

FINAL
**Initial Study/
Mitigated Negative Declaration**
Organic Materials Recovery Center

Prepared for:

Fairfield-Suisun Sewer District
1010 Chadbourne Road
Fairfield, CA 94534

Prepared by:



April 2015

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Acronym List

BAAQMD	Bay Area Air Quality Management District
CAP	Clean Air Plan
CCTV	Close Circuit Television
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERP	Contingency and Emergency Response Plan
CH ₄	Methane
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalents
dba	Decibel, a-weighted
FSSD	Fairfield-Suisun Sewer District
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
I-80	Interstate 80
IS/MND	Initial Study/Mitigated Negative Declaration
KOH	Potassium hydroxide
MT	Metric ton
MT/yr	Metric tons per year
NaOH	Sodium hydroxide
NO ₂	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
OMRC	Organic Materials Recovery Center
PM	Particulate Matter
RMC	RMC Water and Environment
SFBAAB	San Francisco Bay Area Air Basin
SMSHCP	Solano Multi-Species Habitat Conservation Plan
SO ₂	Sulfur Dioxide
SPCC	Spill Prevention, Control, and Countermeasure
USEPA	United States Environmental Protection Agency
WWTP	Wastewater Treatment Plant

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Chapter 1 Introduction

1.1 Purpose of This Document

The Fairfield-Suisun Sewer District (FSSD or District) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to provide the public and Responsible and Trustee Agencies reviewing the proposed Project with information about the potential impacts on the environment. This IS/MND was prepared in compliance with Sections 15070 to 15075 of the California Environmental Quality Act (CEQA) Guidelines of 1970 (as amended), and California Administrative Code, Title 14, Division, Chapter 3. In accordance with Section 15070, a Mitigated Negative Declaration (MND) shall be prepared if the initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment or if the initial study identifies potentially significant effects, but revisions to the project would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur. FSSD as the CEQA lead agency has determined that an IS/MND should be prepared for the proposed Project.

1.2 CEQA Process

In accordance with Section 15073 of the CEQA Guidelines, this document is being circulated to local, state, and federal agencies and to interested organizations and individuals who may wish to review and comment on the report. FSSD has circulated the IS/MND to the State Clearinghouse for distribution and a 30-day public review (March 13 – April 13, 2015). FSSD will evaluate comments received on the draft IS/MND, and will prepare responses to address any substantial evidence that the proposed project could have a significant impact on the environment. If there is no such substantial evidence, FSSD as lead agency will adopt the MND in compliance with CEQA.

Written comments should be submitted to FSSD by 5:00 PM, April 13, 2015. Submit comments to:

Greg Baatrup
General Manager
Fairfield-Suisun Sewer District
1010 Chadbourne Road
Fairfield, CA 94534

This IS/MND and any comments received during the public review process will be considered by the FSSD Board of Directors at a public hearing:

Fairfield-Suisun Sewer District
Monday April 27, 2015
6:00 p.m.
1010 Chadbourne Road
Fairfield, CA 94534

1.3 Impact Terminology

The environmental impact analysis for each resource defines the criteria used to judge whether an impact is significant based on the CEQA Initial Study Checklist and regulatory agency standards. Impacts that exceed identified threshold levels are considered significant. In describing the significance of impacts, the following categories of significance are used and are based on the best professional judgment of the preparers of the Initial Study:

No Impact: An effect that would have no impact, or would have a positive impact on the environment, such as reducing an existing environmental problem.

Less than Significant: An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures.

Less than Significant with Mitigation: An impact is potentially significant, but can be reduced to below the threshold level (to less than significant) given reasonable and available mitigation measures.

Potentially Significant: An impact that would cause substantial, or potentially substantial, impacts above the threshold level. Such an impact requires further evaluation and would trigger the preparation of an Environmental Impact Report for the project.

Chapter 2 Project Description

2.1 Project Overview

FSSD is proposing the Organic Materials Recovery Center (OMRC or Center) to improve their process for handling biosolids at their Wastewater Treatment Plant (WWTP) in Fairfield, California. Biosolids are produced from the sewage sludge that is separated during the treatment of municipal wastewater and treated to meet U.S. Environmental Protection Agency (USEPA) pollutant and pathogen requirements for land application and surface disposal. The project would use proprietary organics processing technology developed by Lystek International Limited (Lystek), a private company specializing in the commercial treatment of biosolids and other non-hazardous organic materials, to produce a fertilizer product that would enable diversion of biosolids from waste disposal and landfills through beneficial reuse.

2.2 Purpose and Need for Project

2.2.1 Background/Need for Project

In the San Francisco Bay region and surrounding northern California area, significant quantities of biosolids are produced, primarily by wastewater treatment plants. The majority of this material is applied to land with some or no additional treatment. The intent of the proprietary organics processing technology developed by Lystek, is to process these biosolids to create a pathogen-free, nutrient-rich fertilizer product that is easily applied using traditional fertilizer application equipment.

2.2.2 Purpose of Project

The District's purpose in implementing the project is to improve solids handling. Specific project objectives are as follows:

- Improve solids handling and provide predictable biosolids management for the District;
- Generate revenue;
- Provide a local treatment facility that produces a Class A-EQ or Class A¹ product;
- Reduce organic materials that are sent to landfills;
- Reprocess biosolids to improve solids digestion and bio-gas production; and
- Provide a solution to the organics ban (AB 1594), which would no longer allow yard trimmings, prunings and other greenwaste used as landfill cover to count as being diverted from landfills; and to AB 1826, which will require commercial generators to recycle yard and food waste.

2.3 Project Location

The project would be located at the existing WWTP, which occupies about 150 acres and is located in the southern portion of the City of Fairfield at 1010 Chadbourne Road, Fairfield, California, 95434. **Figure 2-1** shows a vicinity map. The WWTP site is located, south of the Interstate 80 (I-80) interchange with California State Highway 12. The site is adjacent to open space to the east and south, a sod farm to the west, and an industrial park to the north. **Figure 2-2** shows an aerial of the project location. The project would be constructed and operated entirely within the existing WWTP site.

¹ USEPA defines the quality of biosolids (40 CFR Part 503). "Class A EQ" is defined as exceptional quality.

Figure 2-1: Vicinity Map

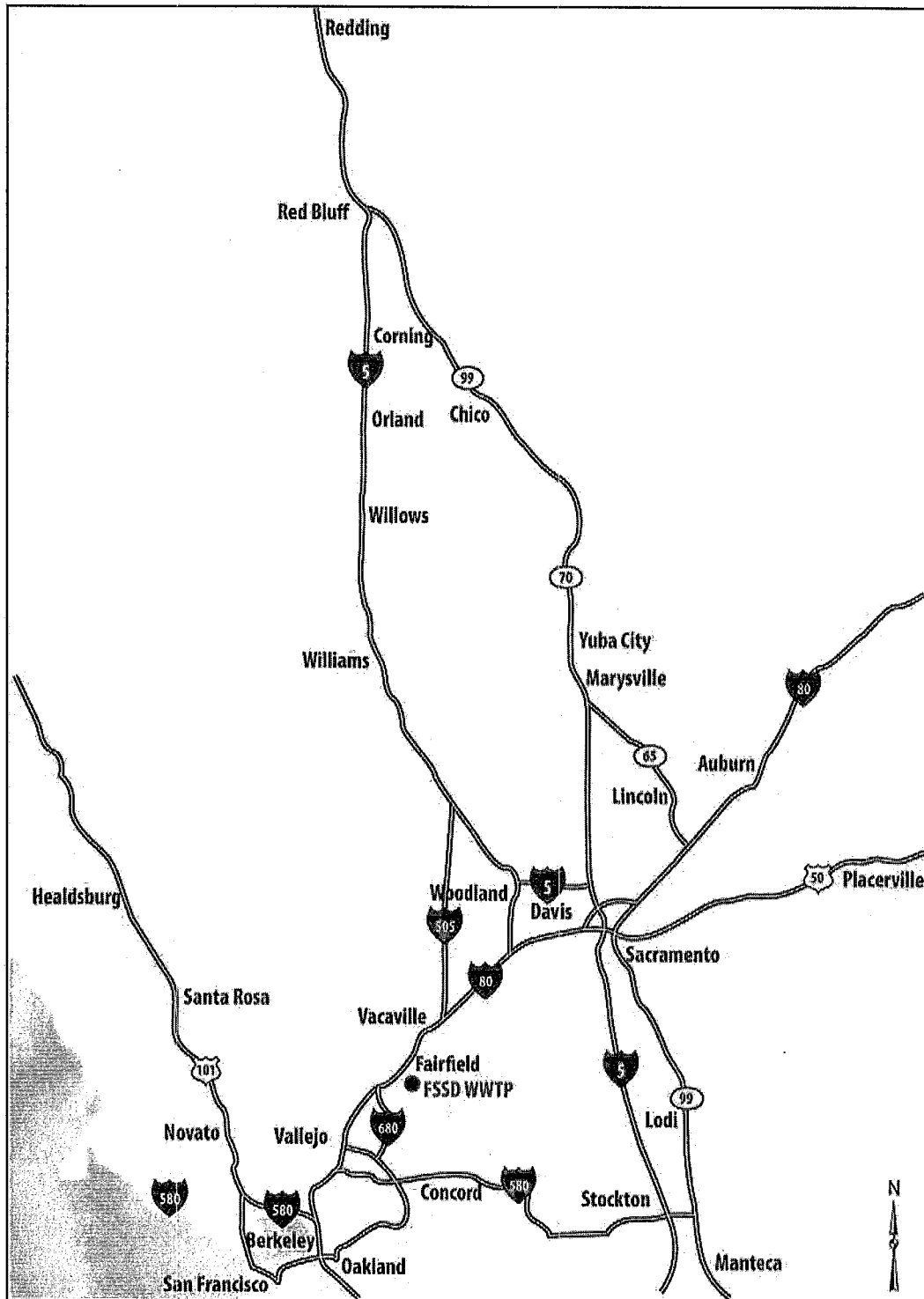






Figure 2-2: Location Map



Location Map

<p>Legend</p> <p> Fairfield-Suisun Sewer District WWTP</p>	<p></p> <p>0 0.5 1 2 Miles</p> <p>Data Sources: Google Earth 2007 Digital Globe Census 2000 Tiger/Line Data</p>	<p>Organic Materials Recovery Center</p> <p></p> <p></p>
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2.3.1 Existing Facilities

The WWTP currently has a dry weather flow capacity of 23.7 million gallons per day (MGD). Treatment processes at the WWTP include screening and grit removal, primary clarification, optional fixed film roughing filters and intermediate clarification, biological activated sludge, secondary clarification, temporary storage of secondary effluent in flow balancing reservoirs, dual-media filtration, and disinfection using ultraviolet light. Methane gas produced as a natural byproduct of the digestion process is used to produce electrical energy, which supplies a portion of the power requirements for the WWTP.

Biosolids are concentrated using gravity belt thickeners, anaerobically digested, and sludge is either mechanically dewatered or dewatered in open-air solar drying beds or lagoons. Biosolids are placed in the Potrero Hills Landfill as alternative daily cover.

2.4 Proposed Project

FSSD is proposing to develop an OMRC at the WWTP. The OMRC would be designed and constructed based on a proprietary organics processing technology. The Center would process dewatered biosolids, liquid septage materials, and other similar organic materials from the agricultural, waste and food processing sectors. The end product of the process would be a pathogen-free and nutrient-rich fertilizer product that is appropriate for land application or enhanced anaerobic digester efficiency. The process has been developed to produce fertilizer products for land application, ultimately allowing diversion of biosolids and other similar organic materials from typical waste disposal options (such as landfill) through beneficial reuse of the nutrient content of the processed materials.

The OMRC would receive and process materials, manage the resulting fertilizer product, and manage the operational and environmental aspects of processing operations. The OMRC would service the demand for biosolids and septage processing and the market need for fertilizers in the agricultural community.

2.4.1 Organic Materials Recovery Center Process

The OMRC would use high shear mechanical mixing with alkali and temperature adjustment to achieve full breakdown of biological materials in the biosolids feedstock. The process relies on physical/chemical principles with heat input to achieve the processing function. No biological process steps are involved. The biosolids entering the Center are converted into a nutrient-rich, pathogen-free fertilizer that is well suited for land application.

All material receipt and processing would occur in an existing and closed building (FSSD dewatering building). Generally, the process would be designed to accommodate biosolids from wastewater treatment plants but would also be able take a range of other organic materials from municipal and private sources. The process produces a high-solid pathogen-free high-nutrient fertilizer value liquid product that meets the USEPA "Class A EQ" (exceptional quality) biosolids standard.

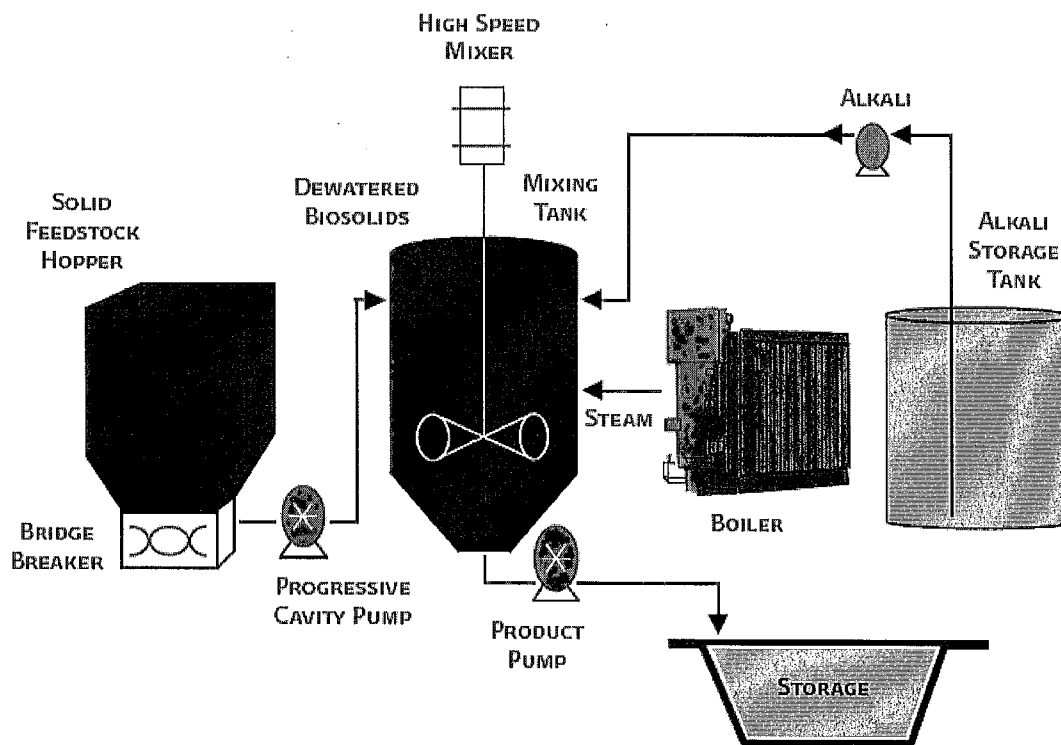
One of the most important benefits of the proposed process would be the ability to create a stable high solid and low viscosity liquid material that is pumpable with conventional liquid handling equipment even at a solids concentration up to or exceeding 20 percent. The process stabilizes the material, creates a pumpable liquid, and neutralizes pathogens. Key parameters that are important to the process include material solids content, temperature, pH, mixing speed, and processing time. An advanced process control system automates and monitors the entire process and provides complete redundancy and emergency shut-down, with periodic manual inspections complementing the control system.

Dewatered solids are typically 15 to 30 percent solid content and may rely on liquid feedstock to meet the final fertilizer solids content; dilution water would be required to achieve the appropriate solids content, which is in the range of 16 to 18 percent. Dilution water can be supplied by FSSD approved septage and/or liquid waste organics. Process reactors receive dewatered biosolids from the delivery area and are mixed with dilution waters. This mixing/dilution function takes place in the process reactors, which operate in semi-continuous batch mode. **Figure 2-3** shows a process flow diagram.

The key process equipment would be as follows:

- **Solid feedstock hopper**, a structure designed to accept solid feedstock material unloaded from incoming trucks;
- **Solid feedstock pumps (progressive cavity pump)**, which deliver feedstock to the process reactor through an enclosed piping system;
- **Liquid feedstock pumps**, which would convey any liquid feedstock such as septage or other organic liquid material with solids content typically less than 10 percent (liquid feedstock is not shown in **Figure 2-3**, but would be accommodated in the proposed process);
- **Alkaline storage and delivery system**, which would store potassium hydroxide (KOH), sodium hydroxide (NaOH), or similar processing material and deliver the material to the reactor through an enclosed piping system; these chemicals are the “reagent” for the process, *i.e.*, the substance or compound that is added to the system to bring about the chemical reaction that produces the desired end product;
- **Steam boiler**, which produces steam for addition to the reactor to heat materials to a temperature of up to 168 °F, providing pasteurization of the material;
- **Process reactors (mixing tanks)**, stainless steel vessels containing a high speed mixer, which performs rapid mixing to break down the materials into the desired product;
- **Final product pumps**, which would pump the final fertilizer product either to storage lagoons via an enclosed piping system or back to the digesters through a re-fed line; and
- **Process system monitoring**, which monitors equipment through a Supervisory Control and Data Acquisition (SCADA) or similar system; the system would monitor parameters including pH, viscosity, total solids, and temperature. The SCADA system is not shown in **Figure 2-3**.

Figure 2-3: Flow Diagram for Lystek Process



Operations monitoring station

Figure 2-4 shows a site plan indicating the location of the dewatering building where the new equipment would be installed, piping that would be installed on site; and the storage lagoons that would be used to store the final product. Figure 2-5 shows photos of the locations for proposed facilities.

2.4.2 Facilities

The building structures and facility services at the OMRC would consist of the following:

- New Scales;
- Existing Dewatering Building for material (solid and liquid) receiving and processing;
- New Product Loading Area;
- Renovated Final Product Storage Lagoons;
- Existing Surface Water Management System
- Existing Site Fencing;
- Renovated Paved Areas (as required);
- Existing Sanitary Services;
- Existing Electrical Service;
- Existing Water Service;
- Existing Natural Gas Service;
- New pipelines to convey natural gas, and other utility features to the dewatering building, and to convey final product to storage or to the digesters:
 - 2,200 feet of 2-inch natural gas, bio-gas and other utility lines,
 - 2,200 feet of 6-inch product re-fed line,
 - 500 feet of 6-inch final product delivery line;
- Buried utility lines (2,600 feet) for communications and electrical service between the dewatering building, scale and outload facility;
- New Spill Containment (as required).

Each of the above noted facility services are explained in additional detail below.

Scales

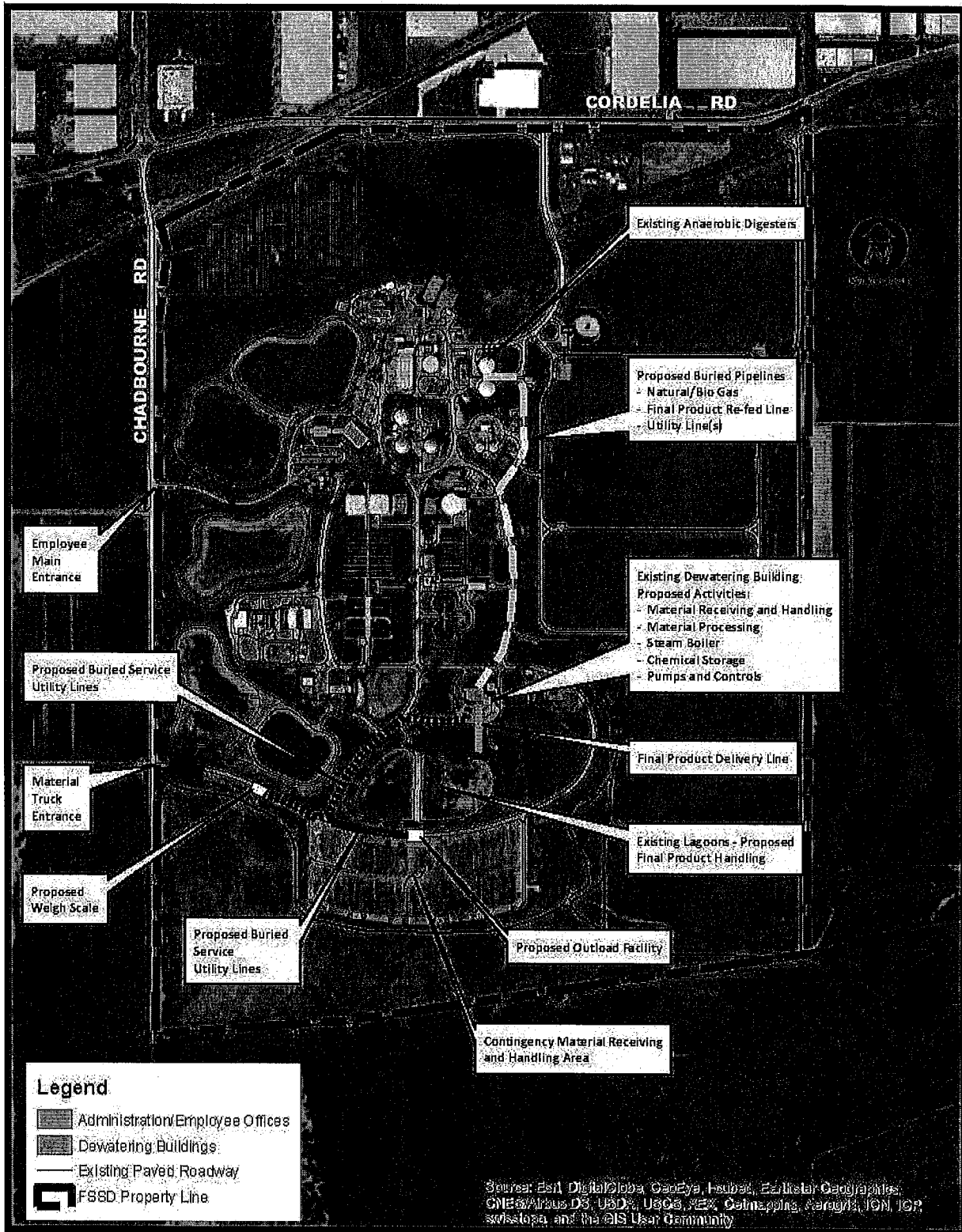
A single weigh-scale bridge would be utilized to monitor both incoming and outgoing hauling and final fertilizer product vehicles. The weigh scale would be located on the existing service road at the west of the FSSD site. An unattended weighing and ticketing system would be utilized and monitored by Close Circuit Television (CCTV) equipment. Incoming and outgoing delivery vehicles would typically cross the weigh scale unless tared and shipped weights are determined off site.

Dewatering Building

The existing Dewatering Building would be utilized to accommodate the following activities

- Material receiving hoppers or silos, both solid and liquid feedstocks.
- Pumping equipment
- Lystek reactors
- Chemical storage
- Boiler equipment for steam generation
- Electrical control equipment
- Operations monitoring station

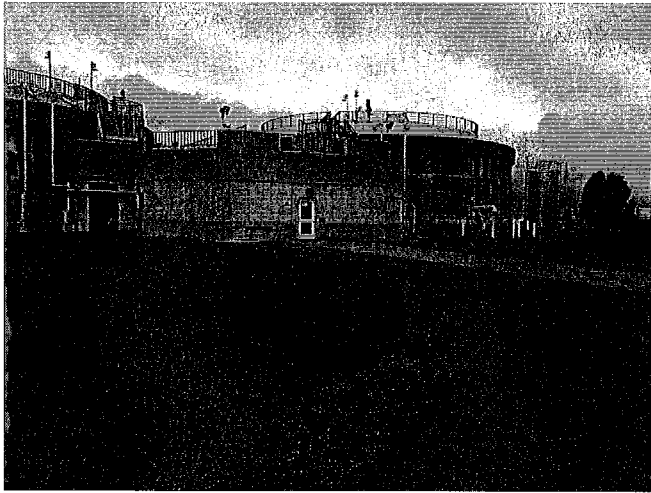
Figure 2-4: Site Plan



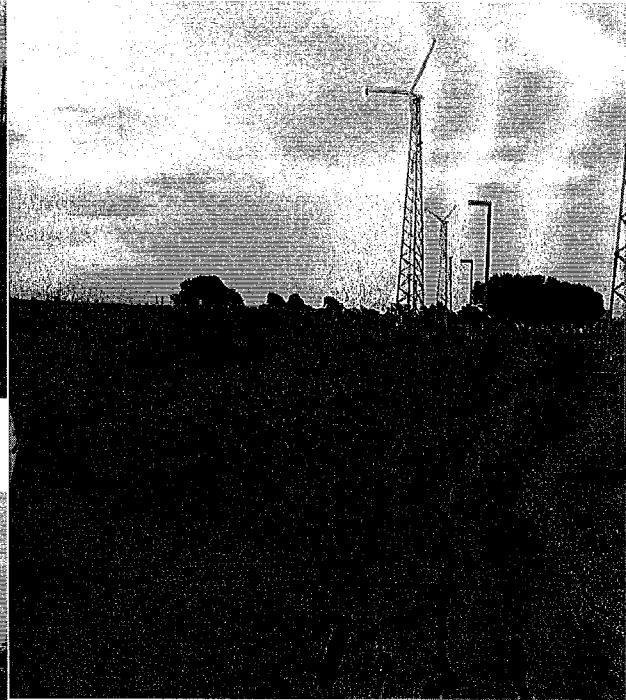
LYSTEK CONCEPTUAL LAYOUT

H1: Lystek Conceptual Layout.mxd Last updated: 3/10/15

Figure 2-5: Site Photos



Digesters and north end of pipeline alignment looking northwest



Pipeline alignment from Digesters to Dewatering Building looking south



Dewatering Building and pipeline alignment to existing lagoons looking north

Material Receiving

The material receiving area would accept incoming solid and liquid feedstock materials. The existing dewatering building consists of adequate storage space to accommodate both inside and outside receiving and storage equipment. The area in and around the building has been designed to allow for reception of longer dump trucks that require added clearance when tipping. Hoppers or silos adjacent to the wall of the building allow for conveyance of delivered material to the separate processing area.

Corrosion issues are not anticipated at the OMRC. All processing at the OMRC would occur in storage hoppers or silos and conveyance would be through piping.

Process Area

Processing area consisting of the process tanks, boiler, chemical storage tanks, process piping, electrical room, as required.

Product Loading Area

The area where trucks would load from the lagoon fill pipes would be locally depressed to collect any spillage; the collected spills and runoff would be directed into an existing sump, and then recycled into the FSSD on-site sewer system for retreatment.

Final Product Storage Lagoons

Renovated storage lagoon(s) would be provided on the south side of the dewatering building to receive the final product created through the process. The existing lagoons would be lined and covered to provide a storage area for the final product. Surface water that collects on the covered lagoons would be utilized in the process, as needed, to accommodate process water needs. There would be no active gas generation from the storage lagoons as the materials are not biologically active and are stored with a slightly elevated pH that inhibits and prevents biological activity and regrowth. As the outdoor storage lagoons would be covered and lined, they would not be a source of fugitive odor.

All pipes conveying final fertilizer product would be sealed; final fertilizer product would be expected to be significantly reduced in odor compared to the incoming feedstocks, and would be pumped directly into the trucks. Outgoing final fertilizer product vehicles would be sealed tankers.

Surface Water Management System

The existing surface water management system at the FSSD facility would be used. There would not be additional run-off or run-on surface water as a result of this project.

Site Fencing

The entire FSSD site area is enclosed with a chain link fence and gate system. Lockable gates are provided along the access roads. There are no new roadways to be constructed as a result of this project. Access to the OMRC would be regulated and only authorized personnel would be permitted into the OMRC facilities.

Paved Areas

Depending on the material receiving configuration, a small turn-around area for trucks may be required adjacent to (west) of the dewatering building.

Sanitary, Electrical, Water, and Natural Gas Services

The OMRC would utilize FSSD's existing on-site sanitary system. No additional sanitary services would be required as a result of this project. It is expected that additional staff of up to 12 people would be required to service the OMRC. This is well within the operating capacity of the existing sanitary services.

Electrical service would be provided by the existing electrical services from FSSD. No new electrical services would be required to be delivered to the FSSD plant as a result of this project. There would be adequate electrical power capacity at the FSSD plant. Some on-site upgrades to the existing electrical system may be required, and electrical service would be extended to OMRC support activities (e.g., scales, out-loading pumps).

The OMRC would have access to potable water service (in the existing dewatering building), provided by FSSD. It is expected that the majority of process water requirements at the OMRC would be satisfied by the incoming feedstocks, collected surface water taken from on-site retention storage, and clean surface water taken from above the final product lagoon storage covers. Potable or reclaimed water may be used if required to supplement these sources.

Natural gas service is available within the plant limits of FSSD. It is not expected that any new gas delivery lines would be required from outside the plant. The OMRC would be equipped with a natural gas boiler to create steam for use in the process. Bio-gas generated at the existing digesters may be used for the boiler at some future date.

Pipelines

Connection points for gas service are located near the existing digesters, and new pipelines would be needed to convey natural gas from the existing connection points to the dewatering building. In addition to the new gas pipelines extending from the digesters to the dewatering building a product re-fed line would be installed in the same trench to convey the finished product back to the digesters. A second product line would convey the remaining product from the processing area in the existing dewatering building to the storage lagoons.

Spill Containment/Heavy Rainfall Events

Where there is a potential for spillage, either inside or outside of the process building, adequate containment facilities would be constructed.

Process Tanks

The main process reactors are single-walled vessels housed within the dewatering building. Any spills occurring in this area are directed via catch basins to sumps, which are then directed to the outdoor storage tanks. It is not possible for excess loading of the tanks, as they essentially operate in batch mode.

The chemical storage tank(s) located within the processing area would be double-walled and located within a secondary containment area.

Product Piping

The fertilizer product is not hazardous and most of the piping would be within existing buildings. No pumping of material through the lines would be undertaken during non-manned hours of operation. All piping would be sealed and would be similar to municipal water mains, constructed using a combination of HDPE, PVC, and ductile iron pipe lengths.

2.4.3 Operations

The ultimate design capacity of the OMRC would allow processing of 150,000 total tons of non-hazardous organic material, which can include a mix of:

- dewatered and non-dewatered biosolids;
- solids from anaerobic digestion facilities servicing municipal and other organics streams including source-separated organics;
- septage material received from licensed haulers;
- organic material from the food processing industry and other industries that produce food wastes;
- organic material from the commercial sector; and
- organic material such as starches and paper wastes.

It is expected that the dominant incoming feedstock to the Center would be dewatered and non-dewatered biosolids. Feedstocks may originate from a combination of municipal or private installations, including but not limited to wastewater treatment plants. No hazardous material would be accepted at the Center.

Septage material and other organic liquid material low in solids content (less than 10%) is generally considered liquid feedstock material.

The OMRC would receive feedstocks primarily from the San Francisco Bay area but could also receive material from the greater northern California region, with a service radius of approximately 100 miles.

Receipt Rates and Storage Capacity

The OMRC would receive solid and liquid products that would need to be managed temporarily prior to processing. The following receipt rate and maximum handling volumes are proposed:

- The anticipated volume of organic material which can be accepted in receiving hoppers or silos is 1,000 tons (approximately 1,000 cubic yards). The intent is to clear the receiving facilities of incoming materials on a daily basis. However, variation in deliveries and processing necessitates short-term handling on a temporary or emergency basis.
- The maximum rate of delivery for dewatered biosolids and other organic materials would be 800 tons per day.
- The maximum rate of delivery of liquid feedstocks would be 200 tons per day. This volume of liquid feedstock can be accommodated in a series of liquid feedstock holding tanks.

There would be an initial capacity of 150,000 cubic yards of final product ready for off-site transportation and application as a fertilizer. This material would be held in lined, covered storage lagoon(s) located directed south of the OMRC (dewatering building).

Feedstock Delivery

The primary sources of truck traffic that are expected at the OMRC are:

- Incoming biosolids, septage, and other liquid feedstock material loads
- Outgoing loads containing final fertilizer product

Any truck queuing required would occur within the FSSD property boundaries.

At design capacity, the number of total trucks transporting organic materials to and from the OMRC is expected to be a maximum of approximately 50 trucks per day – 25 trucks entering and 25 tanker trucks leaving the OMRC on any given working day. Truck traffic entering the site would be distributed evenly over the 24-hour day for the 7-day week. Outgoing trucks would primarily be scheduled during the 12-hour period of 6:00 AM – 6:00 PM.

Several different truck types would be used for incoming materials. Incoming dewatered biosolids loads would be transported in semi-trailers with capacities of up to 25 tons per load. These trucks would be primarily walking floor or end-dump type and would deposit their loads onto the receiving hopper(s). Trucks carrying septage of non-dewatered biosolids would be dumped into the liquid feedstock holding tanks.

Trucking contracts would be controlled to insure the best available vehicles are used for materials accessing the OMRC. The trucks that would be used to haul incoming biosolids would be transfer trailers with fully sealed tarp systems designed to minimize odor and prevent loss/leakage of material during transportation of solid feedstock to the OMRC. Outgoing final fertilizer product vehicles would be sealed tankers in the range of 25 tons each.

All vehicles would use Chadbourne Road and enter the southern entrance along the west side of the FSSD WWTP. Trucks carrying feedstock or product would pass over the weigh-scale, located in the existing road. They would then proceed to the unloading areas, deposit material, and circulate back over the weigh scale prior to exiting the FSSD plant via Chadbourne Road. There would be adequate room to queue a significant number of vehicles and the turning radius for the largest vehicles has been used to confirm the location of the gates and support facilities. There would be one weigh scale installed and this would be adequate for the traffic load. Trucks carrying dewatered biosolids would proceed to the receiving area.

Feedstock Processing

Up to five processing reactors are planned for the OMRC. Processing capacity would be increased over time as a function of the contracted feedstock capacity of the OMRC. Each of the process reactors is sized to contain 13 cubic yards of combined solid and liquid feedstock material and would be designed to operate at a maximum capacity of 12 cubic yards. The process reactors are typically manufactured out of

stainless steel. Each process reactor has a removable cover to install the mixer and level switches; level switches are provided to monitor fill/purge levels automatically through the central control system.

The main process reactors are single-walled vessels housed within the existing dewatering building. Any spills occurring in this area are directed via catch basins to sumps, which are then directed to storage facilities or the on-site sewer system. It would not be possible for excess loading of the tanks, as each reactor processes a single batch of feedstock at one time.

While solid/liquid feedstock, alkaline and steam is added, rapid mixing would be performed within the process reactors. The high shear mixing breaks down the materials into the desired product. Specifically, the mixing assists in the breakdown of biosolid cells and the adjustment of overall viscosity such that the final product can be conveyed using conventional pumping systems.

The designed processing time for one batch of material is approximately 60 minutes with up to an additional 30 minutes for final processing. The control system automates the execution of each processing phase and transition between them. Although the feedstock would be processed in batches, the entire vessel volume is not purged during each cycle. For the initial cycle on a given day feedstock would be added, the reactor would be closed and reagent, water and steam are added as the contents are mixed. When the cycle is completed, approximately 25 to 33 percent of the vessel's contents are removed from the vessel for storage in the lagoons, and some material would be retained within the reactor to provide thermal mass for the next input quantity. The volume deficit is then addressed by a combination of new feedstock, reagent, and water; after addition, the reactor would be treated as a batch and no purge of material would be undertaken until the cycle is complete. Each reactor cycle would be a constant volume batch that would be processed to attain the quality requirements.

The overall combination of conditions utilized to deliver the quality requirements are a combination of temperature, reagent, and mixing, all of which are controlled for each batch. Loading of reactors with feedstock occurs through the top of the reactor, while outgoing materials are delivered from the bottom, to ensure that short-circuiting does not occur. Irrespective of the loading/unloading configuration, the tank contents are vigorously mixed to ensure homogeneity.

Final Product Re-fed to Anaerobic Digesters

After the material has undergone processing in the reactors, a portion of the final product may be conveyed back to the anaerobic digesters through the 6-inch product re-fed line. Introduction of the processed material would enhance the performance and efficiency of the digesters, making the residual volatile solids in digested biosolids more amenable to further biodegradation when re-fed into anaerobic digestion and biological nutrient removal systems. This can increase biogas yields by 30 percent or more, and reduce biosolids output volumes 20 percent or more. Increases in biogas production would allow generation and recovery of more energy to power facilities at the WWTP.

Final Product Storage

The remainder of the processed material would be pumped to outdoor lined and covered lagoons located south of the dewatering building. The material would be handled in these lagoons to allow for outgoing shipments to match crop planting periods. As the material has been stabilized, there would be no additional biodegradation leading to off-gassing or significant production of odor under the covers that could escape, and as the lagoons are lined, there would be no potential for infiltration of the final fertilizer product into the native soil.

Regrowth of pathogens would be highly unlikely. The storage lagoons are covered, and thus not exposed to contamination. Additionally, the pH of the final fertilizer product would be a minimum of 9, which inhibits pathogen regrowth under any temperature or condition. The use of pH adjustment in this manner is specifically undertaken to prevent regrowth in the material. While specific data has not been collected

to demonstrate that regrowth would not occur under a range of environmental conditions, the product characteristics are such that this would be highly improbable.

No additional material capacity would be needed at the OMRC. The overall batch volumes delivered to the lagoons are small relative to the total volume available in the lagoons; the levels are monitored and visually obvious to operators. Given that the reactors generate less than 13 cubic yards of product per batch, handling issues with respect to the lagoons would become obvious prior to reaching the maximum fill capacity. If the maximum fill capacity of the lagoons is approached (without consuming the available freeboard), processing operations would be halted until the product in the lagoons can be sold and levels reduced. There is an appreciable freeboard capacity in the lagoons in addition to the maximum fill line, providing additional redundancy.

Truck Loading Station Delivery Pumps

The final fertilizer product would be conveyed to the truck loading station via an enclosed and sealed pipeline through one or more final product pumps.

Final Product Usage

The final product would be a pathogen-free Class A-EQ and/or Class A biosolid that would be used for local agricultural application or for re-feeding digesters or other treatment plant enhancements, in accordance with applicable regulations. The fertilizer product would be applied in accordance with laws and regulations to match the fertilizing needs of normal crop planting.

2.4.4 Construction Activities and Schedule

Because project components would be housed primarily inside existing buildings, very little construction would be required. Construction is expected to begin in June 2015, and project commissioning is planned for December 2015, depending on equipment shipping and installation schedules. Pipelines would be installed in existing roadways and the existing ponds would be lined from June through October. Installation of equipment inside the dewatering building would occur from August through October. Up to 15 truck trips per day would be needed to deliver trench bedding material and equipment to the site, with an average of 3 truck trips per day.

2.4.5 Equipment

Construction of on-site pipelines would require excavators, backhoes, haulers, concrete/asphalt trucks and dump trucks. Installation of the liner would require surface preparation using an excavator and a loader to place the lining.

2.4.6 Operational Schedule

The project is anticipated to start operating in December 2015, and would operate continuously at the WWTP.

2.4.7 Maintenance Activities

Up to a 12-person staff would operate the OMRC to ensure safety and to prevent occurrence of nuisance conditions.

Site Access, Supervision and Security

Trained personnel would supervise all activities occurring during the hours of operation of the OMRC. All processing, loading, unloading, and transfer of feedstocks and final product would be supervised by trained personnel. The OMRC would be secured by a fence and lockable gates at the entrance to allow only authorized personnel into the OMRC.

Signage would be posted at the entrance to the OMRC identifying:

- Facility name

- Name of the owner
- Normal hours of operation
- Owner's telephone number to which complaints may be directed
- Emergency number for contacting site personnel
- A warning against unauthorized access
- A warning against dumping at the OMRC

Hours of Operation

The receiving of organics would occur at any time in the day or night. Trained personnel would be on site at all times when feedstocks are being received at, or final fertilizer product is being collected from, the OMRC.

Litter Control

No litter is expected at the OMRC, as the incoming feedstocks are generated by existing processing operations such as wastewater treatment plants. Any material that could create litter would be removed at the generating source. All unloading functions of any dewatered biosolids material would occur within the main building.

Nevertheless, housekeeping procedures for the OMRC would include daily monitoring for litter surrounding the perimeter of building, which would be picked up by personnel as required to prevent accumulation. The overall litter control program for the OMRC would be specified in the operations plan and communicated to all OMRC personnel.

Noise Control

The primary source of noise which is expected at the OMRC originates from the incoming and outbound vehicle traffic. Given the relatively small number of trucks accessing the OMRC, noise from traffic is expected to be fairly minor, especially as it compares to the existing FSSD plant operations.

The truck numbers accessing the OMRC are relatively low:

- 25 incoming trucks per day at peak
- 25 outbound trucks per day at peak

Dust Control

Dust is expected to be negligible from the OMRC. All incoming feedstocks are high water content (greater than 70 percent moisture by weight).

Spill Control

Incoming dewatered biosolids would be solid and do not require spill protection. Incoming loads of septage or non-dewatered biosolids are liquid in nature and would deposit their loads directly in the storage tanks. All unloading of these materials are required to be supervised. A spill control curb would be provided for incoming deliveries such that any incidental spills from a truck are collected. This area would be inspected and cleaned on a daily basis.

Vector and Vermin Control

The design of the OMRC and the implemented housekeeping procedures would be developed to eliminate sources of attraction and to discourage vector and vermin. Immediate and appropriate action would be taken if, at any time, pests are found at the OMRC. As needed, a qualified, licensed pest control professional would be hired for pest control. All incoming feedstocks are either enclosed within the main

processing building or stored within a sealed tank, and thus the potential for vector and vermin issues is minor.

The delivery/tipping area and the processing area would be cleaned on a regular basis to discourage vector and vermin issues. As required, the existing paved areas of the OMRC that receive truck traffic would also be cleaned.

Fire Protection

In terms of its structural features, the main building consists of reinforced concrete and structural steel. The general structure and design of the building is not conducive to the propagation of fire.

The incoming materials processed in the installation are very high in moisture content and do not pose a fire risk. The highest temperatures in the building occur in the process reactors, where steam is added to provide the required temperature adjustment; however, this is a liquid product at this point and is not a fire risk.

Employee Training Programs

The OMRC would comply with all workplace safety, worker protection, safety policies, and ergonomics, as required. Regular inspections at the workspace would be carried out by the facility manager to ensure consistent compliance among employees with safety and health regulations. Additionally, the effectiveness and efficiency of the facility's policies on safety, health, and environment would be reviewed periodically and revised as necessary.

An Employee Training Program would be provided for all employees that are actively involved with day-to-day facility operations. Detailed Health and Safety and Emergency Response Plans would be developed for the OMRC and would form part of the detailed operations plan.

Maintenance Schedules

Preventative maintenance is a critical aspect for the effective and efficient operation of the OMRC equipment. Equipment requiring maintenance includes, but is not limited to, the following:

- Process reactors including instrumentation and mixing
- Dewatered biosolids hoppers and pumps
- On-site natural gas boiler capacity
- Chemical holding tanks and feed pumps
- Handling for liquid feedstocks and associated pumps
- Final product storage lagoons and pump station
- SCADA system

A detailed maintenance and preventative maintenance program would be developed and implemented and would remain on site to be available for inspection at any time. Site supervisory duties would include ensuring that maintenance schedules and procedures are observed. The maintenance program would be periodically reviewed and revised as necessary.

As part of the maintenance program there would be regular inspection of the lagoon liner and cover system. The inspection program for the liners would consist of a visual inspection which would be performed during the daily site walk-around/inspection. Site personnel would look for signs of liner distress, mechanical damage, and slope slumping or failure. There are no maintenance requirements for the liner system.

The renovated lagoons would not require any cleaning/dredging as there would be no sludge accumulation within the lagoons. The final fertilizer product is flowable, and is processed specifically to create a liquid. All material is in suspension and therefore there would be no settling of solids.

2.4.8 Contingency Planning

The OMRC has been designed to ensure that redundancy is available in all critical applications. However, additional planning has taken place to ensure that in the event of risk to the environment and public health appropriate action plans are already available. These include:

- General Site Contingency and Emergency Response Plan
- Process Operations Contingency
- Operational Contingency for Complaints

These plans are elaborated on further below.

Site Contingency Plan

A Contingency and Emergency Response Plan (CERP) would be updated following commissioning of the OMRC and would include the following:

- List of persons responsible for the site, including contact information
- List of emergency phone numbers for applicable emergency entities
- Description of fire protection, control systems, and emergency procedures
- Description of safety devices and maintenance procedures
- Training of site personnel
- Site plan including locations of all emergency equipment

The CERP would be kept in a central location at all times. Training would be provided for personnel in all CERP procedures. General elements of the contingency plan are provided in the below sections.

Process Contingency

Contingency planning for various scenarios is described below.

Lagoon Overflow or Loss of Liner Integrity

Lagoon overflow is not possible. The levels in the lagoons are monitored and observable by OMRC personnel, and the size of each batch delivered to the lagoons is small compared to the total. The lagoons are also designed with a freeboard volume. In the event that lagoons levels rise and the freeboard is consumed, processing operations would be terminated.

The liner to be used for the lagoons is standard-typical in the field and installed with rigorous quality assurance/quality control requirements. Lagoon levels are monitored; if a noticeable decrease in liquid levels occurs due to a loss of integrity in the liner, processing operations would be terminated, and the lagoons would be drawn down to allow for inspection and repair of the liner.

Rupture of Conveyance Piping

Conveyance piping is unlikely to result in rupture. Pumping through conveyance piping can only occur while operators are present; if a conveyance pipe ruptures, there would be pressure loss in the line that would be identified in the OMRC's SCADA system through a system of pressure transmitters. In the event that this occurs, the flow would be terminated immediately and processing operations halted until the damaged line is repaired.

Critical Equipment Malfunction

The facility would have redundant or replacement equipment on site to deal with malfunctions, including spare pumps. In the event that critical equipment malfunctions, incoming waste feedstocks would be scaled back or terminated until the equipment is repaired or replaced. Most of the critical equipment in the OMRC is process-related, and thus reduction or termination of processing until repair/replacement is undertaken addresses the majority of the issues. The following list provides examples of redundancy and response:

- Boiler malfunction: as heat is required for the process, the process would be scaled back to reflect the decline in heating capacity if one of the boilers malfunctions.
- Loaders: loaders are relatively easy to replace and can be done so immediately. If a loader malfunctions, a spare would be rented.
- Pumps to fill reactors: these are critical items for delivery of feedstock to the reactors. There are two feed pumps for redundancy. If both feed pumps fail, incoming materials would be scaled back to accommodate this and a replacement pump would be installed and brought into service, if available. If a reactor malfunctions, the same steps would be taken.

Power Failures

Provisions have been made to rent and connect a generator as required. The electrical infrastructure has been developed to allow for plug-in of a generator as required. This generator would operate portions of the SCADA system and emergency lights. The generator would operate the emergency systems; no processing would occur during a power failure.

Natural Gas Interruption

This is exceedingly rare for a distribution system. However, if natural gas supply does cease, processing operations would be terminated until supply recommences or propane can be brought onto site.

Operational Contingency for Complaints

If complaints are received in relation to the OMRC, the following information would be recorded in a computerized tracking system:

- Contact information of the complainant
- Time and date of the complaint
- Operational activities during the time of the complaint
- Wind direction and temperature
- Substance and scope of the complaint
- Actions taken to mitigate the underlying factors
- Procedure enacted to prevent reoccurrence

All appropriate steps would be taken to eliminate the cause of the complaint and to prevent reoccurrence.

2.5 Permits Required

Because the project would be constructed entirely within the WWTP, few permits are expected to be required. Operations would generally be covered by existing FSSD permits, but the OMRC may require an Authority to Construct and Permit to Operate from the Bay Area Air Quality Management District.

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Chapter 3 Environmental Checklist Form

1. **Project Title:** Organic Materials Recovery Center
2. **Lead Agency Name and Address:** Fairfield-Suisun Sewer District
1010 Chadbourne Road
Fairfield, CA 94534
3. **Contact Person and Phone Number:** Gregory Baatrup
General Manager
707-428-9162
4. **Project Location:** Fairfield-Suisun Sewer District
Wastewater Treatment Plant (WWTP)
1010 Chadbourne Road
Fairfield, CA 94534
5. **Project Sponsor's Name:** Fairfield-Suisun Sewer District
6. **General Plan Designation:** Public Facility
7. **Zoning:** Public Facility
8. **Description of Project:** The District proposes to develop an OMRC at their existing WWTP. The OMRC would process dewatered biosolids, liquid septage materials, and other similar organic materials from the agricultural, waste and food processing sectors. The end product of the process would be a pathogen-free and nutrient-rich fertilizer product that is appropriate for land application or enhanced anaerobic digester efficiency. The project would divert biosolids and other similar organic materials from typical waste disposal options such as landfill through beneficial reuse of the nutrient content of the processed materials. The OMRC is intended to receive and process materials, manage the resulting fertilizer product, and manage the operational and environmental aspects of processing operations. The OMRC would service the demand for biosolids and septage processing and the market need for fertilizers in the agricultural community.
9. **Surrounding Land Uses and Setting:** The WWTP site is a 150-acre parcel located on Chadbourne Road, south of the I-80 interchange with California State Highway 12. The site is adjacent to open space to the east and south, a sod farm to the west, and an industrial park to the north. The project would be constructed and operated entirely within the existing WWTP site.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** The OMRC may require an Authority to Construct and Permit to Operate from the Bay Area Air Quality Management District.

Environmental Factors Potentially Affected

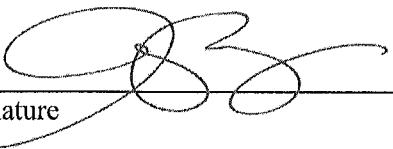
The proposed project could potentially affect (“Potentially Significant Impact” or “Less than Significant Impact with Mitigation Incorporated”) the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and present mitigation measures that would reduce all impacts to less than significant.

- | | | |
|---|--|---|
| <input type="checkbox"/> Land Use | <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Hazards/Hazardous Materials |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Mineral/Energy Resources |
| <input type="checkbox"/> Transportation and Circulation | <input type="checkbox"/> Public Services | <input type="checkbox"/> Agricultural and Forestry Resources |
| <input type="checkbox"/> Noise | <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION:

On the basis of this initial study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.


Signature

April 21, 2015
Date

Gregory Baatrup
Printed Name

Fairfield-Suisun Sewer District
For

3.1 Aesthetics

Would the Project:	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The existing visual environment is characterized by WWTP infrastructure with surrounding agricultural land and industrial uses. Pipelines would be buried underground and equipment would be installed inside the existing dewatering building. The project does not include any new structures on the site. The project would not have any effect on a scenic vista. Thus, there would be no impact.
- b) I-80, which borders the eastern portion of the WWTP site, is not a designated scenic highway (California Department of Transportation 2013). There are no scenic highways in the vicinity of the project site. There would be no impact.
- c) The project would be installed in the central portion of the existing WWTP site in areas that are already graded and paved. Limited new/renovated facilities (e.g., new scales and renovated lagoons) would be consistent with the existing visual character of the site. The proposed facilities would not be visible from outside the WWTP site. There would be no impact.
- d) The project does not include addition of new lighting. Existing on-sight lighting would be sufficient for the needs of the project. The project facilities would not add new sources of light or glare. There would be no impact.

Mitigation Measures: None required or recommended.

3.2 Agriculture and Forestry Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for or cause rezoning of, forest land (as defined in Public Resource Code section 12220 (g)), timberland (as defined by Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a-e) The project is located on a previously developed site that is designated by the Farmland Mapping and Monitoring Program as Urban and Built Up Land (California Department of Conservation 2012). There is no farmland or forest land at the project site, thus there would be no impact.

Mitigation Measures: None required or recommended.

3.3 Air Quality

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The WWTP is in the San Francisco Bay Area Air Basin (SFBAAB), under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). All air basins are characterized as to whether the air quality in the basin is in compliance with the National and/or California Ambient Air Quality Standards. Standards for criteria air pollutants are established to ensure protection of human health and public welfare. **Table 3-1** shows federal and state ambient air quality standards and the Bay Area's federal and state designation for each criteria pollutant.

Table 3-1: Bay Area Air Basin Attainment Status

Pollutant	Averaging Time	(State) SAAQS ¹		(Federal) NAAQS ²	
		Standard	Attainment Status	Standard	Attainment Status
Ozone (ROG)	One hour	0.09 ppm	N	NA	NA
	Eight hour	0.07 ppm	N	0.075 ppm	N
Carbon Monoxide (CO)	One hour	20 ppm	A	35 ppm	A
Nitrogen Dioxide (NO ₂)	One hour	0.18 ppm	A	0.100 ppm	U
Sulfur Dioxide (SO ₂)	One hour	0.25 ppm	A	0.075 ppm	A
Particulate Matter (PM ₁₀)	24 hour	50 µg/m ³	N	150 µg/m ³	U
Fine Particulate Matter (PM _{2.5})	Annual	12 µg/m ³	N	15 µg/m ³	A
Lead	30 day/Quarterly	1.5 µg/m ³	ND	0.15 µg/m ³	A
Sulfates	24 Hour	25 µg/m ³	A	NA	ND
Hydrogen Sulfide	One Hour	0.03 ppm	U	NA	ND
Visibility-Reducing Particles	Eight Hour	Extinction of 0.23 per kilometer	U	NA	ND

Source: BAAQMD 2015

Footnotes: A = Attainment; N = Nonattainment; U = Unclassified; NA = Not Applicable, no applicable standard; ND = no designation; ppm = parts per million; µg/m³ = micrograms per cubic meter.

1. SAAQS = state ambient air quality standards (California).
2. NAAQS = national ambient air quality standards

- a) The proposed Project is located within the jurisdiction of the BAAQMD, which regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review process. To meet planning requirements related to the Nonattainment status of the SFBAAB, the BAAQMD has developed a regional air quality plan, the Bay Area 2010 Clean Air Plan (CAP)² (BAAQMD, 2010). A significant impact would occur if a project conflicted with the plan by not mirroring assumptions of the plan to attain air quality standards; reduce population exposure and protecting public health in the Bay Area; and reduce greenhouse gas emissions and protect the climate. The Project is intended to improve existing biosolids handling at the WWTP and would not increase treatment capacity or accommodate population growth. As such, Project-related emissions, which are discussed in greater detail, below, are accounted for in the CAP, and implementation of the Project would not conflict with or obstruct implementation of the applicable air quality plan. There would be no impact.
- b,c) BAAQMD has not established quantitative significance thresholds for construction or mobile-source related impacts. Construction activity would be limited because the Project would primarily require installation of equipment within an existing building. A limited amount of construction would be required for installation of less than 2,200 feet of pipeline and lining of

² The purpose of the 2010 Bay Area CAP is to provide a comprehensive plan to improve Bay Area air quality and protect public health. Specifically, the CAP defines a control strategy to: (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce greenhouse gas (GHG) emissions to protect the climate.

existing lagoons. Construction would take less than six months, and due to the limited extent of construction activities emissions are expected to be minimal. A limited amount of grading would be required to prepare the existing lagoons for liner installation, but this is expected to be similar in extent to the regular work that is conducted to maintain the lagoons. Short-term emissions associated with pipeline construction are expected to be minor for this project. However, because the project area is nonattainment for particulate matter, the potential for generation of dust during excavation activities is considered potentially significant. BAAQMD has developed basic construction mitigation measures to minimize emissions during construction and **Mitigation Measure AQ-1** would be implemented to ensure that emissions of particulate matter and from construction equipment are controlled, which would reduce this impact to less than significant.

Operational emissions would be negligible because the process takes place inside a building using enclosed storage tanks and covered storage lagoons. Incremental changes in emissions from trucks bring organic materials to the OMRC and delivering fertilizer product to agricultural users are expected to be minor because truck trips would replace existing trips to take organic materials to other locations for disposal.

- d) The closest sensitive receptors are a small business park located about 0.4 miles north of the WWTP and a residence on the eastern boundary of the WWTP, about 3,000 feet from the WWTP secondary access road. As noted in item b,c) above, operational emissions of criteria pollutants would be minimal.

While there is some potential for generation of dust during construction, **Mitigation Measure AQ-1** would be implemented to reduce this impact to less than significant.

- e) The Project would employ a process that reduces the odor potential of the existing biosolids produced by FSSD. Other feedstock that would be received at the WWTP would be conveyed in covered trucks and would be handled in a timely manner to minimize exposure to the outside environment. All materials handling and storage operations would be inside or adjacent to the existing dewatering building, which houses existing processing and dewatering operations. The product would be stored in covered lagoons prior to loading onto trucks for off-site delivery. The Project is not expected to result in a noticeable increase of odors at the WWTP. The impact would be less than significant.

Mitigation Measures:

Mitigation Measure AQ-1: BAAQMD Basic Construction Measures

The following basic construction measures are identified by BAAQMD and shall be incorporated into contract specifications and implemented by the contractor.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day;
- All haul trucks transporting soils, sand, or other loose material off-site shall be covered;
- 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;
- All vehicle speeds on unpaved roads shall be limited to 15 mph
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.;
- 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.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

3.4 Biological Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-b) The project would take place entirely within the footprint of the existing WWTP. All construction and operational activities would occur within existing buildings, in roadways, or within existing lagoons. Biological resources within the site are limited. The WWTP contains no suitable habitat for sensitive species and no riparian areas. There would be no impact on sensitive species or habitats.
- c) Based on a wetland delineation completed by FSSD in 2005, and confirmed during preparation of environmental documentation for the Ultraviolet Disinfection Upgrades (FSSD 2009), the WWTP site does contain seasonal wetlands and drainage areas that may be considered to be under the jurisdiction of the U.S. Army Corps of Engineers. Construction affecting any of these jurisdictional areas would be considered to be significant. **Mitigation Measure BIO-1** would ensure that any potential jurisdictional areas are avoided and would not be affected by Project construction. Potential for impacts to federally protected wetlands would be less than significant with incorporation of mitigation.
- d-e) No wildlife migratory corridors cross the project site. The project would not require removal of trees. There are a few existing trees within the WWTP that could provide nesting locations for migratory birds. However, the WWTP site is highly disturbed and noisy due to ongoing operations and maintenance activities. Because construction activities are limited and are fairly similar to ongoing operations that occur at the WWTP, construction is not expected to disrupt any birds that might have established nests within the WWTP site. Impacts would be less than significant.
- f) The WWTP lies within the area covered by the Solano Multi-Species Habitat Conservation Plan (SMSHCP) (Solano County Water Agency 2012). The WWTP site lies within the Fairfield Urban Growth Boundary, and does not contain vernal pools or other sensitive habitats, except for small areas of seasonal wetlands as described in item c) above. Because the WWTP is a designated public facility, providing ongoing services for wastewater treatment, the Project fits with the purpose and scope of the WWTP and does not conflict with the SMSHCP. There would be no impact.

Mitigation Measures:

Mitigation Measure BIO-1: Avoid Site Wetlands

Pipeline alignments and other on-site improvements would be sited so as to avoid filling of any seasonal wetlands or drainages within the WWTP site.

3.5 Cultural Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion

a-d) The project would be located within the existing WWTP site, which has been previously developed, graded, and compacted. Limited excavation within existing on-site roadways would be required for installation of pipelines. There is no evidence of historic or archaeological objects or formations that could indicate presence of cultural resources within the WWTP site. There have been five previous surveys of the WWTP, none of which has identified cultural resources within the site (Fairfield-Suisun Sewer District 2009) and therefore, no impacts to cultural resources would be expected to occur with project implementation. The WWTP is not identified as a significant historical or cultural resource and is not included in a local, state, or federal register of historical resources. There is one historic resource that has been identified within the vicinity of the WWTP: a portion of the Southern Pacific Railroad Line (P-549), which is about 1,700 feet north of the Project area. Due to the distance of this resource from the WWTP, the proposed project would not have any effect on California historical resources.

Although no cultural or paleontological resources are expected to be present, because the Project would require excavation to install pipelines, it is not possible to completely eliminate the possibility that cultural or paleontological resources could be encountered during construction. Excavation could unearth previously undiscovered cultural resources, including human remains and historic or prehistoric site indicators and paleontological resources. In the event of an inadvertent discovery of cultural and/or paleontological resources, **Mitigation Measures CUL-1** and **CUL-2** would be implemented. These measures would reduce the potential for impacts to less than significant.

Mitigation Measures:

Mitigation Measure CUL-1: Proper Handling of Inadvertent Discovery of Cultural Resources or Human Remains

In accordance with CEQA Section 15064.5, if cultural resources are encountered during project-related excavations, construction shall be halted or diverted to allow an archaeologist an opportunity to assess the resource. All Contractor personnel and subcontractors shall attend training discussing the nature of cultural resources and potential materials that may be encountered. Prehistoric archaeological site indicators include chipped chert and obsidian tools and tool manufacturing waste flakes, grinding implements such as mortars and pestles, and darkened soil that contains dietary debris such as bone fragments and shellfish remains. Historic site indicators include, but are not limited to, ceramics, glass, wood, bone, and metal remains.

Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during project-related excavation. It states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible for contacting the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for "...protection of inadvertent destruction." To achieve this goal, it is recommended that the construction personnel on the project be instructed as to the potential for discovery of cultural or human remains, and both the need for proper and timely reporting of such finds, and the consequences of failure to do so.

Mitigation Measure CUL-2: Protection of Paleontological Resources

If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work near the find. In accordance with Society of Vertebrate Paleontology guidelines (Society of Vertebrate Paleontology 2010), a qualified paleontologist would assess the nature and importance of the find and recommend appropriate salvage, treatment, and future monitoring and mitigation.

3.6 Geology and Soils

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the Project:

- 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.
 - ii) Strong seismic ground shaking?
 - iii) Seismic-related ground failure, including liquefaction?
 - iv) Landslides?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Be located on 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) The project is located in northern California, a seismically active region. A review of the most recent Alquist-Priolo Earthquake Fault Zone Map (California Department of Conservation, 1993) found that the proposed project is not located within a USGS quadrangle where Alquist-Priolo fault zones occur, nor is the project area located within landslide and liquefaction zones. There would thus be no impact associated with surface rupture. The Green Valley-Concord Fault Zone (5 miles west and southwest of the WWTP) and the Cordelia Fault Zone (4.5 miles west of the WWTP) are the closest active or recently active faults (Fairfield-Suisun Sewer District 2009) The Greenville, Calaveras, and Rodgers Creek-Healdsburg faults are over 10 miles from the WWTP. There would be no impacts associated with ground rupture.

Although the Project site is not susceptible to ground rupture, major earthquakes on regional faults could result in ground displacement and intense groundshaking that would be expected to damage vulnerable structures and could result in localized ground failure. FSSD would use existing geotechnical information for the project site to ensure that new facilities are designed to withstand strong groundshaking. Therefore, this impact would be less than significant.

Liquefaction is the process in which poorly consolidated, sandy soils take on the properties of a liquid when subjected to strong ground shaking. All proposed work would occur on previously developed and paved land within the existing WWTP site. Soils underlying the site are generally very cohesive and not considered susceptible to liquefaction (Fairfield-Suisun Sewer District 2009). There would be no impact associated with liquefaction

The existing WWTP site is situated on a relatively flat developed parcel, with no source of a landslide in the immediate proximity. No impact associated with landslides would be expected.

- b-d) The project would occur within the previously developed and paved land of the existing WWTP site. As a result, the proposed project is not anticipated to result in substantial soil erosion or the loss of topsoil. As noted above in item a), the potential for liquefaction is considered to be negligible. Soils on the WWTP site have low to medium expansion potential. Excavation of existing soils and placement of engineered fill as needed for pipeline construction would minimize the potential for pipelines to be damaged by native soils. Pipelines would be

constructed in compliance with applicable requirements to ensure that they are not subject to damage. The impact would be less than significant.

- e) The project does not include the use of septic systems. There would thus be no impact associated with soils incapable of supporting septic systems.

Mitigation Measures: None required or recommended.

3.7 Greenhouse Gas Emissions

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Greenhouse gas (GHG) emissions are reported as metric tons per year (MT/year) measured as carbon dioxide equivalents (CO₂e). Because every GHG has a different global warming potential, CO₂ is used as the “reference gas” for climate change, and emissions of other GHGs are reported as CO₂e. For example, methane (CH₄) has a global warming potential 21 times greater than CO₂, so emissions of CH₄ are converted into CO₂e for purposes of calculating GHG emissions.

- a-b) Project construction would generate some emissions GHGs, but this impact is expected to be outweighed by the long-term reduction in operational GHG emissions. Current biosolids disposal at the Potrero Hills Landfill is estimated to produce greater GHG emissions than land application of the fertilizer produced by the Project. Landfill disposal is estimate to result in GHG emissions of 297 to 335 metric tons (MT) of GHG per 100 dry tons of anaerobically digested biosolids; land application of the fertilizer product generated by the proposed Project would actually reduce GHG emissions by 49 MT CO₂e per 100 dry tons of biosolids (Lystek 2014) resulting in a net reduction in GHG emissions. The Project is thus expected to have a beneficial impact, and is consistent with applicable plans, policies and regulations for reduction of greenhouse gas emissions.

Mitigation Measures: None required or recommended.

3.8 Hazards and Hazardous Materials

Would the Project:	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a,b) The project would involve the use of fuels during the construction phase. Use and disposal of all hazardous materials would be conducted in accordance with existing laws and regulations for appropriate handling and disposal. All activities within the WWTP would be subject to the facility's existing Spill Prevention, Control, and Countermeasure (SPCC) Plan, which contains measures to ensure safe handling of fuels on site and appropriate management of any spills. To

ensure safe use of fuels and other hazardous materials during construction, **Mitigation Measure HAZ-1** would be implemented. Potential impacts would be less than significant with mitigation.

Operations would require use of chemicals such as KOH and/or NaOH, both of which are classified as hazardous materials. Both chemicals would be stored in double-walled tanks inside the existing dewatering building to ensure safe storage. Use and disposal of all hazardous materials would be conducted in accordance with existing laws and regulations for appropriate handling and disposal. FSSD has an existing Hazardous Materials Business Plan, which would be updated to address on-site storage of KOH and/or NaOH and submitted to the Solano County Department of Environmental Management, Environmental Health Services Division. Project operation is expected to result in a less than significant hazard to the public or the environment.

- c) The Project site is not located within one-quarter mile of an existing or proposed school (FSSD 2009). There would be no impact.
- d) The WWTP is not a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC 2015), and according to the SWRCB Geotracker database (2015), there are no leaking underground storage tanks near the site. There would be no impact.
- e,f) There are no public or private airports located in the vicinity of the WWTP. The site is not located within an airport land use plan or within two miles of a public or private airport. There would be no impact.
- g) All construction and operational activities would take place within the existing WWTP. Traffic associated with construction and operation would be minimal, with a maximum of 15 truck trips per day during the construction period and 50 truck trips during the operations period. Due to the minimal number of truck trips, the project would not interfere with any emergency response or evacuation plan. The impact would be less than significant.
- h) The WWTP is surrounded on three sides by open-space lands that have the risk of wildfires. Calfire designates fire hazard severity zones in the state and has designated the northern portion of the site as having moderate hazard, with the southern portion of the site designated as high hazard (Calfire 2008). The WWTP is in a Local Responsibility Area and is served by the City of Fairfield Fire Department. Construction would take place in existing paved roads at the WWTP and it is thus not expected that construction activities would present a substantial risk of igniting combustible materials or vegetation. In addition, the contractor would be required to use equipment with spark arrestors and to have fire suppression equipment on site. The impact would be less than significant.

Mitigation Measures:

Mitigation Measure HAZ-1

Construction equipment shall be inspected regularly for leaks. Any spills or leakage of hazardous wastes during construction shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of contaminants. Any contaminated material shall be delivered to a licensed treatment, disposal or recycling facility that has the appropriate systems to manage the contaminated material.

3.9 Hydrology and Water Quality

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion of siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- j) Inundation of seiche, tsunami, or mudflow?

Discussion

- a,f) The WWTP discharges treated wastewater primarily to Boynton Slough, with intermittent discharges to two duck ponds and Ledgewood Creek, all of which are waters of the United States within the Suisun Basin watershed tributary to Suisun Marsh and Suisun Bay. As of March 1, 2015 this discharge is subject to the Waste Discharge Requirements for the Fairfield-Suisun Sewer District, Order No. R2-2009-0039, NPDES³ No. CA0038024⁴. Storm water originating at the WWTP is directed off site and regulated under the Statewide Industrial Storm Water Permit (NPDES General Permit No. CAS000001). Activities related to the project would comply with these permit requirements and there would be no impact associated with violation of water quality standards or waste discharge requirements. As the proposed project would take place on already developed and paved lands, water quality threats from construction-related stormwater runoff are not anticipated to be significant. The proposed project would not impact the existing wastewater discharge. No violations of water quality standards or waste discharge requirements would occur.
- b) The project would not affect groundwater resources because it would not use groundwater, and would be implemented within an existing building and existing paved site. There would thus be no increase in impervious surface area, and no resulting decrease in recharge. There would be no impact.
- c,d,e) The project would be constructed and operated within an existing building and paved area at the WWTP. There would thus be no change in drainage patterns, no increase in runoff, and no effect on existing drainage systems. There would be no impact.
- g,h,i) The project does not include housing, is not located within the 100-year flood plain (Fairfield-Suisun Sewer District 2009), and is not located in the vicinity of any levees or dams. There would be no impact.
- j) The WWTP is located inland, almost six miles north of Grizzly Bay, and the project site is thus not expected to be affected by tsunamis. There are no other nearby large water bodies that could subject the site to seiche or mudflows. There would be no impact.

Mitigation Measures: None required or recommended.

3.10 Land Use and Planning

Would the Project:	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

³ National Pollutant Discharge Elimination System

⁴ The NPDES Permit is up for renewal and the San Francisco Bay Regional Water Quality Control Board has prepared a draft NPDES permit (tentative order), which will be considered at its March 11, 2015 meeting.

- | | | | | |
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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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable HCP or NCCP? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) The project would be constructed entirely within the existing WWTP and would thus not divide an established community. There would be no impact.
- b) The project would not conflict with any land use plan, policy or regulation. The proposed facilities are consistent with existing Public Facility land use and zoning of the WWTP. There would be no impact.
- c) As detailed in Section 3.4, Biological Resources, the WWTP lies within the area covered by the SMSHCP (Solano County Water Agency 2012), within the Fairfield Urban Growth Boundary. Because the WWTP is a designated public facility, providing ongoing services for wastewater treatment, the Project fits with the purpose and scope of the WWTP and does not conflict with the SMSHCP. There would be no impact.

Mitigation Measures: None required or recommended.

3.11 Mineral Resources

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
Would the Project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,b) There are no economically significant mineral resources within the project site. There would be no impact.

Mitigation Measures: None required or recommended.

3.12 Noise

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
Would the Project result in:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a-d) Ambient noise levels at the WWTP are estimated to be in the 60 to 70 A-weighted decibels (dBA)⁵ range, and the nearest sensitive receptor is a residence about 3,000 feet from the area where the pipeline would be constructed (Fairfield-Suisun Sewer District 2009). To reduce the impacts of construction noise, the City of Fairfield limits construction activities to the hours from 7 a.m. to 10 p.m. daily. Noise levels associated with pipeline construction typically range from 75 to 90 dBA, but because noise levels would be considerably attenuated by distance, the construction noise levels at the sensitive receptor would be less than 60 dBA and would not be

⁵ A-weighted decibels are an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, compared with unweighted decibels, in which no correction is made for audio frequency. This correction is made because the human ear is less sensitive at low audio frequencies, especially below 1000 Hz, than at high audio frequencies.

expected to result in a perceptible change in the existing noise environment. Construction noise and vibration impacts are expected to be less than significant.

Operation of the project is expected to generate very little noise. Some additional truck traffic would be generated but the numbers of trucks are not expected to substantially increase noise levels, and truck routes would not affect sensitive receptors. The process equipment would be located inside an existing building, and there are no nearby sensitive receptors. Operation of the project is thus not expected to cause a noticeable change in the noise level at nearby receptors. Operational noise and vibration impacts are expected to be less than significant.

e,f) The WWTP site is not in the vicinity of a public or private airstrip. There would be no impacts.

Mitigation Measures: None required or recommended.

3.13 Population and Housing

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The project would improve solids handling at the WWTP, but would not increase treatment capacity. The project would not result in or accommodate construction of new homes or businesses. There would be no impact.
- b, c) The project would be constructed and operated within the existing boundaries of the WWTP and would not displace people or housing. There would be no impact.

Mitigation Measures: None required or recommended.

3.14 Public Services

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the Project:

- 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The project would not change existing land use at the WWTP site, and would not increase population or otherwise create additional demand for public services in the area. Because the project would not induce or accommodate growth, the demand for fire and police protection, schools, parks or other facilities would not be affected. Project facilities would comply with applicable local fire ordinances and would not create demand for police services. The existing WWTP has safety features, including controlled site access, to prevent illegal trespass on the site. There would be no impacts associated with provision of public services.

Mitigation Measures: None required or recommended.

3.15 Recreation

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the Project:

- 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?
- b) Does the Project include recreational facilities or require the construction or expansion of

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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recreational facilities which might have an adverse physical effect on the environment?

Discussion

a; b) The project would not increase the use of existing parks or recreational facilities and would not result in demand for construction or expansion of new recreational facilities. There would be no impact on recreation.

Mitigation Measures: None required or recommended.

3.16 Transportation/Traffic

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Conflict with and applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the 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 intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

facilities, or otherwise decrease the performance or safety of such facilities?

Discussion

a,b) Access to the WWTP is provided by I-80, State Route 12, Chadbourne Road and Cordelia Road.

Construction would generate a maximum of 20 round trips per day, consisting of 5 workers traveling to the site, and up to 15 truck deliveries per day. This minor amount of additional traffic would not be expected to affect traffic congestion in the vicinity of the WWTP.

Operation of the project is expected to require up to an additional 12 employees working at the OMRC. During operations it is estimated that up to 25 trucks per day could be used to deliver the organic material to the OMRC. The receiving hours would be 24-hours per day, with a 7-day a week operating schedule. Finished product would be trucked from the site in sealed tankers trucks, with an estimated 25 trucks per day leaving the site. The project area is adjacent to a business park with a number of existing warehouses that routinely generate truck traffic. Roads providing access to the WWTP site are not designated arterials in the Solano 2011 Congestion Management Program System (Solano Transportation Authority 2013), and levels of service on roadways in the vicinity of the WWTP have not been identified as unacceptable (Fairfield-Suisun Sewer District 2009). Truck traffic associated with construction and operation would not constitute a substantial change and would be consistent with the type of traffic that occurs in the project vicinity.

Traffic impacts would be less than significant.

c) The project would have no effect on air traffic or air traffic patterns. There would be no impact.

d) The project would not alter existing roadways, or require use of incompatible equipment on roads in the vicinity of the WWTP. Equipment that would be used as part of the project would be driven to and from the site in accordance with state transportation laws. There would be no impact.

e) The project would not affect emergency access to the WWTP. There would be no impact.

f) Parking for construction workers would be provided at the WWTP, and the project would not create additional demand for parking. There would be no impact.

g) The project would not conflict with plans, policies or programs for pedestrian, bicycle or public transit facilities. There would be no impact.

Mitigation Measures: None required or recommended.

3.17 Utilities and Service Systems

	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
	<u>Potentially Significant Impact</u>		

Would the Project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a,b) The goal of the project is to improve solids handling at the WWTP. The project would not generate wastewater, and would have no effect on wastewater treatment requirements. The project would not induce or accommodate population growth, and would thus not require construction of new or expanded water or wastewater treatment facilities. There would be no impact.
- c) The project would be constructed and operated within an existing paved area at the WWTP. There would thus be no change in drainage patterns, no increase in runoff, and no effect on existing drainage systems. There would be no impact.
- d) The project would require some process water, but sufficient water supplies are expected to be available. The OMRC would have access to potable water service, provided by FSSD. It is expected that the majority of process water requirements would be satisfied by the incoming feedstocks, collected surface water taken from on-site retention storage, and clean surface water taken from above the final product lagoon covers. Potable or reclaimed water may be used if required. No new or expanded entitlements are expected to be required. The project would not entail the construction of new housing and would not accommodate additional growth that would increase water demands. There would be no impact.
- e) The project would not generate additional wastewater and would not entail the construction of new housing or accommodation of additional growth that would increase wastewater treatment demands. FSSD is the wastewater treatment provider and would be implementing the project. There would be no impact.

- f,g) The project would not be expected to generate additional solid waste. FSSD currently disposes of biosolids at the Potrero Hills Landfill. The project is aimed at improving solids handling and would divert solid waste from disposal. Any construction waste would be disposed of in accordance with applicable federal, state and local regulations. Disposal would occur at permitted landfills, and the construction contractor would be encouraged to recycle construction materials, to the extent feasible. There would be no impact.

Mitigation Measures: None required or recommended.

3.18 Mandatory Findings of Significance

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the Project have impacts that are individually limited, but cumulative considerable? (“Cumulative 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The project would be located entirely within the existing WWTP, which has little to no habitat value, and would thus not degrade habitat, or affect sensitive species. The facilities would be installed on existing paved surfaces and would not have the potential to affect historic or prehistoric resources. There would be no impact.
- b) FSSD is not planning other projects that would be expected to result in cumulative impacts when combined with the OMRC.

According to the City of Fairfield’s website (Planning Department) major projects underway in the City include the Fairfield/Vacaville Train Station Project and associated Fairfield Train Station Specific Plan and the Hawthorne Mill Mixed Use Development project, all of which are in the northeast portion of the City. None of the projects is near the WWTP site. The City also has a number of capital improvement projects in various stages of design and construction,

including road improvements and pipeline projects, but none of these would occur in the vicinity of the WWTP.

It is not expected that the project would result in cumulatively considerable impacts.

- c) As demonstrated in the checklist above, the project would not be expected to have adverse effects on human beings. The facilities would be constructed entirely within the existing WWTP, and would be located about 3,000 feet from the nearest sensitive receptor. Impacts on air quality, noise, and traffic would be minimal and would not be expected to result in perceptible effects. Construction would be very brief. No longer-term impact would be expected to occur during the project operations.

Chapter 4 Report Preparation

4.1 Report Authors

This report was prepared by the Fairfield-Suisun Sewer District, assisted by RMC Water and Environment (RMC). Staff that were involved include:

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- Talyon Sortor, Assistant General Manager
- Nellie Dimalanta, GIS

RMC Water and Environment

- Robin Cort, Ph.D., Senior Environmental Planner
- Sue Chau, Environmental Planner

4.2 References

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Memorandum



Fairfield-Suisun Sewer District Organic Materials Recovery Center

Subject: Response to Comments on Initial Study/Mitigated Negative Declaration

Prepared For: Fairfield-Suisun Sewer District

Prepared by: Robin Cort

Date: April 15, 2015

This memo has been prepared to address comments received on the Initial Study/Mitigated Negative Declaration (IS/MND) that was prepared for the Fairfield-Suisun Sewer District (FSSD) Organic Materials Recovery Center. The IS/MND was published on March 13, 2015 and was circulated to the State Clearinghouse and to state, regional and local agencies who might have an interest in the project. There was a 30-day public review period, which ended on April 13, 2015. FSSD received two comment letters. Letters were received from the Bay Area Air Quality Management District (BAAQMD) and CalRecycle, and are included here as Attachment A. Comments are addressed below. Each comment is repeated verbatim, followed by a response.

1 Response to Comments from Bay Area Air Quality Management District (BAAQMD) (Comment Letter 1)

Comment 1-1

Bay Area Air Quality Management District (Air District) staff has reviewed the Draft Initial Study/Mitigated Negative Declaration for the proposed "Organic Materials Recovery Center, Fairfield-Suisun Sewer District" project.

Here are our comments:

1. The Air District has not yet received a permit application for the proposed project. The proposed equipment cannot be installed, modified, altered, operated, or tested without the required Air District permits.

Response 1-1

FSSD will work with the Air District to obtain an appropriate permit for the project.

Comment 1-2

2. Please contact your facility's assigned Air District permit engineer (Ms. Flora Chan at fchan@baaqmd.gov or (415) 749-4630) to discuss any equipment modifications/alterations or use of new/modified equipment due to this project that may require Air District permits.

Response 1-2

FSSD will contact Ms. Chan to review permitting requirements for the project.

Comment 1-3

3. The biosolids receiving/preparation area and the reactor are potential sources of odor, which should be considered in the CEQA review.

Response 1-3

The IS/MND does evaluate the potential for the OMRC to generate odors. As noted on page 3-7 of the IS/MND:

“The Project would employ a process that reduces the odor potential of the existing biosolids produced by FSSD. Other feedstock that would be received at the WWTP would be conveyed in covered trucks and would be handled in a timely manner to minimize exposure to the outside environment. All materials handling and storage operations would be inside or adjacent to the existing dewatering building, which houses existing processing and dewatering operations. The product would be stored in covered lagoons prior to loading onto trucks for off-site delivery. The Project is not expected to result in a noticeable increase of odors at the WWTP. The impact would be less than significant.”

Comment 1-4

4. The Air District staff concur that storing the product in lagoons that are covered is an important mitigation measure.

Response 1-4

FSSD appreciates the District's concurrence with the proposal for storage of product.

2 Response to Comments from CalRecycle, Department of Resources Recycling and Recovery (Comment Letter 2)**Comment 2-1**

Thank you for allowing the Department of Resources Recycling and Recovery (CalRecycle) staff to provide comments on the proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

PROJECT DESCRIPTION

The Fairfield-Suisun Sewer District (FSSD), acting as Lead Agency, has prepared and circulated an Initial Study/Mitigated Negative Declaration (MND) in order to comply with CEQA and to provide information to, and solicit consultation with, Responsible Agencies in the approval of the proposed project. The FSSD is proposing an Organic Materials Recovery Center (OMRC) at their Wastewater Treatment Plant (WWTP) in Fairfield, California. The project would use proprietary organic processing technology developed by Lystek International Limited (Lystek). The process relies on physical/chemical principles with heat input to achieve the processing function. No biological process will be involved. All processing at the OMRC would occur through an enclosed piping system. The end product of the process would be a pathogen-free and nutrient-rich fertilizer product that is appropriate for land application or enhance anaerobic digester efficiency.

The Lystek system will comprise of up to five processing reactors each with an operating capacity of 12 cubic yards. An alkaline (potassium hydroxide and/or sodium hydroxide) and heat is added to the reactor to raise the temperatures up to 168°F. Processing time of approximately 60 minutes with up to an additional 30 minutes for final processing. The feedstock is piped from the hopper to the top of the reactor, while the finished materials is piped from the bottom. Part of the finished material may be conveyed to the anaerobic digesters to help enhance the performance efficiency of the digester. The remainder of the material will be pumped to an outdoor lined and covered lagoon. The material would be stored in these lagoons to allow for outgoing shipments to match crop planting periods. There would be no biologically active occurring in the lagoons because the finished material will be stored with a slightly elevated pH that inhibits and prevent biological activity and regrowth.

The ultimate design capacity of the OMRC would allow process of 150,000 total tons of non-hazardous organic material, which can included:

- Dewatered and non-dewatered biosolids;
- Solids from anaerobic digestion facilities servicing municipal and other organic streams including
- source separated organic;
- Septage material received from licensed haulers;
- Organic material from the food processing industry and other industries that produce food waste;
- Organic material from the commercial sector; and
- Organic material such as starches and paper wastes.

No hazardous material would be accepted. The OMRC anticipated a maximum of 1,000 tons per day (TPD), with a maximum of 800 tpd of dewatered biosolids and other organic materials and 200 tons per day of liquid feedstock and will operate seven days a week, 24 hours a day.

COMMENTS

CalRecycle's comments on the MND are summarized in the table below. Where a specific location in the document is noted for the comment, please ensure the comment is addressed throughout all chapters of the MND, in addition to the specific location noted.

Response 2-1

The comment is generally correct and specific comments are addressed below.

Comment 2-2

Notice of Completion and Environmental Document Transmittal Form. - The SCH# listed on the bottom of the form is not the correct SCH#. Please correct.

Response 2-2

The correct SCH# is 2015032040. This number was stamped on the Notice of Completion & Environmental Document Transmittal Form by the State Clearinghouse. We are not aware of any incorrect SCH# being referenced on the form.

Comment 2-3

Section 2.4 Proposed Project, Page 2-6, Provide the total acreage within the operating area (14 CCR, Section 18221.6(f)).

Response 2-3

This and several subsequent comments cite sections from the California Code of Regulations (CCR) that pertain to solid waste permitting and enforcement. Section 18221.6 addresses information that is needed to obtain a Full Solid Waste Facility Permit as a Large Volume Transfer/Processing Facility. As noted on page 2-19 of the IS/MND, FSSD believes that operation of the OMRC "would generally be covered by existing FSSD permits". In subsequent comments CalRecycle acknowledges that the Local Enforcement Agency would determine whether a Solid Waste Facilities Permit is needed. Detailed information requested in this and subsequent comments is provided where possible. However, in many instances the comments request more detailed information than is currently available. Operations would be conducted within the existing Dewatering Building, which has an area of 0.2 acres.

Comment 2-4

Section 2.4.1 Organic Materials Recovery Center Process, Pages 2-6 and 2-9, Figure 2-4 (Site Plan), Provide detailed, legible site plans. Pursuant to 14 CCR 18221.6 (c), provide a "schematic drawing of the building and other structures showing layout and general dimensions of the operations area, including, but not limited to, unloading, storage, loading, and parking areas."

Response 2-4

This comment also requests detailed information that is needed to obtain a Full Solid Waste Facility Permit as a Large Volume Transfer/Processing Facility. As noted in Response to Comment 2-3, it has not yet been determined if a permit would be needed. A detailed site plan has not been prepared, and would not be developed until FSSD actually approves the project. Project approval cannot occur prior to the completion of CEQA documentation, which would occur if the Board adopts this IS/MND. Detailed design is typically not done for a project that has not been approved.

Comment 2-5

Section 2.4.3 Operations, Page 2-12 Material Receiving, Provide a detailed description of waste, and the associated amounts, proposed to be accepted at the facility, along with measures to prevent prohibited waste types.

Response 2-5

The proposed waste to be accepted is described on page 2-12 of the IS/MND under Operations:

"The ultimate design capacity of the OMRC would allow processing of 150,000 total tons of non-hazardous organic material, which can include a mix of:

- *dewatered and non-dewatered biosolids;*
- *solids from anaerobic digestion facilities servicing municipal and other organics streams including source-separated organics;*
- *septage material received from licensed haulers;*
- *organic material from the food processing industry and other industries that produce food wastes;*
- *organic material from the commercial sector; and*
- *organic material such as starches and paper wastes.*

It is expected that the dominant incoming feedstock to the Center would be dewatered and non-dewatered biosolids. Feedstocks may originate from a combination of municipal or private installations, including but not limited to wastewater treatment plants. No hazardous material would be accepted at the Center."

As noted in the IS/MND, biosolids from wastewater treatment facilities are expected to be the primary source of feedstock. However, the amounts of each source of waste have not been determined. The OMRC would take waste from existing facilities and would select facilities that implement appropriate measures to prevent prohibited waste from being accepted. Biosolids from FSSD and other wastewater treatment facilities would be the end product of a wastewater treatment process and would not contain any prohibited waste types. Other suppliers of feedstock would be expected to ensure that prohibited wastes are removed from the feedstock before it is delivered to the OMRC. Staff at the OMRC would also perform random visual observations to verify that waste being delivered is consistent with the expected wastestream. If material is not accepted it would be returned to the generator.

Comment 2-6

Section 2.4.3 Operations, Page 2-12, It is unclear whether there will be any residual. Include a discussion for the handling of the residual, if appropriate.

Response 2-6

The proposed process would not produce any residual. No procedures for handling residuals would thus be required.

Comment 2-7

Section 2.4.3 Operations, Page 2-13 Receipt Rates and Storage Capacity, The MND states "The facility's total maximum permitted daily capacity will be 1,000 tons per day." Please provide the assumptions, methods, and calculations performed to determine the total capacity (14 CCR 18221.6 (g)).

Response 2-7

The quantity of 1,000 tons per day is based on the known capacity of the reactors, which has been established based on operations at other facilities. Each of the five reactors is capable of processing on the order of 200 tons per day (or the equivalent of 1,000 tons per day for the full facility).

Comment 2-8

Section 2.4.3 Operations, Page 2-13 Feedstock Delivery, This section states that "...OMRC is expected to be a maximum of approximately 50 trucks ..." It is unclear what is meant by "maximum of approximately." Based on other reference within the document, it appears that the maximum traffic for the OMRC is 50 trucks round trip.

Response 2-8

The comment is correct that it is expected that there would be 50 round trip truck trips each day. As noted in the IS/MND on page 2-13 it is estimated that there would be "25 trucks entering and 25 tanker trucks leaving the OMRC on any given working day".

Comment 2-9

Section 2.4.3 Operations, Page 2-13 Feedstock Delivery, Describe and provided a site map detailing the traffic circulation on-site. Note that pursuant to 14 CCR, Section 17418.3, traffic flow through the facility shall be controlled to prevent interference with operations and on-site safety hazards.

Response 2-9

As noted in Response to Comment 2-4, a detailed site plan has not been prepared, and would not be developed until FSSD actually approves the project. However, traffic flow through the facility for feedstock delivery is described on page 2-13 of the Draft IS/MND:

"All vehicles would use Chadbourne Road and enter the southern entrance along the west side of the FSSD WWTP. Trucks carrying feedstock or product would pass over the weigh-scale, located in the existing road. They would then proceed to the unloading areas, deposit material, and circulate back over the weigh scale prior to exiting the FSSD plant via Chadbourne Road."

Facilities mentioned in the description are depicted in Figure 2-4, on page 2-9 of the IS/MND. As shown on the figure, trucks would access the facility at the southern entrance to the WWTP, which is labeled "Truck Material Entrance" and would pass over the weigh-scale, which is labeled "Proposed Weigh Scale". The unloading areas would be at the area labeled "Existing Dewatering Building". As noted in Figure 2-9, activities at the Existing Dewatering Building include "Material Receiving and Handling".

Trucks leaving the facility after depositing their load would follow the same route back to the Material Truck Entrance, and would exit onto Chadbourne Road.

Tanker trucks coming to the facility to pick up fertilizer product are described on page 2-15 of the Draft IS/MND:

"The final fertilizer product would be conveyed to the truck loading station via an enclosed and sealed pipeline through one or more final product pumps."

The truck loading station is shown on Figure 2-9, which depicts the "Proposed Outload Facility". Trucks coming to pick up fertilizer product would enter at the Material Truck Entrance, which is the same entrance that would be used by trucks delivering feedstock, and would proceed directly to the Proposed Outload Facility. After loading, trucks would exit by the same route. All traffic flow would be confined to the southern end of the WWTP, which is already dedicated to biosolids handling. Traffic to the OMRC would thus not interfere with existing operations and is not expected to produce on-site safety hazards.

Comment 2-10

Section 2.4.3 Operations, Page 2-13 Feedstock Processing, This section states that "Each of the process reactors is sized to contain 13 cubic yards of combined solid and liquid feedstock material and would be designed to operate at a maximum capacity of 12 cubic yards." It is unclear how the maximum capacity of a container can be less than the operating capacity. This should be clarified.

Response 2-10

The maximum capacity of each reactor is 13 cubic yards and the operating capacity would be 12 cubic yards. Maximum capacity is thus greater than operating capacity. Standard operating procedure would require that reactors are never completely filled so as to allow space for mixing.

Comment 2-11

Section 2.4.3 Operations, Page 2-14 Final Product Storage, The lagoon are will be maintained at a slightly elevated pH to prevent the regrowth of pathogens and control odors. Based on the MND, specific data has not been collected to demonstrate that regrowth would not occur under those conditions. We would suggest that a self-monitoring test to determine the effectiveness of the process be implemented.

Response 2-11

As described on page 2-6 of the Draft IS/MND, "The process produces a high-solid pathogen-free high-nutrient fertilizer value liquid product that meets the USEPA "Class A EQ" (exceptional quality) biosolids standard." Tests of the fertilizer product generated by the Lystek process that would be used at the OMRC have shown no detectable pathogens, and based on operational experience from existing facilities, it has been determined that no pathogen regrowth occurs (Lystek 2014). FSSD will consider the suggestion for self-monitoring.

Comment 2-12

Section 2.4.3 Operations, Page 2-15 Final Product Usage, It is unclear how the final product will be tested. Clarify the testing procedure and the handling of the material that fails the test.

Response 2-12

The proposed Lystek technology is a thermos-alkaline treatment process, which reduces vector attraction in conjunction with Class A pathogen reduction and pollutant concentrations meeting 40 CFR 503.13 limits in accordance with USEPA regulations. The testing procedure for this material would be consistent with procedures established by the USEPA. The frequency at which the testing must be run is specified in 40 CFR 503.16, ranging from once per year for facilities producing less than 290 dry metric tons of

biosolids per year, to once per month for facilities producing over 15,000 dry metric tons per year. Material(s) that may fail the test would be re-processed until meeting the applicable passing results.

Comment 2-13

Section 2.4.8 Contingency Planning, Page 2-19 Operational Contingency for Complaints, Will anyone outside the WWTP be notified when there is a complaint?

Response 2-13

The standard protocol at FSSD is to document and investigate any complaint received. The procedure is to investigate the nature of the complaint and determine its extent and/or impact. Based on whether or not a complaint is verified, the FSSD would take action to address the source as appropriate.

Comment 2-14

Section 2.5 Permits Required, Pages 2-19 and 31, This project may need a Solid Waste Facilities Permit (SWFP). The determination as to whether the proposed project needs a SWFP would be up to the Local Enforcement Agency in consultation with CalRecycle.

Response 2-14

As noted on page 2-9 of the IS/MND, FSSD believes that operation of the OMRC “would generally covered by existing FSSD permits”. The comment acknowledges that the Local Enforcement Agency would determine whether a Solid Waste Facilities Permit is needed. FSSD would consult with the Local Enforcement Agency to confirm whether the OMRC is covered by existing permits.

Comment 2-15

CONCLUSION

CalRecycle staff thanks the Lead Agency for the opportunity to review and comment on the environmental document and hopes that this comment letter will be useful to the Lead Agency preparing the MND and in carrying out their responsibilities in the CEQA process.

CalRecycle staff requests copies of any subsequent environmental documents, copies of public notices and any Notices of Determination for this project.

If the environmental document is adopted during a public hearing, CalRecycle staff requests ten days advance notice of this hearing. If the document is adopted without a public hearing, CalRecycle staff requests ten days advance notification of the date of the adoption and project approval by the decision making body.

Based on the project description, this project may require a Solid Waste Facility Permit. For more information please contact the Local Enforcement Agency, Mr. Ricardo Serrano at 707-784-6765 or by e-mail at rserrano@solanocounty.com for specific requirements for a Solid Waste Facilities Permit. If a

Solid Waste Facility Permit is required for this site, this document may not be adequate and additional CEQA analysis may be necessary.

Response 2-15

FSSD appreciates the information provided by CalRecycle and will provide the requested environmental documents and notices. FSSD expects to consider adoption of the IS/MND at their regular board meeting on Tuesday, April 27, 2015. As noted in Responses to Comment 2-3 and 2-14, FSSD does not believe that a Solid Waste Facilities Permit is required. The IS/MND is deemed to be adequate to allow FSSD to consider whether to approve the project.

Attachment A – Letters Received during Public Comment Period

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FAIRFIELD-SUISUN SEWER DISTRICT

RESOLUTION NO. 2015-04

**A RESOLUTION APPROVING MITIGATED NEGATIVE DECLARATION FOR
ORGANIC MATERIALS RECOVERY CENTER PROJECT**

WHEREAS, the Fairfield-Suisun Sewer District (District) proposes to develop an Organic Materials Recovery Center (OMRC) at their existing Wastewater Treatment Plant where dewatered biosolids and other organic materials from the agricultural, waste and food processing sectors would be processed into a pathogen-free and nutrient-rich fertilizer product that is appropriate for land application or enhanced anaerobic digester efficiency; and,

WHEREAS, the project would divert biosolids and other similar organic materials from typical waste disposal options such as landfill through beneficial reuse of the nutrient content of the processed materials; and,

WHEREAS, the OMRC is intended to receive and process materials, manage the resulting fertilizer product, and manage the operational and environmental aspects of processing operations; and,

WHEREAS, the District caused to be prepared a Draft Initial Study/Mitigated Negative Declaration (IS/MND) dated March 2015, for the proposed Organic Materials Recovery Center Project, a copy of which is available for public inspection at the District administrative offices, 1010 Chadbourne Road, Fairfield, California 94534; and

WHEREAS, the Initial Study indicated that the IS/MND would be circulated for a public review period of 30 days beginning March 13, 2015; and

WHEREAS, during the public review period the District received two comment letters, namely a letter from the Bay Area Air Quality Management District and the California Department of Resource Recycling and Recovery (CalRecycle); and

WHEREAS, at the meeting of the District Board held on April 27, 2015 at 6:00 p.m., the Board considered the comments received during the public review period, comments received during the public hearing, the reports of District Staff and any comments received at the April 27, 2015 meeting; and,

WHEREAS, after considering the environmental analysis provided in the IS/MND and public comments on the IS/MND, the District has determined that the project would not have a significant effect on the environment with implementation of the five mitigation measures identified in the Mitigation Monitoring and Reporting Plan;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE FAIRFIELD-SUISUN SEWER DISTRICT:

- 1) Based upon substantial evidence, including the IS/MND, comments on the IS/MND, the response to comments, the Mitigation Monitoring and Reporting Plan and other materials

which are included in the agenda materials for the April 27, 2015 meeting, which are incorporated herein and made part of the this resolution by this reference; the Board of Directors for the Fairfield-Suisun Sewer District finds:

- A. The IS/MND document comprises a proper notice of intent to adopt a mitigated negative declaration and was properly publicized.
 - B. The IS/MND document was subject to a proper public notice period.
 - C. The District Board has considered the proposed Mitigated Negative Declaration together with any comments received during the public review process.
 - D. On the basis of the whole record before it (including the Initial Study and any comments received), there is no substantial evidence that the Organic Materials Recovery Center Project will have a significant effect on the environment, and the Mitigated Negative Declaration reflects the District Board's independent judgment and analysis.
- 2) The Mitigated Negative Declaration for the Organic Materials Recovery Center is hereby adopted.
- 3) The District Clerk, located at 1010 Chadbourne Road, Fairfield, California, is hereby designated as the custodian of the documents or other material which constitute the record of proceedings upon which this decision is based.
- 4) The District Clerk is hereby directed to file a Notice of Determination with the Solano County Clerk within five working days after deciding to carry out or approve the project.
- 5) A Mitigation, Monitoring, and Reporting Plan for reporting on or monitoring the changes which the District Board has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects is hereby adopted.
- 6) The General Manager is hereby authorized and directed to do all things necessary and proper to implement this resolution.

PASSED AND ADOPTED this 27th day of April 2015 by the following vote:

AYES: Directors ~~Bertani-Day-Hudson-Moy-Price~~
~~Sanchez-Segala-Timm-Vaccaro-Wilson~~

NOES: Directors None

ABSENT: Directors Timm, Vaccaro

Catherine Moy
President Pro-Tem

ATTEST:
Vamsdhopay
District Clerk