducted as follows:

a. The site receives a complaint. When complaints are received by the third-party answering service, an email is sent to both BVON personnel and Stanislaus County alerting them of the incident. Complaints received by BVON will be forwarded to the Lead Enforcement Agency (LEA) within 24 hours of receipt or by close of business of the first business day after a weekend complaint. The submittal will note that an investigation will be conducted and an Odor Complaint Investigation Report (OCIR) (see Appendix A) will follow within 48 hours of receipt of initial complaint or by close of business of the first business day after a weekend complaint.

b. Upon notification of a compliant by the third-party service, or upon direct receipt of a complaint by the Facility, a Facility investigator will use an olfactometer device to determine if the odor is detectable both at the complaint location and on-site at the Facility border in the area of the prevailing wind direction. Additionally, the investigator will use a pocket weather tracker to document other meteorological conditions, such as wind direction and speed, heat, humidity, and precipitation. If an odor is not detectable, or is only detectable within the BVON property boundary, the investigation is completed by submitting an Odor Complaint Investigation Report (OCIR) to CalRecycle within 48 hours of receiving the complaint.

c. If an odor is detectable at the complaint location, the investigator will determine if the nature of the odor is malodorous, indicating a possible operational issue, or if the odor is consistent with normal composting operations by evaluating the character of the odor, i.e. grassy, leafy, earthy, putrid, fishy, etc.

d. The investigator will determine the duration of the odor, i.e. chronic (present over several days), acute (present over several hours), or conditional (only present during certain weather conditions).

e. The investigator will determine the source of the odor.

f. If BVON is found to be the source of acute malodorous conditions, then the site will work to eliminate the source of the malodor and an OCIR will be submitted to the LEA within 48 hours of receiving the complaint or by close of business of the first business day after a weekend complaint. Please see below for methods used to eliminate the source of malodorous conditions.

g. If BVON is found to be the source of chronic malodorous conditions, then the site will work to eliminate the source of the malodor. An olfactometer device may be used, at the operator's discretion, to quantify chronic malodors off-site and to verify that efforts made by the Facility to eliminate the odor source are effective. An OCIR will be submitted to the LEA within 48 hours or by close of business of the first business day after a weekend complaint.

h. If a conditional malodor is discovered, appropriate adjustments to storage, process control, and facility improvements will be made to improve the problem, if possible, and an OCIR will be submitted to the LEA within 48 hours of receiving the complaint or by close of business of the first business day after a weekend complaint.

i. If acute malodors reoccur or become chronic, then site personnel will determine if the odor source is related to weather or operations. Appropriate

adjustments to storage, process control, and facility improvements will be made to improve the problem.

Facility improvements and adjustments to process controls used to eliminate the source of malodorous conditions may include, but are not limited to, the following examples:

a. Processing all incoming compostable feedstock materials into active windrows within 72 hours;
b. Adequately blending feedstocks and/or adjusting food material to green material ratios to achieve desired carbon to nitrogen levels. Windrows typically have up to a one-to-one ration of food material, not comprising more than 50% of food content, to green material by weight;
c. Monitoring feedstock porosity;
d. Evaluating and altering moisture management operations, which may include adding sufficient water to achieve desired moisture;
e. Temperature balancing through regulation of airflow within the windrows;
f. Adjusting pile sizes;
g. Improving site drainage; and
h. Other technologies, facility improvements, or changes to process controls as deemed necessary and appropriate by BVON to eliminate the source of malodor.

Odor controls on the compost pad include:

a. Collection and incorporation of organics from aisles between windrows;
b. Use of microbial inoculants or lime on pad surfaces and water collection systems; and
c. Incorporating high organic content liquids into the composting process, both as an inoculant and for moisture control.

Additionally, in accordance with the San Joaquin Air Pollution Control District Rule 4566, the Facility applies a six-inch biocover, consisting of finished compost overs, at the peak of active composting windrows during the first 15 days of active composting. This helps reduce odors from the site. Additional odor control measures and technologies may be used should the need arise.

IV. Design Considerations

Aeration: Odor causing conditions are minimized with adequate air flow through the material. Adequate aeration during the composting process can be achieved using open windrows with adequate porosity. Forced or active aeration technologies can be used if necessary to assist in the control of odors.

Moisture: Windrows are moisture conditioned regularly to provide water that supports the biological breakdown of the material. Water is added at a rate that allows thorough absorption and minimizes runoff. Water can be applied using portable or dedicated

systems such as a windrow turner with sprayer, water truck with sprayer, a sprinkler system, or other type of water distribution system.

Feedstock Characteristics and Storage: Feedstocks composted at the site may include green materials, food materials, and agricultural materials as defined in Title 14 of the California Code of Regulations (14 CCR, §17852). Feedstock may remain on the pad for up to 72 hours, after which the material is to be placed into windrows for active composting, covered with a waterproof cover, or removed from the facility as permitted by the San Joaquin Valley Air Pollution Control District.

Airborne Emission Production: Potential airborne odor causing emissions created during the composting process are best minimized by maintaining a process that is predominantly aerobic. BVON accomplishes this by maintaining aerobic conditions in the pile. Other airborne emissions such as dust and particulate matter can be minimized by maintaining proper moisture in the material and on roads.

Pad and Site Drainage Permeability: The site is on a compacted, well-drained clay loam soil and a paved area that was historically an airport runway. An improved surface receiving area has been installed toward the center of the Facility along the eastern property boundary.

Equipment Reliability: Equipment used at the facility was chosen for its reliability and ease of repair or replacement should a breakdown occur. Back-up equipment is available from other Recology operations or local rental companies.

Personnel Training: BVON personnel are trained in compost operations and odor management on at least an annual basis.

Weather Event Impacts: Climatological conditions such as inversions, changes in wind direction, and temperature can cause potential odors to migrate. Maintaining aerobic conditions minimizes the production of malodors, which are generally the source of complaints. The potential impacts from climatological conditions are most effectively minimized by mitigating malodor causing compounds with aerobic processing.

Utility Service Impacts: Site operations are performed during daylight hours using diesel and electrical equipment. Water used for moisture conditioning and dust control is provided by a pump off of the Delta Mendota Canal, which pumps at 1,500 gallons per minute (GPM). The Facility also includes two on-site wells, both located at the northwest corner of the site. One well has a depth of 300 feet and has a production rate of 125 GPM. The other well has a depth of 500 feet and has a production rate of 850 GPM. Both on-site wells are used primarily to replenish the retention pond. Portable generators are located on site and may be used should the need arise.

V. Operating Procedures

Odor controls are in place throughout the entire composting process. If material loads exhibit odor problems at the time of delivery, these loads are given processing priority. Upon initiation of the active composting phase, odors are primarily controlled in windrows by maintaining proper carbon to nitrogen levels, maintaining adequate moisture levels, and monitoring temperature conditions to ensure sustainment of an efficient compost process. Windrows are turned regularly to ensure any anaerobic pockets of material that may have formed are broken up and can compost aerobically. Finally, the implementation of good housekeeping practices (i.e., cleaning around the windrows) also serves to effectively control the potential generation of odors.

It should be noted that the Facility is located in an isolated rural area surrounded by land used for agricultural purposes, although the closest single residence is located approximately 500 feet to the east of the Facility. The remote, rural location of this Facility, therefore, has very limited odor impacts to residences.

Aeration: Odor causing conditions are minimized with adequate air flow through the material. Adequate aeration during the composting process can be achieved using open windrows with adequate porosity. Forced or active aeration technologies can be used if necessary to assist in the control of odors.

Moisture Management: Windrows are moisture conditioned regularly to support the biological breakdown of the material. Feedstocks with high moisture content, such as food materials are combined with drier materials, such as green materials, to maintain proper moisture content and minimize run-off. By maintaining the proper moisture, porosity, and mixture of high liquid and low liquid feedstocks run-off and/or ponding from the windrows can be minimized.

Feedstock Quality: Feedstocks with high moisture content such, as food materials, are combined with drier materials, such as green materials, to maintain the proper mixture of high and low moisture feedstocks. Incoming organics are tipped and non-compostable residual removal efforts begin prior to incorporation into a windrow. The residual removal process continues as windrows are turned and residual are exposed.

Drainage Controls: Ponded water can be a significant source of nuisance odors at a compost facility. The Facility's surface is designed to flow to drainage ditches which direct the flow of liquids to a retention pond. Liquids from this pond are removed for application into the composting process. Additionally, the site will be upgrading the storm water run-off conveyance system and the storm water treatment and storage ponds in 2016. Below grade solid pipes will convey the storm water from the active pads to storm water treatment and storage ponds. Each pond will be equipped with aerators to maintain aerobic conditions and minimize potential to emit odors.

Surface Maintenance: When water is found ponded in low areas it can be treated with lime to neutralize it and/or be absorbed with compost and reincorporated into the process. Low areas on the pad will be repaired, weather permitting.

Wastewater Pond Controls: On site retention ponds are pumped regularly to prevent long-term storage of liquids. Liquids collected from the retention ponds are applied for moisture control on active compost windrows. Additionally, as part of the 2016 upgrading of the storm water treatment and storage ponds, each pond will be equipped with aerators to maintain aerobic conditions and minimize potential to emit odors.

Storage Practices: Compost materials will be stored in piles sized in compliance with the BVON Fire Prevention Plan. Storage times will vary based on location in the process.

Contingency Plans:

a. **Equipment:** Loaders are predominantly used at the site. Additional loaders can be procured on a temporary basis from other Recology companies or from local equipment leasing companies. Other more specialized equipment such as windrow turners and screens can be temporarily replaced by borrowing equipment from other Recology companies or through rental companies. BVON maintains a mechanic staff and shop for equipment repairs.
b. **Water:** Should an issue arise with the well on-site, the Facility can utilize water from the Delta Mendota Canal and the retention pond.
c. **Personnel:** Site personnel can be temporarily replaced by using employees from other Recology companies or through temporary labor.

Biofiltration: In compliance with the San Joaquin Valley Air Pollution Control District Rule 4566, the Facility applies a six-inch biocover, consisting of finished compost overs, at the peak of active composting windrows during the first 15 days of active composting. This helps reduce odors from the site.

Tarping: Windrows are not currently tarped at the site. Tarping may be evaluated in the future.

Appendix A

Odor Complaint Investigation Report

Recology
Odor Complaint Investigation Report

COMPLAINT			
Date (of Complaint):			
Time (of Complaint):		LEA Notified (Time):	
Name/Address of Person Filing Complaint:			
Contact Number:			
Location of Observed Odor:			
Reported Odor Type/Duration:			
INVESTIGATION			
RBVON (Vernalis) Representative:		LEA Representative:	
Nasal Ranger Measurement (location, D/T and descriptor):			
Is Odor Obvious, Persistent or Ephemeral:			
Investigation Details:			
WEATHER			
Wind Speed:		Direction:	
Temperature:		Conditions:	
OPERATIONS			
Operations at time of Complaint:			
Operational steps taken to reduce odors:			

Recology
Odor Complaint Response Map

Date of Complaint:	
Complaint Time:	
Complainant:	
Complaint Location:	
Weather Conditions:	

*Subject to change based on complaint location

CONSULTING REPORT:

Nuisance Fly IPM for Recology Organics

SRL PROJECT I.D. # RCG16-1

REPORT AUTHOR & AFFILIATION:

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REPORT DATE:

11 September 2016

REPORT AUTHOR SIGNATURE:

William A. Donahue, Jr. 11 September 2016
William A. Donahue, Jr., Ph.D. Date

Title:

Nuisance Fly IPM for Recology Organics

Objectives:

To implement an integrated pest management (IPM) program to mitigate nuisance flies and the associated problems they cause in and around the Recology Organics facility located in Vernalis California.

Personnel:

Bill Donahue (BD), Ph.D. – Sierra Research Laboratories, Inc. - Principal Investigator

Michael Donahue (MD) – Sierra Research Laboratories, Inc. - Scientist I

David Taylor (DT) – Recology Organics – General Manager

Joe Lizarraga (JL) – Recology Organics - Operations Manager

Rod Olsen – Crimson West - Consultant

Site Visit 16 August 2016 – E-mail to JL & DT 8/29/16: I visited Ms. Yamaichi's property at 3855 Welty Road on August 16th to meet with her regarding complaints and issues with nuisance flies on her property. I arrived at 10:35 am and we discussed her fly issues and gave me a brief tour of the property and permission to inspect the premises for flies. She considered the problem "bad" with the populations fluctuating throughout the day. I saw a number of "stinky traps", aerosol fly sprays (hand held and dispensers) and evidence of flies on the porch and fence (fly spots). I did observe adult flies around the property, but I did not consider the numbers to be "bad", but they were definitely a nuisance buzzing and landing on both of us and her dog. Mr. Tom Wolfe from Stanislaus County Environmental Resources arrived a few minutes after my arrival to conduct a nuisance fly assessment also (we did not coordinate the visit, purely coincidental). I was told by Mr. Wolfe that Ms. Yamaichi call Supervisor Di Martini and that generated the visit. I allowed him to make an independent assessment with Ms. Yamaichi without being present.

I observed several species of flies around the property: Sarcophagids (flesh flies) were around the stinky traps which acted as an attractant, these flies are attracted to dead animals. I also observed blow flies (Callophorids) and house flies in and around these traps. The traps were hung on fences around the back yard and some traps had quite a few flies in and around them. I saw a few *Fannia* (little house flies) hovering under the large trees, but these flies usually do not land on people. On the front porch I noticed stable flies (*Stomoxys calcitrans*) resting on the structure and buzzing about. These blood feeding flies will attack certain breeds of dogs, but they did not appear to be biting her dog. There were two horses on the property and the stable flies were landing and biting the horses. These flies are associated with horses and cattle primarily and need moist soil with decaying plant matter to breed in. The horses also had face

flies and/or house flies on their bodies and were troubled by them. I did not find any active breeding sites for any fly species on the property and neither did Mr. Wolfe. I used a sweep net to collect adult flies on the property and brought them back to the laboratory for identification. I collected 5 stable flies and 3 house flies with minimal effort, which I felt was pretty representative of the fly species present and the population pressure (minimal) excluding flies around the stinky traps.

Ms. Yamaichi was pleased both Mr. Wolfe and myself were present and addressing her concerns, giving us permission to come back any time to monitor flies, observe or collect specimens that we may need. We were also encouraged to visit her next door neighbor whom she said has chickens. I talked briefly at the site with Mr. Wolfe and we both concurred that the fly pressure was fairly low, but there is no firm measurement of what constitutes a "bad" fly problem. The stable fly populations were quite high for this time of the year, normally they diminish in hot weather, but are prevalent in the spring and fall in the central valley. With all the cattle operations in a 5 to 10-mile radius of Recology, these flies could be migrating from unknown breeding sites in this area. The house flies, flesh flies and bottle flies are always present in our area and it is difficult to determine where the breeding sites are located to assess changes in those populations over time. Mr. Wolfe and myself then drove to the Recology site where we met with the both of you. I am still working on a fly monitoring program and will report more on that at a later time.

Site Visit with Clark Pest Control at Recology - 22 August 2016: JL, DT, BD met with Scott Coelho and James Roque of Clark Pest Control to discuss adult fly spraying options for the Recology facility. The primary topics were: 1) logistics and coordination of activities for fly spraying and Recology operations, 2) using organic fly spays – product selections & options, 3) wind and weather patterns that may affect treatments, and 4) tour the site to observe Recology operations and fly activity. Clark Pest Control will make a separate proposal to Recology for scope of the pest control and cost.

Adult Fly Monitoring: 30 August 2016 – BD & MD – Based on the conversations from the visit to Ms. Yamaichi's and discussions with Mr. Lizarraga & Mr. Taylor we began to assess how to monitor adult fly populations at various locations. The Olsen trap was employed to detect primarily stable flies, *Stomoxys calcitrans*, but will catch other flies. Fly Stick Tube sticky traps with and attractant were used primarily to catch house flies, but will also catch other nuisance fly species (Fig. 1). Five locations were selected on the Recology Site using a line transect design to determine fly population densities at various locations on the facility (see attached site map with trap locations plotted). The traps were set in line with the predominant wind direction from the north-west to the south-east. Both Olsen and Fly Sticks were placed approximately 5' apart at each location sheltered from the wind and blowing dust and debris. The traps were left for 3 days then collected and brought back to the laboratory for counting and identifying the flies caught. The flies caught in the two traps at each site were added together and the total number of adult flies caught is reported. Two trap locations were also set-up at Ms. Yamaichi's property, one by the horse corrals and one in the front yard.

Adult Fly Monitoring Results: Recology Trap location #1 had the highest population of flies as this location was the newest green waste placed in windrows and had the greatest adult fly activity. The total number of flies caught was 3,138 in both traps. The predominant species

were house fly, *Musca domestica*, little house fly, *Fannia* spp., and a very small wasp species, possibly a parasitic species. Trap location #2 was on the south side of the new green waste rows and caught a total of 1,447 adult flies. The predominant species included house fly, little house fly, blow flies (Calliphorids), small iridescent flies and gnats. Trap location #3 was located next to the employee break room (trailer) and had a total of 667 flies trapped and were primarily house flies, little house flies and blow flies. Trap location #4 was near the office building and had a total of 752 flies caught and were of the same mix as the employee break room. Trap location #5 was located at the far south-east corner of the Recology site outside the fence in the landscaped area. The total number of flies trapped was 94, significantly lower than any other location on the Recology site and only house flies were caught at this location.

Results from the two trap locations at Ms. Yamaichi's were as follows: Horse corral – a total of 144 adult flies were caught with approximately half stable flies, *S. calcitrans* and the other half house flies, *M. domestica*. Adult stable flies are biting flies that feed on blood primarily cattle, horses, dogs and people. The larval habitat (eggs laid) is usually around areas where animals are feed hay which falls to the ground and is worked into the soil with animal manure, urine and water. The stable fly larvae complete their life cycle in the larval habitat (eggs-larvae-pupae), but adult flies can migrate many miles to find both blood sources and new places to lay their eggs (oviposition sites). I did not find stable fly or house breeding sites (larval habitat) at the site, but the horses were definitely attractive to the stable fly adults and we observed them being bitten. The front yard trap location had 46 flies caught in the two traps and were approximately half stable and half house flies.

Observations, Discussion and Recommendations: The site visit to Ms. Yamaichi's property was productive in that I had an opportunity to hear from her directly and learn of the fly issues that she was experiencing. The predominant fly species on her property with stable flies and house flies with both species around the property on the house as well as on the horses. Both species of flies will roost on the building and leave their fecal spots, but only the stable fly will bite animals and people. I did not find any breeding sites for either species, but again their migration distances can easily be up to 5 miles. Ms. Yamaichi allowed myself and staff access to her property to assess the fly problem and to begin a monitoring program.

The meeting with Clark Pest Control allowed everyone present to discuss the fly problems and see the site first hand. The proposed idea was to spray the entire facility with an organic adult fly knockdown product and Clark would send a proposal to Recology. Other issues included how to avoid windy times of the day for applications and to also work around the recycling activities by Recology personnel avoiding unnecessary human exposure to the pest control products and safety issues with all the equipment and vehicles on site.

The adult fly monitoring with Olsen and Fly Stick Traps provided very useful information in determining fly population densities and identifying predominant fly species to be controlled. The 3-day trapping period is sufficient to give robust and consistent data and will be expanded to locations within a 1 to 5-mile radius of Recology to determine: 1) potential fly migration patterns, 2) local fly breeding sites and dispersal, 3) recommended fly treatment procedures and time intervals, 4) various fly populations (species) throughout the year to assist in IPM decisions using various means of control options, 5) determine action thresholds based on neighbor's

perceptions and fly trap counts and other measures, 6) determine action thresholds for the Recology site which may be different from those of the neighbors, 7) assist in making decisions on allocation of resources (human, financial and physical) to address fly issues.

At the time of my initial meeting with Joe and Dave at Recology the primary constraint in a fly management program was the Organic classification of the site, but after further discussions with Joe and Dave (9/8/16) there may be other options for fly control. The green waste coming into the facility is not organic certified waste from organic production or commercial sources. Recology does not utilize and Organic Certification entity, but the end compost product is chemically analyzed and determined to be "Organic". Since the composting process generates high levels of heat during this natural decomposition process many chemicals and undesirable organisms are broken down in to basic chemical units or killed. The composting process goal is a 90-day turnaround time from coming in to going out. Fly conducive conditions may be only for the first 2-4 weeks of the process and several control options may be worth investigating.

Options to Investigate & Consider for Moving Forward:

1) Adult fly knockdown agents such as organic certified sprays as well as EPA Exempt (25(b) options, fly specific bacterial and fungal sprays (Elector PSP - Spinosad, fungal pathogen - *Beauveria bassiana*), botanical insecticides – pyrethrum, Pyrethrins + synergists), short residual sprays with rapid degradation.

2) Granular fly baits in selected areas applied in bait trays, on bait cards or as scatter baits – examples Zyrox fly bait (Indoxacarb), Quickstrike (dinotefuran), Conserve Fly Bait (Spinosad + Z9) or Elector fly bait if still being marketed. Need to monitor for fly bait acceptance and resistance.

3) Insect Growth Regulators (IGR) break the life cycle of flies by preventing molting, metamorphosis and reproduction. Tekko 10 or Tekko Pro (novaluron spray or granule) or Neporex (cyromazine) granules are two products that are used for fly control on dairies, poultry and other animal confinement operations to control house flies in manure. I have conducted extensive field trials in the central valley and these studies were used to obtain US EPA and California state registrations. They are very effective in controlling breeding flies (maggots) before they molt to adults and become a nuisance. I may be able to arrange an efficacy study with the manufacturers of the products and the California Department of Pesticide Regulation (DPR) to obtain a site designation for green-waste recycling on the labels. In the mean time I could do the field test under the Research Authorization Program managed by DPR.

4) Insecticide (deltamethrin) impregnated mesh used for stable fly control on dairies. I have a sample coming from Y-Tex Corporation to conduct field trials around the central valley, I can include Recology and the surrounding areas for these evaluations. May be useful for limited house fly control due to the quick on-set of insecticide resistance with house flies, but could work well on other fly species.

5) Turning new green waste more frequently (3X/week) to disrupt fly breeding and attraction as well as making the material less conducive to fly activities.

6) Expand fly monitoring (sticky traps) to include more sites at the Recology site and the surrounding areas up to 5-miles (neighbors), but to also evaluate fly populations in Stanislaus County to determine what the seasonal fly pressure is for the county in general at various times of the year. What is the normal "background" level of flies?

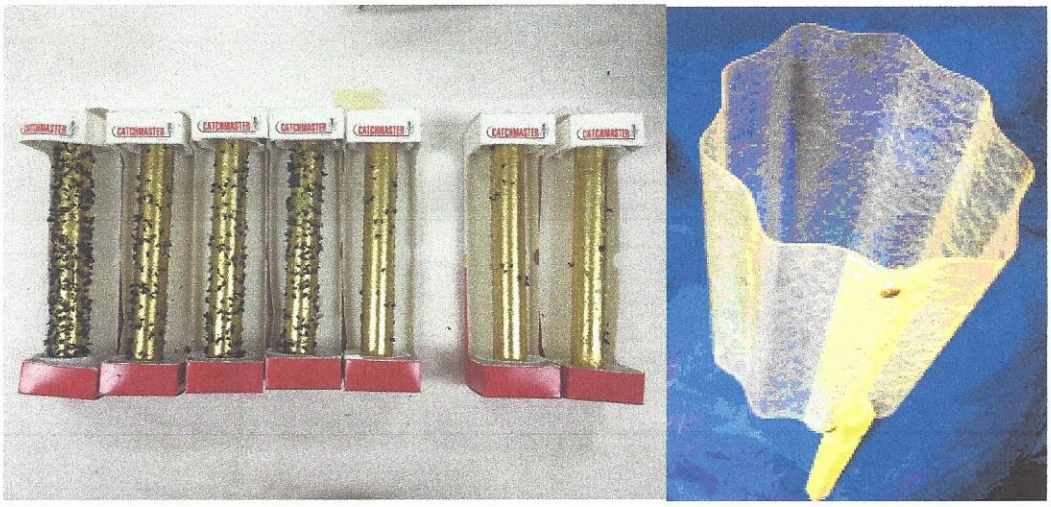
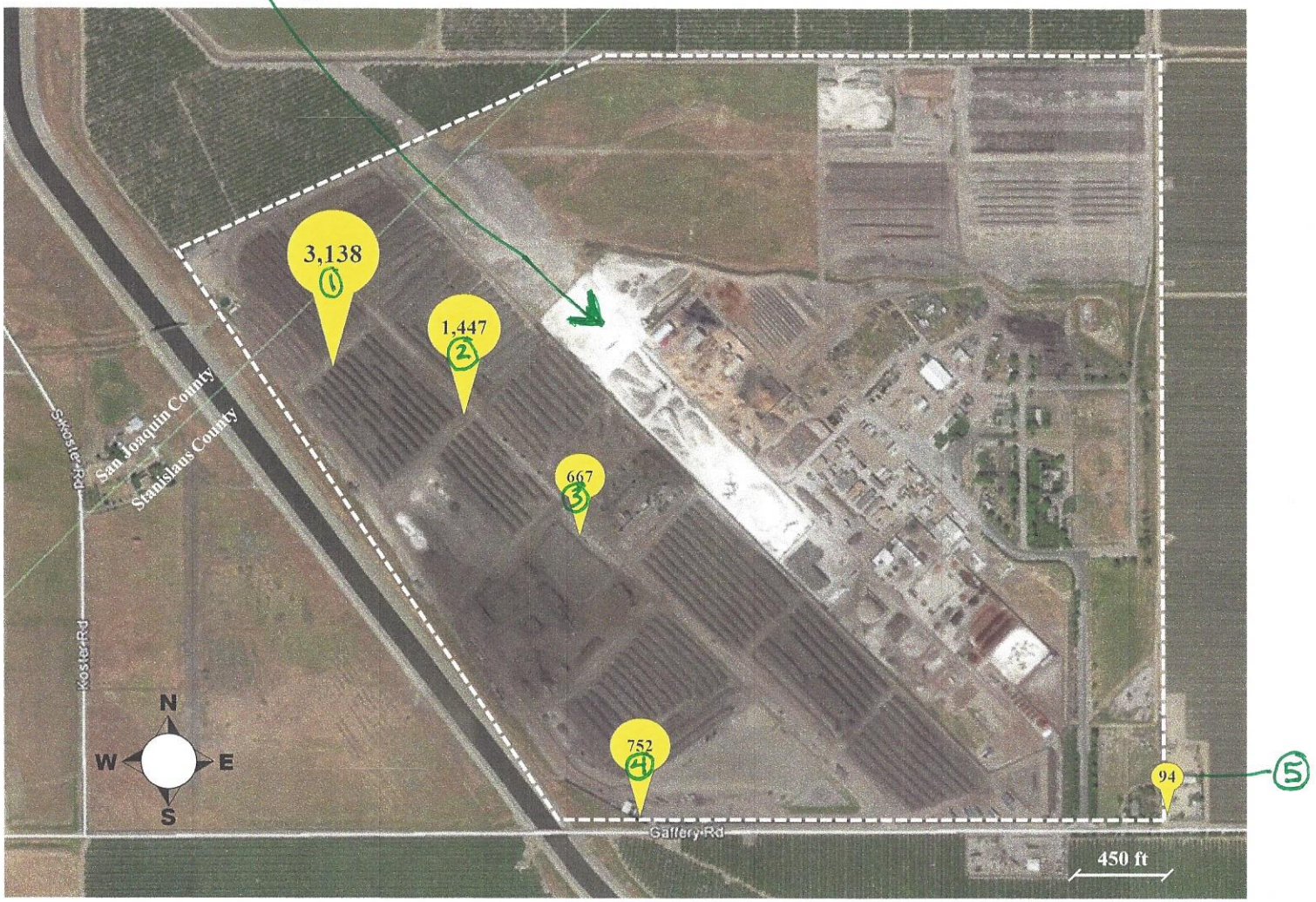


Fig. 1. Fly Sticky Traps (Olsen trap on right) used for population monitoring and species identification.

SRL Project I.D. # REC16-1



Combined Fly Stick Counts (Alsynite + Gold Stick) – 8/31 – 9/2/16

Note: This site map will be updated in the future.

SUMMARY OF RESPONSES FOR ENVIRONMENTAL REVIEW REFERRALS

PROJECT: Use Permit No. PLN2016-0055 - Recology Blossom Valley Organic - North

REFERRED TO:				RESPONDED		RESPONSE			MITIGATION MEASURES		CONDITIONS	
	2 WK	30 DAY	PUBLIC HEARING NOTICE	YES	NO	WILL NOT HAVE SIGNIFICANT IMPACT	MAY HAVE SIGNIFICANT IMPACT	NO COMMENT NON CEQA	YES	NO	YES	NO
CA DEPT OF CONSERVATION: Land Resources / Mine Reclamation	X	X	X		X							
CA DEPT OF FISH & WILDLIFE	X	X	X		X							
CA DEPT OF FORESTRY (CAL FIRE)	X	X	X		X							
CA RECYCLE	X	X	X	X				X		X	X	
CA DEPT OF TRANSPORTATION DIST 10	X	X	X		X							
CA OPR STATE CLEARINGHOUSE	X	X	X	X				X		X		X
CA RWQCB CENTRAL VALLEY REGION	X	X	X	X				X		X	X	
COOPERATIVE EXTENSION	X	X			X							
COUNTY OF: SAN JOAQUIN PW & PLNG	X	X	X	X		X		X		X		X
FIRE PROTECTION DIST: West Stanislaus	X	X	X	X				X		X	X	
HOSPITAL DISTRICT: DEL PUERTO	X	X	X		X							
WATER DISTRICT: DEL PUERTO	X	X	X		X							
MOSQUITO DISTRICT: TURLOCK	X	X	X		X							
MT VALLEY EMERGENCY MEDICAL	X	X	X		X							
PACIFIC GAS & ELECTRIC	X	X	X		X							
SAN JOAQUIN VALLEY APCD	X	X	X		X							
SCHOOL DISTRICT 1: PATTERSON JOINT UNIFIED	X	X	X		X							
SCHOOL - RISING SUN ELEMENTARY SCHOOL	X	X	X		X							
STAN CO AG COMMISSIONER	X	X	X		X							
STAN CO BUILDING PERMITS DIVISION	X	X	X	X				X		X	X	
STAN CO CEO	X	X	X		X							
STAN CO DER	X	X	X		X							
STAN CO ERC	X	X	X	X				X		X		X
STAN CO FARM BUREAU	X	X	X		X							
STAN CO HAZARDOUS MATERIALS	X	X	X	X						X	X	
STAN CO PUBLIC WORKS	X	X	X	X				X		X	X	
STAN CO SHERIFF	X	X	X	X				X		X		X
STAN CO SUPERVISOR DIST #: 5 (DEMARTINI)	X	X	X		X							
STAN COUNTY COUNSEL	X	X	X		X							
StanCOG	X	X	X		X							
STANISLAUS FIRE PREVENTION BUREAU	X	X	X	X				X		X		X
STANISLAUS LAFCO	X	X	X		X							
SURROUNDING LAND OWNERS	X	X	X		X							
TELEPHONE COMPANY: AT&T	X	X	X		X							
TRIBAL CONTACTS (CA Government Code §65352.3)		X			X							
US ARMY CORPS OF ENGINEERS	X	X	X		X							
US FISH & WILDLIFE	X	X	X		X							
DEPT OF WATER RESOURCES - CALIFORNIA AQUEDUCT	X	X	X		X							