



**ADDENDUM TO THE  
ENVIRONMENTAL IMPACT REPORT  
FOR THE  
MAIN WASTEWATER TREATMENT PLANT  
LAND USE MASTER PLAN**

*SCH No. 2009112073*

**For the Organics-Rich Materials Preprocessing Pilot Project**

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## Chapter 1 Project Description

### 1.1 Project Overview

The East Bay Municipal Utility District (EBMUD) is proposing to develop a Pilot Project for preprocessing of organics-rich materials, including food waste collected from residential and commercial sources, pre-packaged foods, organic mixed materials and a minimal amount of yard debris, at its main wastewater treatment plant (MWWTP) located in Oakland, CA.

### 1.2 Purpose and Need for Project

#### 1.2.1 Addendum Overview

Pursuant to the California Environmental Quality Act, California Public Resources Code sections 21000 et seq. (“CEQA”) and the California Environmental Quality Act Guidelines, Title 14, chapter 3 of the California Code of Regulations (“CEQA Guidelines”), this Addendum to the Main Wastewater Treatment Plant Land Use Master Plan Final Environmental Impact Report, certified by the EBMUD on June 28, 2011 (hereinafter referred to as the “2011 EIR”), has been prepared to address implementation of an Organics-Rich Materials Preprocessing Pilot Project at the location of the proposed food waste preprocessing facility that was evaluated at a project level in the 2011 EIR.

#### 1.2.2 Background/Need for Project

On June 28, 2011, EBMUD, acting as Lead Agency under the California Environmental Quality Act (CEQA), certified the Final Environmental Impact Report for the Main Wastewater Treatment Plant Land Use Master Plan (2011 EIR). This EIR describes and evaluates the overall Master Plan for the Main Wastewater Treatment Plant (MWWTP), and evaluates two near-term projects at a project level: a biodiesel processing facility and a food waste preprocessing facility.

As described in the 2011 EIR, the Master Plan evaluated development of a food waste preprocessing facility, a renewable energy project that will help EBMUD meet sustainability goals by increasing on-site power generation. The project will involve EBMUD contracting with a private company under a land-lease agreement to construct and operate a facility at the MWWTP that meets the objectives of the Master Plan.

The food waste preprocessing facility, as described in the 2011 EIR, would be designed to preprocess food waste to supply EBMUD’s existing food waste processing facility, which is designed to treat up to 250 tons per day (tpd) of food waste. Food waste is currently preprocessed to remove non-digestible material at a combination of facilities located in the greater San Francisco Bay Area, including but not limited to facilities in Vacaville, San Carlos and Martinez. With construction of a food waste preprocessing facility at the MWWTP, organics-rich waste would be delivered directly to the MWWTP to be preprocessed to improve process efficiency and material consistency. This material would then be conveyed to the existing food waste processing facility. EBMUD is now considering implementation of a Pilot Project to refine the operations for preprocessing food waste: the Organics-Rich Materials Preprocessing Pilot Project (Pilot Project).

#### 1.2.3 Purpose of Project

The purpose of the Pilot Project is to analyze the performance of organics-rich feedstocks through various processing equipment components operated in various sequences and combinations to identify an efficient and cost-effective method for preparing a variety of different organics-rich materials for feeding to EBMUD’s wastewater treatment plant anaerobic digesters. The outcome of these research efforts will determine which front-end preprocessing scheme will be operated and which types of organics-rich waste will be considered for acceptance at the proposed food waste preprocessing facility described in the 2011 EIR. The Pilot Project would be able to accept both traditional raw food waste as contemplated in the

2011 EIR, plus other sources of organics-rich waste, including packaged foods, urban organics (biodegradable and digestible organic-rich material derived from urban mixed waste such as food-related materials, leaves, plant debris, paper towels, compostable cups, plates, napkins and bioplastic flatware), and a minimal amount of yard waste such as grass clippings, yard trimmings, and natural fibers. Upon completion of construction, the duration of the Pilot Project is expected to be up to two (2) years. Upon completion of the Pilot Project, implementation of the full-scale food waste preprocessing facility may occur and, if implemented, would replace the Pilot Project.

### 1.3 Proposed Project

The Organics-Rich Material Preprocessing Pilot Project (Pilot Project) will be constructed and operated by a private company, in coordination with EBMUD. The Pilot Project will be located at 2020 Wake Avenue in Oakland, CA within the footprint of the proposed Food Waste Preprocessing Facility as described in the 2011 EIR. The Pilot Project will occupy approximately 0.8 acres of land (see Figure 1), which is smaller than the 1.4-acre site identified for the Food Waste Preprocessing Facility in the 2011 EIR.

The Pilot Project facility will consist of front-end processing equipment to be installed directly on the site on a new equipment pad without construction of a building. The equipment will be employed to separate inorganic contaminants from organics-rich waste material derived from Oakland and other nearby waste streams. The Pilot Project facilities will generally include a concrete pad with 6-foot-high “push walls<sup>1</sup>” enclosing the southeast corner, front-end processing equipment, bins to collect process reject, a generator, 1,000-gallon fuel storage tank, and liquid storage tanks. The liquid storage tanks will contain process liquids, wash-down water, and storm water that are collected on the concrete pad. The concrete pad will be sloped such that liquids on the pad will be directed towards a sump and pumped back into the processing system, eventually combining with processed waste to be delivered to EBMUD’s digesters (see Figure 2). The facilities will also include above-ground piping to deliver process water to the facilities and to deliver processed material to EBMUD’s wastewater treatment process for processing and digestion. The equipment would be smaller than the overall food waste preprocessing facility that was evaluated in the 2011 EIR, and would be 15 to 20 feet tall (as compared to the 40-foot elevation of the food waste preprocessing building). There will be no potable water or sewer service to the Pilot Project and power will be supplied by a generator.

#### 1.3.1 Process

Organics-rich waste will be delivered to the Pilot Project facility via enclosed truck (tarp-covered, leak-proof), except for packaged waste, which may be delivered on pallets. All organics-rich waste will be unloaded onto a concrete pad and stored until processing, which will typically occur the same day. The front-end processing equipment, which will include a wheel loader, conveyor, or other similar equipment, will remove the inorganic particles from the incoming raw material and create organic feedstock that will be piped or trucked to EBMUD’s wastewater treatment process for further processing and anaerobic digestion. Feedstock initially will be conveyed within the MWWTP by truck, until pipeline installation is complete. Process residuals will be collected in a bin for off-site disposal and/or recycling, as practicable.

The concrete pad will be sloped such that process liquids, wash-down water, and storm water that collects on the pad will be directed towards a sump and pumped back into the processing system, eventually combining with processed waste to be delivered to EBMUD’s digesters. Storm water that is not contained on the pad will be directed to existing storm water drains, which flow to San Francisco Bay.

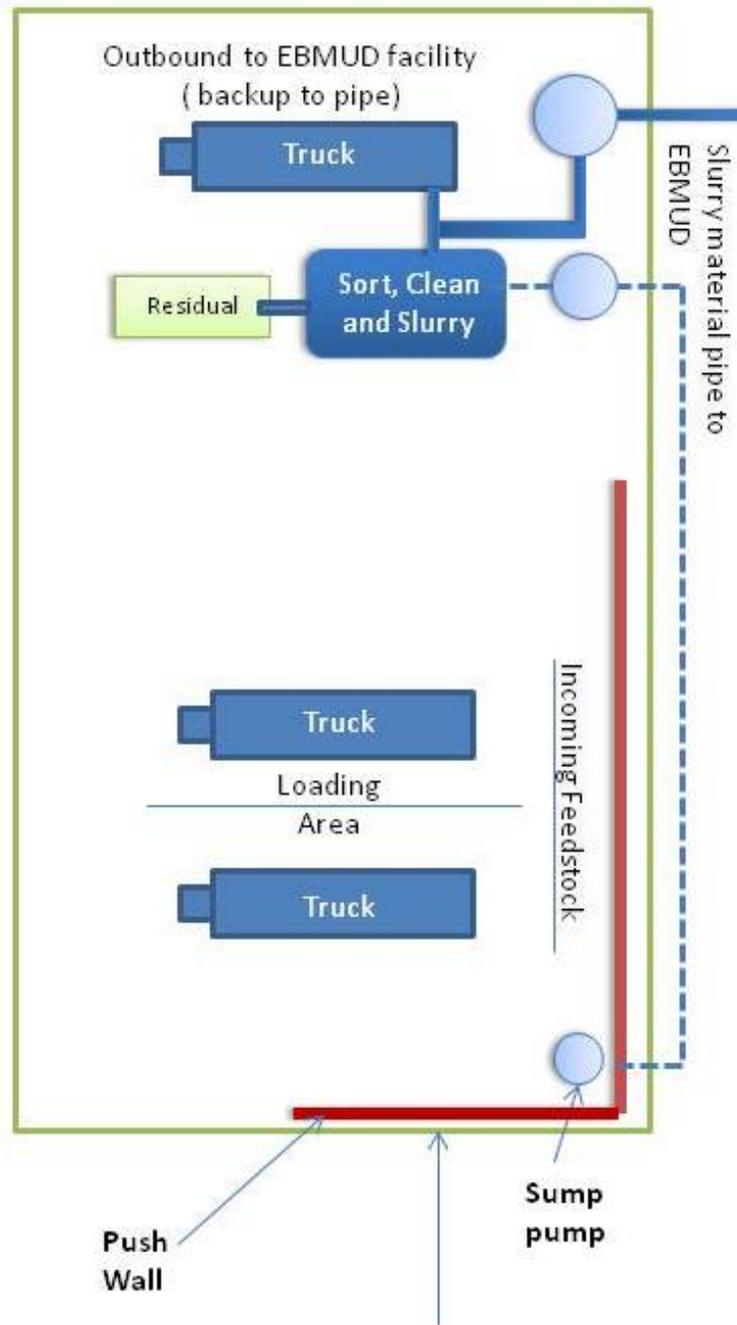
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<sup>1</sup> A push wall is a concrete or steel constructed wall designed to contain the delivered material to allow a loader to scoop up material while pushing against the wall.

Figure 1: Pilot Project Location



Figure 2: Pilot Project Site Layout



Concrete Pad 120' by 80', sloping towards the sump pump located at the south east corner.



### 1.3.2 Operations

It is anticipated that the Pilot Project will process up to 99.9 tpd of organic-rich waste. This is less than the anticipated tonnage of the Food Waste Preprocessing Facility described in the 2011 EIR (200 to 300 tpd initially and up to 400 to 600 tpd at full build-out). Traffic patterns for delivery of waste would be somewhat different than described in the 2011 EIR, but both the total number of trucks and total vehicle miles traveled are expected to be less for the Pilot Project than described for the full-scale project. Because the Pilot Project would accept a maximum of 99.9 tpd of waste, the total volume of trucks would be less than the number of truck trips analyzed in the 2011 EIR. The Pilot Project is anticipated to receive approximately 15 trucks per day, as compared to 76 trucks per day for the full scale project evaluated in the 2011 EIR.

Organic-rich waste to be tested includes food materials collected from residential and commercial sources, pre-packaged foods, or organics-rich mixed materials, and a minimal amount of yard debris, such as grass clippings, yard trimmings, and natural fibers. Residual material is anticipated to be less than 20 tpd, which is far less than the estimated 360 tpd of residual material analyzed for the full-scale project, resulting in fewer truck trips to transport these materials off site for recycling or disposal to landfills. Materials will be received and processed daily (primarily Monday through Friday and on weekends as necessary) and no more than 80 tons of material would be stored on site at any given time within the designated boundaries of the Pilot Project.

As described in the 2011 EIR, the full-scale food waste preprocessing facility was planned to accept “organics-rich material”, which is consistent with the proposed waste to be processed by the Pilot Project. The 2011 EIR did not specifically discuss preprocessing of packaged food waste, yard waste, or urban organics (processed municipal solid wastes from identified collection routes with high organic content and biodegradable non-food materials), but use of these types of waste would not create any impacts not analyzed in the 2011 EIR, nor would it increase the severity of any impacts analyzed in that document. Packaged waste would include food products in plastic, metal or cardboard containers that are being disposed of because they are mislabeled or expired. Typical items could include expired canned or bottled food products.

Packaged food products, by their nature, are “non-putrescible” (they do not decompose or rot while in the container), and thus are not a source of odor while contained in the packaging. Odor characteristics of urban organics would be similar to, and possibly less odorous than, source-separated food waste, because urban organics include a mix of high organic content material with other non-putrescible items. EBMUD will monitor the Pilot Project and will immediately discontinue acceptance of urban organics if they are determined to cause significant environmental impacts. Acceptance of packaged waste and urban organics would not increase traffic impacts because the volume of food waste accepted would not change as a result of the change in the type of waste. Noise impacts would not change with the type of waste accepted, because noise is a function of the type of equipment used.

The Pilot Project facility would have the capability to operate 24 hours a day, 7 days a week; however, it is anticipated that it will operate no more than 16 hours a day, which is less than the 24-hour operations proposed for the full-scale food waste preprocessing facility evaluated in the 2011 EIR. Initially, operations are planned to last 10 to 11 hours each day; however, the volume of materials is expected to increase with time, and operations are anticipated to eventually occur for 16 hours each day.

A range of operational controls will be required by permit and contract and utilized to ensure that this facility has mechanisms in place to avert potential nuisance problems (odors, vectors, noise, dust) and to promote safe working conditions. Such operational controls include required compliance with applicable mitigation measures identified in the 2011 EIR and this document, and development of and adherence to best management practices in the project’s operation. These operational controls are described below in this section and in Sections 1.3.4 and 1.3.5.

### **Vector Control**

The facility will be operated to control the propagation, harborage, and attraction of vectors such as flies, rodents, birds, and other animals. As noted previously, materials will generally be processed and the receiving area will be cleaned by the end of each working day. Material will not remain on-site for more than 48 hours from the time of receipt to conveyance to EBMUD's food waste receiving facility. In the event of an emergency, waste that cannot be processed within 48 hours would be covered and removed from the site. Vectors are expected to be kept to a minimum by using good housekeeping procedures, cleaning all spills and removing materials from the concrete pad. This begins with the timely incorporation of the as-received materials into the front-end processing equipment. Once the material is processed, it will be conveyed to EBMUD's anaerobic digestion food waste receiving facility where vectors will no longer be an issue. All on-site stockpiles will be managed as to not provide harborage or food sources for rodents and other vectors. If EBMUD determines that vectors from the facility are causing a nuisance, EBMUD will suspend operation of the facility and acceptance of feedstock. EBMUD and the private operator of the facility will enter into a process to resolve the vector problems, which may include the use of a vector control specialist.

### **Odor Control**

The primary odor control mechanisms at the facility will include processing all incoming materials in a timely manner using a "first in – first out" means of inventory control and conveying food waste to EBMUD's food waste processing facility by truck or in an enclosed pipe. Putrescible materials will be processed and transferred to EBMUD's feedstock receiving facility within 48 hours of receipt at the Pilot Project facility, though the standard operating procedure will be to process the material by the end of each working day. Due to the non-putrescible nature of pre-packaged food materials (i.e., expired canned, packaged, and bottled food products), such materials may be stored on-site for longer periods of time, but the overall 80-ton on-site storage limit will not be exceeded. Odor control practices for the receiving and processing area include: daily collection and clean-up of materials from the concrete pad; daily cleaning of the equipment and pad; and use of lime on pad surfaces and water collection systems as necessary. Additionally, if a particularly malodorous load is observed, the load will be targeted and prioritized for quick processing, or removed from the site.

If EBMUD determines that odors from the facility are causing a nuisance, EBMUD will suspend operation of the facility and acceptance of feedstock. EBMUD and the private operator of the facility would enter into a process to resolve the odor issue, which may include the use of a consultant specializing in odor control and abatement.

### **Litter Control**

Litter control will be conducted by operations personnel, who will patrol the Pilot Project area boundary. Any accumulated litter will be collected and removed. Fencing and push walls will be constructed around three sides of the concrete pad, which will minimize the amount of litter escaping the facility boundaries. In the event that litter escapes the facility boundaries, it will be collected as needed to prevent off-site migration, safety hazards, and nuisances. If necessary, additional operational and/or physical modifications will be made to control litter.

### **Noise Control**

Noise will be controlled through the proper use and maintenance of mufflers on equipment, both stationary and mobile. Backup alarms on equipment will be monitored to ensure consistency with Cal/OSHA requirements. Backup alarms will comply with all safety regulations and noise ordinances. Personal protective equipment will be available to all personnel. Employees will be provided with noise protection when working near noise-generating equipment or when otherwise required. Routine maintenance of the vehicle fleet will also minimize noise generation.

## **Dust Control**

Sources of dust will be associated primarily with the unloading and loading operations and vehicle traffic. Due to the high moisture content of the incoming material (i.e., food materials), dust is not anticipated to be an issue. Moisture conditioning, as necessary, of the material may be utilized as a means of dust control. Periodic watering of the pad will also help minimize dust from incoming vehicles and unloading of material.

### **1.3.3 Construction**

Equipment would be installed directly on the site without construction of a building. Installation of the facility would be expected to begin near the end of 2013 and would take approximately 30 days to complete.

### **1.3.4 Environmental Commitments from 2011 EIR and Other Requirements Applicable to Pilot Project**

The 2011 EIR included a number of environmental commitments based on standard EBMUD construction specifications, which contain safety and environmental requirements that are implemented during all construction projects. Facilities at the West End property are also subject to a Covenant to Restrict Use of Property, Environmental Restriction imposed by the Department of Toxic Substances Control (DTSC); the DTSC restrictions would be applicable to the Pilot Project. The Pilot Project would also be subject to any measures imposed by the CalRecycle Local Enforcement Agency (Alameda County Environmental Health) through the Registration permit for the project. Environmental commitments and other requirements that would be applicable to the Pilot Project are listed below:

## **Aesthetics**

### **Construction Site Management**

Throughout the period of demolition and construction, EBMUD would require the construction contractor to keep the work site free and clear of all rubbish and debris, and to promptly remove from the site, or from property adjacent to the site of the work, all unused and rejected materials, surplus earth, concrete, plaster, and debris.

The construction specifications require that when construction is completed excess materials or debris shall be removed from the work area (Section 013544-1.1 (B)).

## **Air Quality**

### **Dust Control and Monitoring Plan**

EBMUD's Construction Specifications require development of a Dust Control and Monitoring Plan in order to control construction-related dust (Section 013544-1.3(E)). The plan shall detail the means and methods for controlling and monitoring dust generated by construction activities, as well as measures for the control of paint overspray generated during the painting of exterior surfaces.

### **Equipment and Vehicle Idling**

Section 2485, Title 13, CCR requires limiting the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds, both California- and non-California-based trucks) to five minutes at any location.

## **Hazardous Materials / Hydrology and Water Quality**

### **Notification of Hazardous Materials**

EBMUD's Construction Specifications General Conditions, Article 7.6.1, requires that "Pursuant to Public Contract Code Section 7104, the Contractor shall promptly, and before such conditions are disturbed, notify the Engineer in writing of: (1) Material that the Contractor believes may be hazardous

waste, as defined in Section 25117 of the Health and Safety Code, that is not indicated in the Contract Documents and that is required by law to be removed to a Class I, Class II, or Class III disposal site; (2) Subsurface or latent physical conditions at the site differing materially from those indicated in this contract; or (3) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract.”

### **Project Safety and Health Plan**

EBMUD’s Construction Specifications require a Project Safety and Health Plan (013524-1.3(B)) if actual, potential, or anticipated hazards include: a) hazardous substances; b) fall protection issues; c) confined spaces; d) trenches or excavations; or, e) lockout/tagout. The Plan shall detail measures to be taken to alleviate the identified risks, identify appropriate health and safety requirements, and designate a contractor’s project safety and health representative.

### **Construction and Demolition Waste Disposal Plan**

EBMUD’s Construction Specifications require a Construction and Demolition Waste Disposal Plan (013544-1.3(C)) specifying how the contractor will remove, handle, transport and dispose of all material to be disposed of in a safe, appropriate, and lawful manner. The plan must identify each type of waste material to be reused, recycled, or disposed of; list reuse facilities, recycling facilities, processing facilities, or landfills that will be receiving the materials; and include the sampling and analytical program for characterization of any waste material for disclosure to EBMUD.

### **Spill Prevention and Response Plan**

EBMUD’s Construction Specifications require a Spill Prevention and Response Plan (013544-1.3(D)) detailing the hazardous materials (including petroleum products) proposed for use or generated at the job site and describing the means and methods for controlling spills, monitoring hazardous materials, and providing immediate response to spills. Spill response measures would address notification of EBMUD, safety issues regarding construction personnel and public health, and methods for spill response and cleanup.

### **Controls on Site Activities**

EBMUD’s Construction Specifications require controls on site activities and describe measures that shall be implemented to prevent the discharge of contaminated storm water runoff from the site. Erosion control measures specified in the specifications include:

- No debris, soil, silt, sand, bark, slash, sawdust, asphalt, rubbish, paint, oil, cement or concrete or washings thereof, oil or petroleum products, or other organic or earthen materials from construction activities shall be allowed to enter into or be placed where it may be washed by rainfall or runoff outside the construction limits. (013544-1.1(B)(1))
- Divert or otherwise control surface water and waters flowing from existing projects, structures, or surrounding areas from coming onto the work areas. The method of diversions or control shall be adequate to ensure the safety of stored materials and of personnel using these areas. Following completion of work, ditches, dikes, or other ground alterations made by the Contractor shall be removed and the ground surfaces shall be returned to their former condition, or as near as practicable, in the Engineer’s opinion. (013544-1.1(B)(6))
- Maintain construction sites to ensure that drainage from these sites will minimize erosion of stockpiled or stored materials and the adjacent native soil material. (013544-1.1(B)(7))

### **Water Control and Disposal Plan**

EBMUD’s Construction Specifications require a Water Control and Disposal Plan (013544-1.3(B)) describing measures for containment, handling, and disposal of groundwater (if encountered), runoff of

water used for dust control, storm water runoff, wash water, and construction water or other liquid that has come into contact with any interior surface of a reservoir or inlet/outlet pipeline. The discharge must comply with regulations of the RWQCB, CDFG, County Flood Control Districts, and any other regulatory agency having jurisdiction, whichever is most stringent.

### **Excavation and Trenching**

EBMUD's Construction Specifications require an Excavation Safety Plan (013524-1.3(C)) for worker protection and control of ground movement for the Engineer's review prior to any excavation work at the jobsite. The Plan shall include drawings and details of system or systems to be used, area in which each type of system will be used, de-watering, means of access and egress, storage of materials, and equipment restrictions.

Section 013524-3.2(B) of the Construction Specifications establishes requirements for excavations under hazardous conditions. As required in Section 6705 of the Labor Code, excavation of any trench five feet or more in depth shall not begin until the Contractor has received notification of EBMUD's acceptance of the Contractor's detailed plan for worker protection from the hazards of caving ground during the excavation.

- a. Such plan shall show the details of the design of shoring, bracing, sloping, or other provisions to be made for worker protection during such excavation.
- b. No such plan shall allow the use of shoring, sloping or a protective system less effective than that required by the Construction Safety Orders, Title 8, CCR, and if such plan varies from the shoring system standards established by the Construction Safety Orders, the plan shall be prepared and signed by an engineer who is registered as a Civil or Structural Engineer in the State of California. California Occupational Safety and Health Administration (Cal/OSHA) Permit: Title 8, CCR Section 341(a)(1) 31 requires excavators to obtain a permit PRIOR to digging trenches or excavations which are 5 feet or deeper and into which a person is required to descend.

In the event of any violation of Article 6 of the Construction Safety Orders or deviation from the submitted plan for worker protection and control of ground movement, EBMUD may suspend work, or notify Cal/OSHA, or both.

### **Noise**

#### **Compliance with Noise Ordinance**

EBMUD's Construction Specifications require compliance with local noise ordinances (013544-3.4). The Contractor is responsible for taking appropriate measures, including muffling of equipment, selecting quieter equipment, erecting noise barriers, modifying work operations, and other mitigations as needed to bring construction noise into compliance.

#### **Operation and Maintenance Plan Required by DTSC Environmental Restrictions**

Because the West End property has not been remediated to levels that are suitable for unrestricted land use, DTSC and U.S. Army recorded a Covenant to Restrict Use of Property, Environmental Restriction (deed restriction) with the Alameda County Assessor's Office on June 29, 2007 (DTSC 2007a). The deed restriction specifies soil and risk management procedures (environmental restrictions) that must be implemented to ensure safe management of soil and groundwater remaining at the site and to ensure that human health and the environment are protected during future activities at the site. The environmental restrictions of the deed restriction apply to successive owners of the property, and were assigned to EBMUD in a consent agreement entered into by DTSC and EBMUD in 2009 (DTSC 2009).

An Operation and Maintenance Plan describing the inspection, soil management, groundwater monitoring, annual reporting, and five year review requirements for the site, to be implemented in accordance with the deed restriction, has been prepared by EBMUD (Geologica 2008a). The plan has

been approved by DTSC, and also specifies regulatory coordination that must occur when soil or groundwater is disturbed. For the entire West End property, the Operation and Maintenance Plan specifies that:

- Placement of any property soil outside of the property boundary is permitted only with written approval from DTSC.
- Excavation or disturbance of any soil deeper than 5 feet below ground surface is permitted only with the written approval of DTSC. However, in emergency situations, EBMUD may excavate or disturb soil without prior DTSC approval, provided that the soil management and risk management procedures of the operations and maintenance plan are followed, and that EBMUD notifies DTSC by phone or email of the soil excavation or disturbance within 24 hours of the onset or discovery of the emergency.
- Excavated soil must be appropriately characterized to determine if it is suitable for on-site reuse, or if it must be disposed of at an appropriately licensed off-site disposal facility. At a minimum, the soil must be analyzed for total petroleum hydrocarbons as gasoline, diesel, and motor oil; volatile organic compounds; and Title 22 metals (including analysis of soluble metals concentrations using the Waste Extraction Test [WET] or Toxic Characteristic Leaching Procedure [TCLP] method, as appropriate). Typically, one composite soil sample would be required for each 1,000 cy of soil excavated. However, individual disposal facilities may require additional samples and/or analyses.
- On-site reuse of excavated soil is only permitted if the sample results indicate that the material is not a hazardous waste and is suitable for reuse at the site. Soil characterization for reuse can be completed prior to removal (in situ, which involves the installation of soil borings for collection of soil samples) or after excavation as described above, provided that a suitable controlled location is available for stockpiling that anticipated volume of soil. For on-site reuse, the soil should not contain constituents at concentrations greater than federal and state hazardous waste criteria, industrial Preliminary Remediation Goals, or commercial/industrial Environmental Screening Levels (petroleum hydrocarbons only), whichever is most conservative. To characterize the soil for on-site reuse, 1 sample per 250 cy of excavated soil is required for the first 1,000 cy of soils excavated, and 1 additional sample is required for each additional 500 cy of excavated soil.
- Soil that is unsuitable for on-site reuse and which will not be directly hauled to an off-site disposal facility at the time of excavation must be stockpiled in a manner that limits the potential for generation of dust and/or sediment-laden runoff. Soil shall be stockpiled on a minimum 6-mil plastic sheet of sufficient size to contain the entire stockpile and the entire stockpile shall be covered with a minimum 6-mil plastic sheet secured with sandbags at the close of each workday and at all times during inclement weather. All stockpiled soil shall be properly disposed of within 90 days of generation.
- Workers engaged in activities that will disturb or expose subsurface soil must be appropriately trained in and must follow the standard health and safety procedures described in Appendix A of the Operation and Maintenance Plan. Site and action-specific health and safety plans are required for all activities involving soil removal and/or disturbance.
- Appropriate measures shall be taken to minimize the generation of fugitive dust during soil excavation or disturbance activities in general accordance with the BAAQMD “Basic” and “Optional” PM<sub>10</sub> (fugitive dust) control measures (see *Section 3.3, Air Quality*, for a description of the BAAQMD dust control measures).

For groundwater and accumulated liquids, the operations and maintenance plan specifies that:

- Dewatering activities for any future construction are subject to all applicable local and state requirements, including those of the RWQCB, for disposing of liquids from dewatering activities.
- Groundwater and accumulated liquids produced during construction activities must be characterized in-situ prior to disposal or retained on site until characterized for appropriate disposal. Testing to characterize the groundwater or accumulated liquids must include analysis for total petroleum hydrocarbons as gasoline, diesel, and motor oil; VOCs; and Title 22 metals. Under no circumstances may site groundwater or accumulated liquid be discharged to a storm drainage system, ground surface, or any pathway (e.g. a drainage ditch) that might reasonably be expected to convey site groundwater and accumulated water off the property or to San Francisco Bay. Depending on the analytical results, and subject to approval from the EBMUD Resource Recovery Program, the groundwater or accumulated liquids may be transported to the MWWTP for disposal, although additional testing (e.g. chemical oxygen demand) may be required, depending on the volume of liquid requiring disposal. Groundwater and accumulated liquids found to contain metals or other analytes at concentrations greater than the Soluble Threshold Limit Concentration (STLC) or TCLP values must be treated and/or disposed of at a facility licensed to accept hazardous waste and the transport and disposal of this liquid must be conducted in accordance with all applicable state, federal, and local regulations.

### 1.3.5 Mitigation Measures from 2011 EIR Applicable to Pilot Project

As Lead Agency for preparation of the Main Wastewater Treatment Plant Land Use Master Plan EIR, EBMUD has adopted mitigations as part of its Mitigation Monitoring Reporting Program. The following mitigation measures would be applicable to the Organics-Rich Materials Preprocessing Pilot Project. Note that Mitigation Measure AIR-6a assumes that the food waste preprocessing facility would be constructed within a building. Because this assumption is not applicable to the proposed Pilot Project, EBMUD would enforce the other odor control measures specified in Mitigation Measures AIR-6a and AIR-6b, as applicable, and would monitor the facility to ensure that odor control measures that are included in the project description (see Sections 1.3.2 and 1.3.4) are implemented by the operator of the Pilot Project. As described there, the facility is designed to limit odors, but if odor problems occur, and persist, EBMUD would end the Pilot Project if doing so is needed to address odor impacts.

#### Aesthetic Measures

**Mitigation Measure AES-2a: Maintenance of Construction Worksite.** Throughout the period of demolition and construction, EBMUD will require that the construction contractor keep the worksite free and clean of all rubbish and debris and promptly remove from the site or from property adjacent to the site of the work, all unused and rejected materials, surplus earth, concrete, plaster, and debris.

**Mitigation Measure AES-2b: Design of Facilities to Be Aesthetically Consistent with Existing Visual Character.** EBMUD would require all new facilities be, at a minimum, designed to be aesthetically consistent with existing visual character and surrounding wastewater treatment buildings. Design, exterior finishes, and color would blend with the surrounding facilities.

**Mitigation Measure AES-3: Lighting Design and Low Reflective Paint.** EBMUD would require that lighting be consistent with existing lighting in terms of height, spacing and design. New lighting would be shielded and directed to the interior of the project site. New structures and buildings would be painted in low reflective paint consistent with existing structures at the MWWTP.

#### Air Quality Measures

**Mitigation Measure AIR-1: Criteria Air Pollutant and Precursor Reduction Measures.** To limit dust, criteria pollutant, and precursor emissions associated with construction of all Land Use Master Plan projects, EBMUD shall include the following measures, as applicable, in contract specifications:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved areas shall be limited to 15 miles per hour.
- e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- h. A publicly visible sign with the telephone number and person to contact at the Lead Agency regarding complaints related to excessive dust or vehicle idling shall be posted at the MWWTP entrance. This person shall respond and take corrective action within 48 hours.

**Mitigation Measure AIR-5: Diesel Particulate Reduction Measures.** Diesel-powered on-site rolling stock (2 loaders, excavator, and 2 end dump trucks) associated with the food waste preprocessing facility and any other diesel equipment or trucks operating solely within the MWWTP and West End property under the control of EBMUD shall install a CARB-verified Level 3 Diesel Particulate Filter to reduce PM<sub>2.5</sub> emissions to achieve a minimum reduction of 50 percent (sufficient to reduce combined emissions to below the BAAQMD CEQA excess cancer risk threshold of 10 in a million). Alternative options for achieving this reduction can also be implemented, including the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as such become available.

**Mitigation Measure AIR-6a: Odor Controls in Food Waste Preprocessing Facility.** EBMUD shall include the following measures in contract specifications:

- Roof vents on the proposed building or point sources should be designed to accommodate odor controls in the event that odor problems occur in the future and controls are ultimately needed.
- All food waste shall be processed within 48 hours of receipt or protocols shall be implemented to minimize nuisance odor problems and ensure compliance with applicable BAAQMD air permit requirements.

**Mitigation Measure AIR-6b: Odor Controls on Other Land Use Master Plan Elements.** Odor control is not needed for the biodiesel production facility. All other short- and long-term Land Use Master Plan projects shall be reviewed for odor potential during the design phase. Operational and design odor control measures shall be incorporated into the project to minimize off-site odor impacts and ensure compliance with BAAQMD air permit fence line monitoring limits. Odor controls that could be implemented where appropriate include: activated carbon filter/carbon adsorption, biofiltration/bio trickling filters, fine bubble aerator, hooded enclosures, wet and dry scrubbers, caustic and hypochlorite chemical scrubbers, ammonia scrubber, energy efficient blower system, thermal oxidizer, capping/covering storage basins and anaerobic ponds, mixed flow exhaust, wastewater circulation technology, and exhaust stack and vent location with respect to receptors.

### Biological Resources Measures

**Mitigation Measure BIO-1: Protection of Nesting Birds.** To the extent practicable, project construction activities including tree removal/pruning and demolition will occur outside of the generally accepted nesting season (February 1 to August 31). If tree removal cannot be completed between September 1 and January 31, and it is not feasible to avoid starting construction during the nesting season, then the following measures will be taken:

- a. No more than two weeks before the initiation of construction/demolition activities that would commence between February 1 and August 31, a nesting bird survey will be conducted within 250 feet of the project site by a qualified biologist. If active nests are observed, buffer zones will be established around the nests, with a size acceptable to the California Department of Fish and Game. Construction activities will not occur within buffer zones until young have fledged or the nest is otherwise abandoned.
- b. If construction/demolition is halted for more than two weeks during the nesting season, then additional surveys will be conducted as above.
- c. Nests that are established during construction/demolition will be protected from direct project impact (e.g., trees or a buffer area around the nests shall be flagged and avoided).

**Mitigation Measure BIO-2: Replacement of Protected Trees.** EBMUD will replace each tree that is removed for this project and that is considered a “protected tree” under the City of Oakland Tree Preservation and Removal Ordinance. The replacement tree (e.g., 5-gallon size) will be planted on site in a suitable location at the MWWTP/West End property.

### Cultural Resources Measures

**Mitigation Measure CUL-1: Recovery of Buried Cultural Resources.** If previously unidentified cultural materials are unearthed during construction, EBMUD will halt work in that area until a qualified archaeologist can assess the significance of the find. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If any find is determined to be significant, EBMUD and the archaeologist will determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered will be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested measures proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, EBMUD will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations.

If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed on other parts of the project while mitigation for historical resources or unique archaeological resources is being carried out.

**Mitigation Measure CUL-2: Recovery of Buried Paleontological Resources.** In the event that paleontological resources are discovered, EBMUD will notify a qualified paleontologist. The paleontologist will document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines § 15064.5. If a breas<sup>2</sup> or other fossil is discovered during construction, excavations within 50 feet of the find will be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify

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<sup>2</sup> A seep of natural petroleum that has trapped extinct animals, thus preserving and fossilizing their remains.

the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find.

If EBMUD determines that avoidance is not feasible, the paleontologist will prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important. The plan will be submitted to EBMUD for review and approval prior to implementation.

**Mitigation Measure CUL-3: Recovery of Discovered Human Remains.** In the event human burials are encountered, EBMUD will halt work in the vicinity and notify the Alameda County Coroner and contact an archaeologist to evaluate the find. If human remains are of Native American origin, the Coroner will notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who would then help determine what course of action should be taken in dealing with the remains.

### Geology Measures

**Mitigation Measure GEO-1: Perform Design-Level Geotechnical Evaluations for Seismic Hazards.** During the design phase for all other Land Use Master Plan elements that require ground-breaking activities, EBMUD will perform site-specific, design-level geotechnical evaluations to identify potential secondary ground failure hazards (i.e., seismically-induced settlement) associated with the expected level of seismic ground shaking. For specific Land Use Master Plan element sites within the MWWTP that have previously been subject to a geotechnical investigation, a geotechnical memorandum shall be prepared to update the previous investigation.

The geotechnical analysis will provide recommendations to mitigate those hazards in the final design and, if necessary, during construction. The design-level geotechnical evaluations, based on the site conditions, location, and professional opinion of the geotechnical engineer, may include subsurface drilling, soil testing, and analysis of site seismic response as needed. The geotechnical engineer will review the seismic design criteria of facilities to ensure that facilities are designed to withstand the highest expected peak acceleration, set forth by the California Building Code (CBC) for each site. Recommendations resulting from findings of the geotechnical study will be incorporated into the design and construction of proposed facilities. Design and construction for buildings will be performed in accordance with EBMUD's seismic design standards, which meet and/or exceed applicable design standards of the International Building Code.

**Mitigation Measure GEO-2: Perform Design-Level Geotechnical Evaluations for Liquefaction and Other Geologic Hazards.** During the design phase for all other Land Use Master Plan elements that require ground-breaking activities, EBMUD will perform site-specific design-level geotechnical evaluations to identify geologic hazards and provide recommendations to mitigate those hazards in the final design and during construction. For specific Land Use Master Plan element sites within the MWWTP that have previously been subject to a geotechnical investigation, a geotechnical memorandum shall be prepared to update the previous investigation.

The design-level geotechnical evaluations will include the collection of subsurface data for determining liquefaction potential, and appropriate feasible measures will be developed and incorporated into the project design. The performance standard to be used in the geotechnical evaluations for mitigating liquefaction hazards will be minimization of the hazards. Measures to minimize significant liquefaction hazards could include the following, unless the site-specific soils analyses dictate otherwise:

- Densification or dewatering of surface or subsurface soils;
- Construction of pile or pier foundations to support pipelines and/or buildings; and
- Removal of material that could undergo liquefaction in the event of an earthquake, and replacement with stable material.

- If soil needs to be imported, EBMUD would require that the contractor ensure that such imported soil complies with specifications that define the minimum geotechnical properties and analytical quality characteristics that must be met for use of fill material from off-site borrow sources.

### **Greenhouse Gas Measures**

**Mitigation Measure GHG-1: GHG Reduction Measures.** EBMUD shall implement BAAQMD-recommended Best Management Practices (BMPs) for GHG emissions where feasible, which include the following:

- At least 15 percent of the fleet should be alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment.
- At least 10 percent of building materials should be from local sources.
- At least 50 percent of construction waste or demolition materials should be recycled or reused.

**Mitigation Measure GHG-2a: Energy Efficiency Measures.** Direct and indirect GHG emissions shall be estimated based on the final project design, and energy efficiency measures shall be incorporated into the project as necessary to meet the BAAQMD GHG significance threshold in effect at the time of project implementation.

**Mitigation Measure GHG-2b: Water Conservation Measures for Land Use Master Plan Projects.** Non-potable water shall be used wherever feasible for equipment and area wash down to minimize GHG emissions associated with increased water demand.

### **Hazardous Materials Measures**

**Mitigation Measure HAZ-3: Hazardous Building Materials Surveys and Abatement.** For any building not already surveyed for lead, a registered environmental assessor or a registered engineer would perform a lead-based paint survey for the structure prior to reuse or demolition. Adequate abatement practices for lead-containing materials, such as containment and/or removal, would be implemented prior to reuse or demolition of each structure that includes lead-containing materials or lead-based paint. For demolition, any PCB- or DEHP-containing equipment or fluorescent lights containing mercury vapors would also be removed and disposed of properly.

If removal of a transformer is required, EBMUD or the owner/operator would retain a qualified professional to determine the PCB content of the transformer oil. For removal, the transformer oil would be pumped out with a pump truck and appropriately recycled or disposed of off site. The drained transformer would be reused or disposed of in accordance with applicable regulations.

### **Hydrology Measures**

**Mitigation Measure HYD-3: Prepare and Implement a Comprehensive Drainage Plan.** Prior to expanding the stormwater collection system to treat runoff from the West End property, EBMUD shall prepare and implement a Comprehensive Drainage Plan for the Land Use Master Plan that incorporates measures to ensure that the storm drain system and treatment capacity are not exceeded during peak conditions. The drainage plan shall define operational controls necessary to prevent flooding of the MWWTP headworks and/or release of surface runoff off site.

**Mitigation Measure HYD-5: Prepare and Implement a Tsunami Response Plan.** EBMUD shall prepare and implement a Tsunami Response Plan for the MWWTP site that defines emergency response and coordination procedures. The Tsunami Response Plan shall contain information specific to actions that may be necessary related to receipt of a tsunami watch, warning, or as a result of an actual tsunami along the San Francisco Bay. The first priority of emergency management response shall be the protection of life and property.

## Noise Measures

**Mitigation Measure NOI-1: Implement Noise Controls.** EBMUD's Construction Specifications (013544-3.4) require compliance with local noise ordinances, and measures that shall be employed to meet applicable City of Oakland Noise Ordinance noise limits include the following:

- Pile driving activities and operation of other types of impact equipment such as jackhammers should be limited to the daytime hours (7 a.m. to 7 p.m. on weekdays);
- If impact pile drivers must be used near the eastern MWWTP boundary, they should not be operated for longer than 10 days to the extent feasible. If pile driving must occur for longer than 10 days near this boundary, sonic or vibratory pile drivers should be used if feasible;
- "Quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration) should be employed where feasible (where geotechnical and structural requirements allow);
- Pile driving activities with all construction projects at the MWWTP should be coordinated to ensure that these activities do not overlap;
- Best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) will be used for all equipment and trucks as necessary; and
- If any construction activities must occur during the nighttime hours (7 p.m. to 7 a.m. on weekdays, 8 p.m. to 9 a.m. on weekends), operation of noisier types of equipment should be prohibited as necessary to meet ordinance noise limits.

**Mitigation Measure NOI-2: Implement Vibration Controls.** To ensure that adjacent freeway structures and future commercial structures to the south are not subject to cosmetic damage, EBMUD shall ensure that any future pile driving activities associated with Master Plan projects do not exceed the 0.2 in/sec peak particle velocity (PPV) threshold at these structures. Measures that could be employed to meet this performance standard include using sonic or vibratory pile drivers where feasible or pre-drilling pile holes.

**Mitigation Measure NOI-3: Employ Noise Controls for Stationary Equipment.** EBMUD shall use best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) as necessary on stationary equipment associated with all Master Plan projects in order to comply with applicable City of Oakland Noise Ordinance noise limits, adjusted to reflect ambient noise levels occurring at the time of project implementation (under 2010 conditions, the nighttime noise limit is 54 dBA [Leq] at receiving residential uses to the east and 73 dBA [Leq] at future receiving commercial uses to the south).

## Traffic Measures

**Measure TRA-1: Construction Traffic Management Plan.** EBMUD would implement the following measures during project construction at the local intersections outside the MWWTP property:

EBMUD and the construction contractor would coordinate with the appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion during construction of this project and other nearby projects that could be simultaneously under construction. EBMUD would develop a construction management plan for submittal to the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan would include at least the following items and requirements:

- a. A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours and designated construction access routes;

- b. Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries would occur; and
- c. A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem.

### Measures to Minimize Disruption to Existing Utilities

**Mitigation Measure UTIL-6 Coordinate Relocation and Interruptions of Service with Utility Providers During Construction.** The construction contractor will be required to verify the nature and location of underground utilities before the start of any construction that would require excavation. The contractor will be required to notify and coordinate with public and private utility providers at least 48 hours before the commencement of work adjacent to any utility. The contractor will be required to notify the service provider in advance of service interruptions to allow the service provider sufficient time to notify customers. The contractor will be required to coordinate timing of interruptions with the service providers to minimize the frequency and duration of interruptions.

## 1.4 Permits/Approvals Required

A Registration Tier Permit through the CalRecycle Local Enforcement Agency (Alameda County Environmental Health) and appropriate building and development permits from the City of Oakland and/or Port of Oakland will be obtained for the project. An air permit for the generator will be obtained from the Bay Area Air Quality Management District. There are no other required air permits anticipated for the project. The Department of Toxic Substances Control (DTSC) must approve excavation or disturbance of any soil on the West End property deeper than 5 feet below ground surface and must approve placement of any soil from the West End property outside of the property boundary.

## 1.5 CEQA Process/Addendum Requirements

This Addendum to the Main Wastewater Treatment Plan Land Use Master Plan EIR has been prepared to evaluate the potential effects of implementing the Organics-Rich Materials Preprocessing Pilot Project. This Addendum is in the format of an environmental checklist, prepared in compliance with Section 15063 of the California Environmental Quality Act (CEQA) Guidelines of 1970 (as amended), and California Administrative Code, Title 14, Division, Chapter 3.

Pursuant to Section 15164(a) of the CEQA Guidelines:

*“A lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.”*

The conditions in Section 15162 include the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
  - (A) The project will have one or more significant effects not discussed in the previous EIR;

*(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*

*(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project; or*

*(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment.*

This Addendum provides a focused review of the potential environmental impacts of the Organics-Rich Materials Preprocessing Pilot Project. This Addendum has been prepared because it has been determined (1) that the pilot project would not create any new or more significant environmental impacts beyond those identified in the 2011 EIR, and (2) that the pilot project will not require any new mitigation measures or alternatives which are considerably different from those analyzed in the 2011 EIR. Specifically,

Implementation of the Pilot Project does not constitute a substantial change as compared to the full-scale food waste preprocessing facility evaluated in the 2011 EIR. The Pilot Project does not require major revisions to the 2011 EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Environmental effects of the Pilot Project are discussed in Section 2.1, Environmental Analysis Checklist for the Pilot Project. Impacts in each issue area were characterized and compared to the impacts of the full-scale project, and there are no new significant impacts or substantially more severe impacts.

There have been no substantial changes with respect to the circumstances under which the Pilot Project is undertaken that will require major revisions to the 2011 EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The City of Oakland is considering a realignment of Wake Avenue, but this would not worsen any of the environmental effects of the Pilot Project, as compared with impacts of the full-scale facility. Please refer to Section 2.1, Checklist Item 16, Transportation/Traffic, which documents that EBMUD has plans to ensure adequate queuing space during and after construction of the Wake Avenue realignment.

No new information of substantial importance became apparent as a result of the proposal to conduct the Pilot Project. The Pilot Project will not have significant effects not discussed in the 2011 EIR nor will it result in significant effects that were previously examined but would be substantially more severe than those identified in the 2011 EIR. Please refer to the discussion of each issue in the checklist in Section 2.1, which documents that there are no new or substantially more severe impacts.

The Pilot Project does not increase the feasibility of mitigation measures previously found to be infeasible, and there are no feasible mitigation measures or alternatives that EBMUD has declined to adopt. In approving the Land Use Master Plan, EBMUD adopted all of the mitigation measures included in the Draft EIR, and did not find any of the recommended measures to be infeasible. Thus, there are no mitigation measures that were previously found to be infeasible. Project alternatives evaluated in the 2011 EIR all involved different configurations of the biodiesel facility. Implementation of the Pilot Project would not affect the feasibility of the various options for implementation of the biodiesel facility.

Because the criteria in CEQA Guidelines section 15162 (a) does not apply here, an addendum to the 2011 EIR has been prepared, and will be considered, along with the 2011 EIR, prior to EBMUD making any further approvals of the Pilot Project.

## Chapter 2 Environmental Checklist

1. **Project Title:** Organics-Rich Materials Preprocessing Pilot Project
2. **Project Sponsor's Name & Address:** East Bay Municipal Utility District  
375 Eleventh Street, MS702  
Oakland, CA 94607-4240
3. **Contact Person and Phone Number:** Vince De Lange  
(510) 287-1141
4. **Project Location:** On the Main Wastewater Treatment Plan (MWWTP) site located at 2020 Wake Avenue, in Oakland, CA.
5. **General Plan Designation:** General Industrial/Transportation
6. **Zoning:** General Industrial
7. **Description of Project:** EBMUD is proposing a Pilot Project to analyze performance of organics-rich feedstocks through various processing equipment components for their proposed food waste preprocessing facility.
8. **Surrounding Land Uses and Setting.** The MWWTP is located in an industrial area that is separated from nearby land uses by freeway ramps/approaches to the San Francisco-Oakland Bay Bridge to the north, west, and east, and by vacant land, rail lines and warehouse structures associated with the former Oakland Army Base to the east and south. San Francisco Bay is north of the Bay Bridge approach. The nearest residential land uses are to the east of I-880, about ¼ mile from the eastern boundary of the MWWTP and more than ½ mile from the proposed site for the Pilot Project.
9. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.** A Registration Tier Permit through the CalRecycle Local Enforcement Agency (Alameda County Environmental Health) and appropriate building and development permits from the City of Oakland and/or Port of Oakland will be obtained for the project. An air permit for the generator will be obtained from the Bay Area Air Quality Management District. Department of Toxic Substances Control (DTSC) must approve excavation or disturbance of any soil on the West End property deeper than 5 feet below ground surface and must approve placement of any soil from the West End property outside of the property boundary.

## 2.1 Environmental Analysis Checklist for Pilot Project

The following Environmental Analysis Checklist (Checklist) has been prepared to determine if the Final EIR for the EBMUD Main Wastewater Treatment Plant Land Use Master Plan (2011 EIR) adequately addresses impacts of the Organics-Rich Materials Preprocessing Pilot Project. The Checklist evaluates the adequacy of the earlier evaluation contained in the 2011 EIR pursuant to Section 21166 of the Public Resources Code and Section 15162 of the CEQA Guidelines.

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
<b>1. Aesthetics</b> Would the project:					
a) Have a substantial adverse effect on a scenic vista?	3.2-4	No	No	No	N/A
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	3.2-4	No	No	No	N/A
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	3.2-6	No	No	No	Yes, see Mitigation Measures AES-2a and AES-2b
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	3.2-8	No	No	No	N/A
<p><b>Discussion:</b> The Pilot Project would be in the same location as the food waste preprocessing facility evaluated in the 2011 EIR, but smaller in scale. The site of the Pilot Project is not in a visually sensitive area, and as noted on page 3.2-2 of the 2011 EIR, the site is only visible briefly to passing motorists, primarily on local freeways. The MWWTP and other properties in the project vicinity already use nighttime security lighting, and the general area is substantially lighted at night. The elements of the Pilot Project would be similar to those evaluated in the 2011 EIR, which, in addition to the proposed food waste preprocessing building, included truck deliveries, piping, and other auxiliary structures. Although the Pilot Project would not include a building to enclose operations, the preprocessing equipment would not be dissimilar in appearance to existing facilities found at the MWWTP site in terms of scale and general appearance. The equipment used for the Pilot Project would be 15 to 20 feet tall, which is considerably less than the 40-foot exterior height of the food waste preprocessing facility evaluated in the 2011 EIR. The overall footprint of the facility would also be smaller. In addition, the Pilot Project would be subject to Mitigation Measure AES-2b: Design of Facilities to be Aesthetically Consistent with Existing Visual Character, which would ensure that the facility would blend with surrounding facilities. Any lighting used for the Pilot Project would be subject to Mitigation Measure AES-3: Lighting Design and Low Reflective Paint, which would ensure that new lighting is shielded and directed to the interior of the project site. Visual impacts would thus be expected to be the same or less than those evaluated in the EIR.</p>					

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
<p><b>2. Agricultural and Forestry Resources</b></p> <p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p>					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	3.1-2	No	No	No	N/A
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	3.1-2	No	No	No	N/A
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	NA	No	No	No	N/A
d) Result in the loss of forest land or conversion of forest land to non-forest use?	NA	No	No	No	N/A
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	3.1-2	No	No	No	N/A
<p><b>Discussion:</b> The Pilot Project is located in an urban area that contains no agricultural or forest lands. The Notice of Preparation for the 2011 EIR was issued in 2009, before the CEQA Guidelines were revised to add criteria for impacts to forest lands to the CEQA Checklist. Forest lands were thus not addressed in the 2011 EIR, but facilities at the MWWTP would have no effect on forest lands.</p>					

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
<b>3. Air Quality</b> <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.</i> <i>Would the project:</i>					
a) Conflict with or obstruct implementation of the applicable air quality plan?	3.3-37	No	No	No	N/A
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	3.3-11 et seq. & 3.3-18 et seq.	No	No	No	Yes, see Mitigation Measure AIR-1
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	4-14	No	No	No	Yes, see Mitigation Measure AIR-5
d) Expose sensitive receptors to substantial pollutant concentrations?	3.3-14 et seq. & 3.3-30 et seq.	No	No	No	Yes, see Mitigation Measure AIR-5
e) Create objectionable odors affecting a substantial number of people?	3.3-35 et seq.	No	No	No	Yes, see Mitigation Measures AIR-6a and AIR-6b

Discussion: **Emissions.** Emissions of criteria pollutants associated with construction would be less than those identified in the 2011 EIR because the Pilot Project would require minimal construction and less ground disturbance than what was assumed in the 2011 EIR for the full-scale facility. Mitigation Measures for construction would be applicable to the Pilot Project and would ensure that construction would not generate substantial emissions. Operational mobile source emissions from truck traffic would be similar to, but less than, those estimated for the food waste preprocessing facility because the Pilot Project would be a smaller facility, and would generate less traffic. Traffic patterns would be somewhat different than those projected in the 2011 EIR, but this would not be expected to result in new significant impacts because the volume of trucks needed to transport 99.9 tpd of food waste would be substantially less than the volume of trucks estimated for transportation of up to 600 tpd of food waste. Mobile source emissions of criteria pollutants are shown in Table 3.3-12 of the 2011 EIR. The BAAQMD has established a significance threshold of 80 lb/day for emissions of reactive organic gases (ROG), nitrogen oxides (NOx) and particulate matter less than 10 microns in diameter (PM10). Estimated emissions for the full-scale food waste preprocessing facility were 4.0 lb/day of ROG, 30.2 lb/day of NOx and 2.3 lb/day of PM10. Detailed mobile source emissions estimates have not been made for the Pilot Project, but because the facility would process only a fraction of the waste assumed for the full-scale facility, Pilot Project emissions from truck traffic would be expected to be substantially less than for the full-scale project.

The food waste preprocessing facility evaluated in the 2011 EIR was proposed to be operated from on-site electric power, with no generator, and thus had no stationary source emissions. The Pilot Project would be operated by a generator, which could be operated up to 24 hours per day, but more likely would be operated a maximum of

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
<p>16 hours per day. Emissions from 24-hour operation of the generator with an interim Tier IV engine would be 1.13 lb/day of ROG, 18.14 lb/day of NOx, and 0.12 lb/day of PM10. Combining full-scale mobile source emissions with the estimated stationary source emissions from the Pilot Project generator would still result in emissions below both the 1999 BAAQMD threshold of 80 lb/day for ROG, NOx and PM10, and below the 2010 BAAQMD thresholds that were adopted during the preparation of the 2011 EIR, but later withdrawn by BAAQMD. Combining full scale mobile source emissions with Pilot Project stationary emissions is highly conservative, because if a full-scale facility were to be built, it would replace the Pilot Project and use of the generator would be discontinued. EBMUD would remove the generator from the site after the two-year period of Pilot Project operation, so operation of the Pilot Project is not expected to overlap with operation of the biodiesel production facility. It is thus not necessary to combine operational emissions of the Pilot Project with the operational emissions of the biodiesel facility. If the schedule for implementation of the biodiesel facility is accelerated, EBMUD would evaluate emissions sources to ensure that emissions thresholds are not exceeded. Because engine emissions are continuously improving, delaying the implementation of the biodiesel facility (as compared to the estimated schedule in the 2011 EIR) would result in emissions lower than those projected in the 2011 EIR. With implementation of the Pilot Project emissions of criteria pollutants would remain less than significant.</p>					
<p><b>Odors.</b> Operational odor would be the primary impact that could differ from impacts discussed in the 2011 EIR. The food waste preprocessing facility described in the 2011 EIR was within an enclosed building, and mitigation included the possible addition of odor controls to roof vents if odor problems occurred. The Pilot Project would comply with mitigation requiring that “All food waste shall be processed within 48 hours of receipt or protocols shall be implemented to minimize nuisance odor problems and ensure compliance with applicable BAAQMD air permit requirements.” This limitation would not apply to packaged food or other urban organics that are determined not to have a potential to generate odors. The mitigation from the 2011 EIR assumed that the full-scale food waste preprocessing facility would be enclosed in a building. It has been determined that constructing a building to enclose the Pilot Project would not be economically feasible, due to the short-term nature of the pilot. The private company that would install and operate the Pilot Project has determined that it would not be possible to achieve an acceptable return on investment if a costly enclosure is constructed, in light of the project’s limited time and limited operational period.</p>					
<p>Because the facility is not enclosed, EBMUD would monitor odor and, if it determines that odors from the Pilot Project are causing a nuisance, EBMUD would suspend operation of the Pilot Project and acceptance of feedstock and enter into a process with the private operator to resolve the odor issue. This may include the use of a consultant specializing in odor control and abatement. This requirement is a part of the project description and would be enforced by EBMUD as a condition of its agreement with the private operator. EBMUD will also have authority to suspend or terminate the pilot project in the event odor issues arise and prove insoluble. These project requirements would ensure that the project would be consistent with Mitigation Measure AIR-6a from the 2011 EIR.</p>					
<p>To evaluate the potential for adverse impacts from odors associated with operation of the Pilot Project, site visits to a similar facility were conducted on August 14 and August 28, 2013 by staff from EBMUD and RMC Water and Environment. Staff observed operation of processing equipment at the food waste processing facility at the South Area Transfer Station in Sacramento, CA. The facility uses the same equipment that is proposed for use at the Pilot Project, and is not within an enclosed building. On August 14, 2013, weather conditions were sunny with a slight breeze, and an afternoon temperature from 94° to 97° F. On that day, the facility operators reported that a load of organics-rich waste containing putrescible materials was delivered to the facility at 11:30 AM and processing of the waste began immediately. The load of waste was completely processed by about 2:40 PM, and the concrete pad was sprayed down immediately. At about 2:20 pm, odors from the processing facility were noticeable, but not readily perceptible beyond the immediate vicinity of the processing area.</p>					
<p>On August 28, 2013, weather conditions were again sunny with a slight breeze, with temperature of 72° F at 9:45 AM, warming up through the morning. According to the facility operators, an 18,000-pound load of organics-rich waste containing putrescible materials was delivered to the facility at about 7:00 AM. The load contained mixed waste, was fairly dry, and contained a fair amount of non-organic material. Odors were not detectable upwind, and were only noticeable within about 10 feet of the waste pile on the upwind side. Processing of the waste began at 10:33 AM. During processing, odors were noticeable downwind, including along the nearest public roadway about 560 feet downwind from the processing facility. Although noticeable, odors were not overpowering and did not appear to be stronger than most odors typical of a</p>					

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<p>wastewater treatment plant. The odors observed during these site visits were not characterized as stronger than those expected to be associated with the full-scale facility analyzed in the 2011 EIR. The Pilot Project would be located in the interior of the MWWTP, at the same location as the full-scale food waste preprocessing facility. As noted on page 3-6 of the 2011 EIR, the site would be about 3,000 feet (over ½ mile) from the closest residential receptor. Drivers on the adjacent freeway would be closer to the facility, but freeways are not considered a sensitive receptor, and drivers' exposure to any odors would be very brief, and not substantially different from the existing odor of the MWWTP. Similarly, any users of the Bay Trail alignment along the northern boundary of the MWWTP could be briefly exposed to odors, but the Pilot Project is not expected to make the existing odors from the MWWTP more objectionable. The 2011 EIR considered the compatibility of the full-scale facility with the Bay Trail and concluded that a food waste facility would be consistent with the current character of the area. The Pilot Project is smaller, and expected to have similar impacts and is thus not expected to result in a new significant impact.</p> <p>With the implementation of applicable mitigation and odor control requirements that would be enforced by EBMUD, the Pilot Project is not expected to have odor impacts substantially different from those anticipated for the full-scale project.</p>					
<p><b>4. Biological Resources</b> <i>Would the project:</i></p>					
<p>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	3.4-15	No	No	No	N/A
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	3.4-15	No	No	No	N/A
<p>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	3.4-15	No	No	No	N/A

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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	3.4-15 et seq.	No	No	No	Yes, see Mitigation Measure BIO-1
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	3.4-17 et seq.	No	No	No	Yes, see Mitigation Measure BIO-2
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	3.4-15	No	No	No	N/A
<p><b>Discussion:</b> Impacts to biological resources would be the same as, or less than those addressed in the 2011 EIR. All impacts of the MWWTP Master Plan that are related to the footprint of project facilities would not be changed by implementation of the Pilot Project. The 2011 EIR essentially assumed that all of the land area of the MWWTP, including the West End Property, could eventually be disturbed by construction of a facility. The Pilot Project would thus not result in any new impacts to biological resources.</p>					
<p><b>5. Cultural Resources</b> <i>Would the project:</i></p>					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	3.5-9	No	No	No	N/A
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	3.5-10	No	No	No	Yes, see Mitigation Measure CUL-1
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	3.5-11	No	No	No	Yes, see Mitigation Measure CUL--2
d) Disturb any human remains, including those interred outside of formal cemeteries?	3.5-11	No	No	No	Yes, see Mitigation Measure CUL--3

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<p><b>Discussion:</b> Impacts to cultural resources would be the same as, or less than those addressed in the 2011 EIR. All impacts of the MWWTP Master Plan that are related to the footprint of project facilities would not be changed by implementation of the Pilot Project. The 2011 EIR essentially assumed that all of the land area of the MWWTP, including the West End Property, could eventually be disturbed by construction of a facility. The Pilot Project would thus not result in any new impacts to cultural resources.</p>					
<p><b>6. Geology and Soils</b> <i>Would the project:</i></p>					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	3.7-11	No	No	No	N/A
ii) Strong seismic ground shaking?	3.7-12	No	No	No	Yes, see Mitigation Measure GEO-1
iii) Seismic-related ground failure, including liquefaction?	3.7-13	No	No	No	Yes, see Mitigation Measure GEO-2
iv) Landslides?	3.7-11	No	No	No	N/A
b) Result in substantial soil erosion or the loss of topsoil?	3.7-14	No	No	No	N/A
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	3.7-13	No	No	No	Yes, see Mitigation Measure GEO-2

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d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	3.7-11	No	No	No	N/A
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	3.7-11	No	No	No	N/A
<b>Discussion:</b> Impacts associated with potential geotechnical hazards would be the same for the Pilot Project as those described in the 2011 EIR. The Pilot Project would be located on the same site as the food waste preprocessing facility that was evaluated in the 2011 EIR.					
<b>7. Greenhouse Gas Emissions</b> <i>Would the project:</i>					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	3.8-4 et seq.	No	No	No	Yes, see Mitigation Measures GHG-2a and GHD-2b
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	3.8-12 et seq.	No	No	No	Yes, see Mitigation Measures GHG-2a and GHD-2b
<b>Discussion:</b> Construction activity for the Pilot Project would be less than for the food waste preprocessing facility because only a minor amount of work is required to install the facility on the site. Nevertheless, Mitigation Measure GHG-1 would include implementation of BMPs for GHG emissions where feasible, and would minimize emissions during construction. Similarly, operational GHG emissions would be less than for the food waste preprocessing facility because a smaller amount of waste would be processed. Similar to the full-scale project, the Pilot Project is expected to offset operational GHG emissions by GHG emissions reductions associated with the renewable energy produced by the food waste. The Pilot Project would still be expected to result in a net reduction of CO2 emissions, when comparing power produced from biogas versus fossil fuels (see Table 3.8-3 and discussion on page 3.8-9 of the 2011 EIR). As with construction activities, Mitigation Measures GHG-2a and GHG-2b would minimize GHG emissions during operation.					
<b>8. Hazards and Hazardous Materials</b> <i>Would the project:</i>					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	3.9-24 et seq.	No	No	No	N/A

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b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	3.9-28 et seq.	No	No	No	Yes, see Mitigation Measure HAZ-3
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	3.9-23	No	No	No	N/A
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	3.9-23	No	No	No	N/A
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	3.9-23	No	No	No	N/A
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	3.9-23	No	No	No	N/A
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	3.9-23	No	No	No	N/A
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	3.9-23	No	No	No	N/A

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<p><b>Discussion:</b> The Pilot Project would have impacts the same as or less than the food waste preprocessing facility evaluated in the 2011 EIR. No demolition is expected to be required for the Pilot Project, so Mitigation Measure HAZ-3, Hazardous Building Materials Survey and Abatement, is not expected to be needed. No portion of the MWWTP is identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (EBMUD 2009). The full-scale facility evaluated in the 2011 EIR included a 5,000-gallon diesel fuel storage tank, which is substantially larger than the 1,000-gallon tank proposed for the Pilot Project. The Pilot Project would be subject to the same requirements that are discussed on page 3.9-26 of the 2011 EIR, including filling a Hazardous Materials Business Plan with the Oakland Fire Department, Office of Emergency Services.</p>					
<p><b>9. Hydrology and Water Quality</b> <i>Would the project:</i></p>					
a) Violate any water quality standards or waste discharge requirements?	3.10-8 et seq.	No	No	No	N/A
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	3.10-9 et seq.	No	No	No	N/A
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	3.10-11	No	No	No	N/A
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	3.10-10	No	No	No	Yes, see Mitigation Measure HYD-3

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e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	3.10-10	No	No	No	Yes, see Mitigation Measure HYD-3
f) Otherwise substantially degrade water quality?	3.10-8 et seq.	No	No	No	N/A
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	3.10-7	No	No	No	N/A
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	3.10-7	No	No	No	N/A
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	3.10-7	No	No	No	N/A
j) Inundation by seiche, tsunami, or mudflow?	3.10-11	No	No	No	Yes, see Mitigation Measure HYD-5
<p><b>Discussion:</b> The Pilot Project would comply with mitigation measures identified in the 2011 EIR, and facilities would be constructed within the same area, though with a smaller footprint than was discussed in the 2011 EIR. Impacts would be the same or less than those previously identified. Storm water impacts attributable to the pilot project would be no greater than analyzed in the 2011 EIR. The Pilot Project would not change the amount of impervious surface area at the project site, and thus would not increase the amount of runoff into existing storm drains. Also, as noted in the Project Description the Pilot Project equipment will be placed on a concrete pad, which will be sloped such that process liquids, wash-down water, and storm water that collect on the pad will be directed towards a sump and pumped back into the processing system, eventually combining with processed waste to be delivered to EBMUD's digesters rather than to the storm drain. This is similar to the design of the full-scale project evaluated in the 2011 EIR, and would prevent pollutants from food waste placed on the concrete pad from contaminating storm water discharges.</p>					
<p><b>10. Land Use and Planning</b> <i>Would the project:</i></p>					
a) Physically divide an established community?	3.11-6	No	No	No	N/A

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b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	3.11-6 et seq.	No	No	No	N/A
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	3.4-15	No	No	No	N/A
<b>Discussion:</b> The Pilot Project would be constructed entirely within the MWWTP and would be consistent with existing land use at the plant. Impacts would be the same as those identified in the 2011 EIR.					
<b>11. Mineral Resources</b> <i>Would the project:</i>					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	3.1-3	No	No	No	N/A
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	3.1-3	No	No	No	N/A
<b>Discussion:</b> The 2011 EIR documents that there are no mineral resources at the MWWTP.					
<b>12. Noise</b> <i>Would the project result in:</i>					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	3.12-17 et seq.	No	No	No	Yes, see Mitigation Measure NOI-3

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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	3.12-14 et seq.	No	No	No	Yes, see Mitigation Measure NOI-2
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	3.12-21 et seq.	No	No	No	N/A
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	3.12-10 et seq.	No	No	No	Yes, see Mitigation Measure NOI-1
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	3.12-10	No	No	No	N/A
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	3.12-10	No	No	No	N/A

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<p><b>Discussion:</b> The Pilot Project would be subject to the same mitigation measures identified in the 2011 EIR. However, construction impacts are expected to be less because only minimal ground disturbance would be required and no pile driving is expected to be necessary. Estimated operational noise from the food waste preprocessing facility is presented in Table 3.12-8 of the 2011 EIR, which compares noise levels to noise ordinance limits. Noise levels from operation of the full-scale food waste preprocessing facility were estimated to be 89 dBA (Leq) inside the building, 72 dBA (Leq) at the building exterior, 34 dBA (Leq) at the eastern MWWTP boundary, and 31 dBA (Leq) at the closest residential receptors to the east. Although the Pilot Project would not be constructed within an enclosed building, the Pilot Project has been sufficiently scaled down from the 2011 EIR project to fully offset any noise impacts that would result from the lack of a building in the absence of such scaling down. Noise levels from operation of the smaller facility are expected to be quieter than the full-scale facility, resulting in a noise level of 71 dBA at the project site, at a distance of 25 feet from the equipment (EBMUD 2013), which is similar to the noise levels projected in the 2011 EIR at the exterior of the food waste preprocessing facility. Power for the Pilot Project would be provided by a generator, which produces noise levels of about 75 dBA at a distance of 25 feet. Combined noise levels from the Pilot Project food waste processing equipment and the generator are expected to be about 76 dBA, which is slightly louder than was estimated in the 2011 EIR. However, noise would be substantially less at the nearest sensitive receptor. Noise levels from the Pilot Project would be expected to about 35 dBA at the nearest residential receptor, which is 3,000 feet from the site of the Pilot Project. This represents a 4 dBA increase, as compared to the full-scale project, a level of increase that would be barely perceptible if no other noise sources were present near the receptor<sup>3</sup>. The Pilot Project's noise level at the site of the closest residential receptors remains well within acceptable limits of 68 dBA for daytime noise and 54 dBA for nighttime noise. However, existing background noise level at the nearest sensitive receptor is 55 dBA at night and 63 dBA during the day (see page 3.12-6 of the 2011 EIR). When added to this observed background noise, the noise from the Pilot Project is so small that the total noise level would not change (i.e. the background noise would be loud enough that the noise from the Pilot Project would be inaudible). As noise is measured on a logarithmic scale, the Pilot Project's 35 dBA added to night background noise levels of 55 dBA yields a total noise level of 55.042 dBA. When measured against 63 dBA daytime background noise levels, the marginal increase in noise levels attributable to the Pilot Project would be proportionately less. At all times of day, Pilot Project noise will be imperceptible at the location of the nearest residential receptors. Both the full-scale project and Pilot Project would produce noise from trucks; truck noise would be less with the Pilot Project because there would be less than 1/4 the number of trucks.</p>					
<p><b>13. Population and Housing</b> <i>Would the project:</i></p>					
<p>a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?</p>	3.1-3	No	No	No	N/A
<p>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</p>	3.1-3	No	No	No	N/A

<sup>3</sup> A 3 dBA difference is generally the point at which the human ear will perceive a difference in noise level (Caltrans Traffic Noise Analysis Protocol, May 2011, p. 38).

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c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	3.1-3	No	No	No	N/A
<b>Discussion:</b> The 2011 EIR documents that the Master Plan would not displace housing or people, or contribute to population growth. Implementation of the Pilot Project would not alter this determination.					
<b>14. Public Services</b>					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	3.15-7	No	No	No	N/A
Police Protection?	3.15-7	No	No	No	N/A
Schools?	3.15-7	No	No	No	N/A
Parks?	3.15-7	No	No	No	N/A
Other public facilities?	3.15-7	No	No	No	N/A
<b>Discussion:</b> The 2011 EIR documents that the Master Plan would not generate population growth and would thus not generate need for new or altered government facilities. Implementation of the Pilot Project would not alter this determination.					
<b>15. Recreation</b>					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	3.11-7	No	No	No	N/A
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	3.11-7	No	No	No	N/A

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<b>Discussion:</b> The 2011 EIR documents that the Master Plan would not increase demand for recreational facilities or affect existing or planned facilities. Implementation of the Pilot Project would not alter this determination.					
<b>16. Transportation/Traffic</b> <i>Would the project:</i>					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of a circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersection, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	3.14-14 et seq. & 3.14-17 et seq.	No	No	No	Yes, see Mitigation Measure TRA-1
b) Conflict with an applicable congestion management program, including, but not limited to level of services standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	3.14-16 et seq.	No	No	No	N/A
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks?	3.14-14	No	No	No	N/A
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	3.14-19	No	No	No	N/A
e) Result in inadequate emergency access?	3.14-18	No	No	No	N/A
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	3.14-18 et seq.	No	No	No	N/A

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
<p><b>Discussion:</b> The 2011 EIR documents that the Master Plan would not generate operational traffic that would result in significant impacts on traffic. Compared with the full-scale project analyzed in the 2011 EIR, the Pilot Project would be expected to result in similar traffic patterns for transport of food waste, but less operational traffic because the capacity of the Pilot Project (up to 99.9 tpd) is less than that of the food waste preprocessing facility evaluated in the 2011 EIR (up to 400 to 600 tpd at full build-out). Construction traffic would also be expected to be less because processing equipment would be installed directly on the site without construction of a building. Construction activities would thus be simpler and would require less time than described in the 2011 EIR. Mitigation Measure TRA-1: Construction Traffic Management Plan, would be applicable to the Pilot Project, and would ensure that traffic during construction is managed to minimize congestion on local streets. Mitigation Measures TRA-7a and 7b are not applicable to the Pilot Project because they address potential safety hazardous associated with construction of a rail spur to bring materials to the biodiesel production facility. The Pilot Project would not include construction or use of the rail spur discussed in the 2011 EIR.</p> <p>Since preparation of the 2011 EIR, the City of Oakland has prepared an Addendum to its 2002 EIR for the Oakland Army Base (OARB) Redevelopment Plan and Army Base Reuse Plan (City of Oakland 2012). The addendum considers the potential for realignment of Wake Avenue north of West Grand Avenue; the existing Wake Avenue would be realigned as an extension of Maritime Street to maintain access to the MWWTP. EBMUD has considered the proposed realignment and has determined that the proposed change of roadway configuration, if implemented, would not change the conclusions of the 2011 EIR for the MWWTP. Trucks delivering food waste to the Pilot Project site would all be routed through the main gate into the MWWTP and EBMUD has plans to ensure adequate queuing space during and after construction of the Wake Ave realignment.</p>					
<p><b>17. Utilities and Service Systems</b> <i>Would the project:</i></p>					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	3.15-7 et seq.	No	No	No	Yes, see Mitigation Measure HYD-3
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	3.15-7 et seq.	No	No	No	Yes, see Mitigation Measure HYD-3
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	3.15-9 et seq.	No	No	No	Yes, see Mitigation Measure HYD-3
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	3.15-8 et seq.	No	No	No	N/A

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	3.15-7 et seq.	No	No	No	Yes, see Mitigation Measure HYD-3
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	3.15-10 et seq.	No	No	No	N/A
g) Comply with federal, state, and local statutes and regulations related to solid waste?	3.15-11 et seq.	No	No	No	N/A
<p><b>Discussion:</b> The 2011 EIR documents that the Master Plan would only generate small amounts of additional wastewater. The food waste preprocessing facility would generate very small quantities of wastewater. In addition, storm water from the West End property has the potential to exceed wet weather plant capacity, but this would be addressed through implementation of Mitigation Measure HYD-3. Implementation of the Pilot Project would not alter this determination. As noted above in the discussion of hydrology and water quality, the Pilot Project is designed such that process liquids, wash-down water, and storm water that collect on the pad will be directed towards a sump and pumped back into the processing system, which would prevent pollutants from food waste from contaminating storm water discharges. Because it is smaller than the food waste preprocessing facility evaluated in the 2011 EIR, the Pilot Project would not increase impacts on storm water drainage, water supply or solid waste.</p>					
<b>18. Mandatory Findings</b>					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	4-24	No	No	No	Yes

Issues and Supporting Data Sources:	Location of where Project's impact(s) were addressed in prior environmental Document.	Do Project Modifications Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Document's Mitigations Implemented or Address Impact?
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	4-13 et seq.	No	No	No	Yes
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	4-24	No	No	No	Yes
<p><b>Discussion:</b> The 2011 EIR determined that the project would have a significant unavoidable cumulative air quality impact on community risks and hazards. However, the significant impact was based on Bay Area Air Quality Management District (BAAQMD) cumulative impact methodology and thresholds of significance that were adopted in June 2010; BAAQMD withdrew those significance thresholds in May 2012, after certification of the 2011 EIR. The cumulative impact, as discussed in the 2011 EIR, was found to be significant because of background emissions, primarily from freeways that surround the MWWTP site. The Pilot Project would not increase this cumulative air quality impact, and would not worsen any other cumulative impacts. The Pilot Project would not contribute to cumulative odor impacts in the project vicinity because none of the cumulative projects outside of the MWWTP that are identified in Table 4-1 of the 2011 EIR has the potential to generate odors. As documented in the checklist above, there would be no increased impacts to biological or cultural resources, and there would be no increase in impacts, either direct or indirect, to human beings. Thus, the mitigation measures set forth in the 2011 EIR are fully sufficient to address the environmental impacts of the Pilot Project.</p>					

## 2.2 Environmental Determination

Based upon the evidence in light of the whole record documented in the attached environmental checklist explanation, cited incorporations and attachments, I find that the Project:

- Has NOT been previously analyzed** as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to CEQA Guidelines. Preparation of adequate CEQA environmental documentation is required.
- Has previously been analyzed** as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to CEQA Guidelines. The proposed project is a component of the whole action analyzed in the previously adopted/certified CEQA document. No additional CEQA documentation is required.
- Has previously been analyzed** as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to CEQA Guidelines. **Minor additions and/or clarifications** are needed to make the previous documentation adequate to cover the project which are documented in this addendum to the earlier CEQA document (CEQA §15164). No additional CEQA documentation is required.
- Has previously been analyzed** as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. However, there is important new information and/or **substantial changes have occurred** requiring the preparation of an additional CEQA document (ND, MND, or EIR) pursuant to CEQA Guidelines Sections 15162 through 15163.

Signed

\_\_\_\_\_ Name and Title

\_\_\_\_\_ Date

## Chapter 3 Report Preparation

### 3.1 Report Authors

#### 3.1.1 East Bay Municipal Utility District

- Vince De Lange, P.E., Supervisor of Wastewater Planning
- Heidi G. Oriol, P.E., Associate Civil Engineer

#### 3.1.2 RMC Water and Environment

- Robin Cort, Ph.D., environmental analysis
- Dave Richardson, P.E., technical reviewer

### 3.2 References

Caltrans 2011, Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects, May 2011

City of Oakland 2012, 2012 Oakland Army Base Project Initial Study/Addendum, May 2012

EBMUD 2009, Food Waste Facility Phase 2 Project Initial Study Negative Declaration, July 2009

EBMUD 2011, Environmental Impact Report, Main Wastewater Treatment Plant Land Use Master Plan, certified June 28, 2011

EBMUD 2013, personal communication from Heidi Oriol, email to Robin Cort of RMC providing noise level for Pilot Project equipment, July 24, 2013

EBMUD 2013, Observations from Site Visit to Sacramento Food Waste Facility, August 14, 2013