

Attachment D

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### Measures Incorporated into the Project Design to Avoid/Reduce Environmental Impacts

#### AESTHETICS

- The MRF and AD Facility building roofs would include a series of translucent sky lights, with built-in blinds or external adjustable blinds to prevent light from escaping from the building at night.
- Proposed exterior lighting would consist of energy efficient, dark sky compliant, full cut-off lighting fixtures positioned to minimize off-site impacts by being directed inward and downward and away from U.S. Highway 101, Baron Ranch and nearby habitat areas.
- The MRF and AD Facility would include south-facing rooftop solar panels with anti-reflective coatings that have a reflectivity or albedo of 30 percent or less.

#### AIR QUALITY/GREENHOUSE GAS EMISSIONS

- Bailed recyclable materials and finished compost would be transported from the Resource Recovery Project site to off-site markets in export trucks (~22 ton capacity, compressed natural gas powered [CNG]).
- The following standard emissions reduction measures recommended by the SBCAPCD would be implemented during project construction:
  - During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible.
  - Minimize the amount of disturbed area and reduce on-site vehicle speed to 15 mph or less.
  - If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
  - Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
  - After clearing, grading, earthmoving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation does not occur.
  - The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary, to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to the initiation of construction.

- All portable diesel-powered construction equipment shall be registered with the State's portable equipment registration program or shall obtain an APCD permit.
- Fleet owners of mobile construction equipment are subject to the California Air Resources Board (CARB) Regulation for In-use Off-Road Diesel Vehicles, which regulates diesel particulate matter and criteria pollutant emissions from existing off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to State regulations limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.
- Diesel construction equipment meeting CARB Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- Diesel-powered equipment should be replaced by electric equipment whenever feasible.
- If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters certified and/or verified by USEPA or CARB.
- Catalytic convertors shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure the smallest practical number are operating at any one time.
- Construction worker trips should be minimize by requiring carpooling and by providing lunch on-site.
- Odor reduction measures:
  - Establish time limits for on-site retention of undigested substrates: MSW and SSOW would be placed in the MRF building where liquid discharge and air emissions can be controlled.
  - Utilize enclosed, negative pressure buildings for indoor receiving and pre-processing, and bio-filters or an air scrubbing system: the MRF and AD Facility would be enclosed in negative air pressure buildings with bio-filter odor control systems. A misting system charged with flocculent and deodorizers would be provided within the MRF building to reduce dust and odors. Air within the buildings would be filtered through high volume, bio-filter based air filtration systems to control odors and dust collection units to collect dust and particulates.
  - Establish contingency plans for operating downtime (e.g. equipment malfunction, power outage): the project includes staffing for scheduled maintenance and an on-site emergency generator to avoid power outages during processing.

- Manage delivery schedule to facilitate prompt handling of odorous substrates: MSW and SSOW would be tipped and stored in the MRF building to control odors prior to processing.
- Handle fresh unstable digestate within enclosed building, or mix with green-waste and incorporate into a composting operation within the same business day: digestate would be mixed with green-waste and composted.
- Establish a protocol for monitoring and recording odor events: an Odor Impact Mitigation Program (OIMP) would be developed and implemented as part of the project.
- Establish a protocol for reporting and responding to odor events: the facility would develop and implement an OIMP.
- Compost windrows would be watered immediately after turning events to minimize odors generated by exposure of the interior of the windrows.
- Avoid turning compost windrows when the predominant wind direction is from the north (towards populated areas)
- Implementation of other odor management best management practices such as application of mulch layers, application of deodorants and proper moisture control.
- Compost ROC emissions reduction measures:
  - Blending digestate with 20 percent inert dry wood chips;
  - Interactive pile management (compost pile turning);
  - 20 minutes irrigation after pile turning;
  - Large pile size; and
  - Application of finished compost to the new compost piles to act as a pseudo bio-filter.

#### TRANSPORTATION/AIR QUALITY

- A vanpool program would be implemented for the new employees working at the MRF and AD Facility to reduce traffic generation as well as provide an employment incentive. The Project's vanpool program is anticipated to result in an average vehicle occupancy of 2.5 (average of 2.5 employees per vehicle) for operations staff and 1.6 for administration staff.

#### WATER RESOURCES

- Drainage inlets installed around the project site would be screened.
- Trench drains at MRF and AD Facility door thresholds to intercept liquids found in waste and direct them to the domestic wastewater treatment system.
- Chain link fence around MRF and AD Facility to collect wind-blown plastic and paper that may escape from delivery vehicles or the MRF.
- Pavement sweeping and vacuum clean-up to remove dust, heavy metals in parking lots, driveways and composting area.
- Treatment of wastewater from employee domestic use and facility wash down in an advanced septic treatment system to reduce BOD, ultra-violet treatment of the effluent to kill pathogens

and controlled discharge to the irrigation system during dry periods to maximize evapotranspiration and nutrient uptake in the landscaped disposal areas.

- Double walled tanks and spill containment asphalt dike to contain potential spills or leaks at re-fueling areas.
- Spill containment wall with manual release valve around the percolate tanks to contain potential spills or leaks.
- Hydrodynamic separators on storm drain system to trap oily residue, floatable trash, coarse sediment and fine sediment down to the 10 micron particle size.
- Continuous, fused high-density polyethylene pipe on storm drainage and sanitary sewer systems to prevent storm water and sewage leakage.
- Sediment traps in concrete swales to intercept sediment from slopes and driveways surrounding the MRF and AD Facility.

#### NUISANCE

- Litter fences would be installed around the composting area to collect any windborne debris.

#### BIOLOGICAL RESOURCES

- To the extent feasible, new power lines and poles would be placed within existing disturbed areas of the landfill.