

Transfer Processing Report

Davis Street Transfer Station
2615 Davis St.
San Leandro, CA 94577



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INTRODUCTION AND BACKGROUND

The Davis Street Transfer Station (DSTS) is located at 2615 Davis Street in the City of San Leandro in Alameda County (**Appendix A** – location site map). The DSTS currently integrates a large volume transfer station (TS), four material recovery facilities (MRF) and a heavy equipment and truck shop. Three new buildings will be added and include three material recovery facilities, an indoor compost processing facility and an anaerobic digester. The California Code of Regulations, Title 14 (14 CCR), Section 17402 (a)(8) defines a large volume transfer / processing facility as “a facility that receives 100 tons or more of solid waste per operating day for the purpose of storing, handling or processing the waste prior to transferring the waste to another solid waste operation or facility.” This Transfer / Processing Report (TPR) has been prepared in accordance with the California Code of Regulations, Title 14 (14 CCR), Section 18221.6.

Waste Management of Alameda County, Inc. (WMAC) will build three new facilities and is required to update the TPR to obtain the proper permits. In order to fulfill the requirements, a revised TPR has been prepared for submittal to the Alameda County Department of Environmental Health serving as the Local Enforcement Agency (LEA). The last TPR was updated on July 13, 2015 when the C&D / Dry Waste / MMW MRF was upgraded.

OWNERSHIP AND FACILITY SPECIFICATIONS

The Davis Street Transfer Station is owned and operated by WMAC. The DSTS is a large volume transfer station and material recovery facility (MRF) encompassing 53.8 acres located at 2615 Davis Street on the Western terminus of Davis St. in San Leandro, CA. WMAC owns 53.2 acres of this property (Assessor's Parcel Number: 079A-0475-007-32) and is within the Solid Waste Facility Permit Boundary. Numerous material recovery operations are conducted in various buildings and other areas on site in order to divert recoverable and recyclable materials away from landfill disposal. For further detail see the site plan / facility map in **Appendix B**. Vehicles with recoverable materials are routed to these various buildings or areas depending on the contents of their loads. The DSTS is designated in the City's General Plan as “PI” Public/Institutional and as “IG” Industrial General on the City of San Leandro Zoning Map. Surrounding land uses are primarily industrial to the north, east and south, with recreational uses in the Oyster Bay Regional Park open space and recreational area located west of the project site. Identification of adjacent land uses can be seen in the zoning map provided as **Appendix C**.

Within DSTS there is one parcel of land that is owned by the City of San Leandro. This parcel is approximately 0.6 acres (Assessor's Parcel Number: 079A-0475-010-05) and has historically been used for transfer station activities. The City and WMAC have a Lease and Use Agreement in place that allows WMAC the use of this dedicated area for this purpose. The agreement was approved by San Leandro City Council (Resolution No. 93-207) and has been recorded with the Alameda County Assessor's office. A letter from the City of San Leandro, which confirms 0.6 acres is leased by WM from the City, can be found in **Appendix D**.

There are two new buildings that began construction in March 2016 for completion in Quarter 1 2018, which will be located on the south west corner of the facility. They are the Organics Material Recycling Facility (OMRF) and Employee Building. A third building called the Organics Materials Composting Facility (OMCF), will begin construction in the Quarter 3 2017 with completion in Quarter 1 2019. The Organics Material Recycling Facility and Employee Building will be owned and operated by WMAC. The OMCf, which includes a Pre-Treatment process, Anaerobic Digester, Composting and Compost Refining Process, may be operated under contract to WMAC by a Special Purpose Entity (SPE) to be established specifically for the OMCf. WMAC will be the operator of record for the DSTS and may subcontract with the SPE on all day-to-

day operations for the OMCf on an as needed basis. WMAC will be the operator of record for all processing activities at DSTS. WMAC may subcontract processing activities on an as needed basis.

FACILITY ACTIVITIES

The following sections describe the activities conducted at the Davis Street Transfer Station. Facility and building locations with identification numbers for reference are provided in the site plan / facility map in **Appendix B**. For detailed operation maps see **Appendix E**; for Solid Waste Traffic Flow Patterns see **Appendix F**; and for organics processing equipment layouts, schematics and flow diagrams see **Appendix G**.

A. NON-OPERATIONAL ACTIVITIES

a) Administration Office 2 (Appendix B, Map Location #13)

This one-story building is located directly inside and to the west of the Main Entrance. The Administration Building is the sign-in point for site visitors. It contains offices for the District Manager, Materials Recovery Facility (MRF) Operations Manager, Recycling Manager, and administrative employees, and has restroom facilities, a lunchroom and a meeting room. Future use of this building will include some administration activities with a conference staging area for visitors and expanded educational capabilities.

b) Transportation Building (Map Location #23)

This two-story building houses offices for Transportation Department personnel. The first floor contains the Supervisor's Office, the Dispatch Office, a break room, a locker room and restroom facilities. The second floor contains another Transportation Department office, a manager's office and meeting room.

c) Material Recovery Department Building (Map Location #19)

This two-story building houses offices for personnel in the Material Recovery Department. The second floor of the building has offices and a training room and the first floor has offices, a lunch area, and restroom facilities.

d) Education Center (Map Location #12)

Located immediately behind the Administration Building is the Education Center, a partnership with Stopwaste.org which contains a series of interactive educational displays used on site tours for school children.

e) Organics Processing and Transfer Office (Map Location #6)

Located on the south west side of the facility. The building contains offices for the Manager, lunch area and restroom facilities.

f) Organics Material Recycling Facility Employee Building (Map Location #17)

This Employee Building is a future improvement to be completed in Quarter 1 2018 along with the Organics Material Recycling Facility. The office will be 4,600 square feet and located north of and adjacent to the OMRF building. The building will contain office area for administrative staff, restrooms, locker space, break area, and training / conference rooms for employees.

g) Building Solar Panels (Map Location #1,#2,#3,#4,#5,#6,#7,#8,#10,#12,#13#17,#19,#23,#25)

Roof mounted solar panels will be installed on the following buildings identified by map location numbers, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 13, 17, 19, 23 and 25.

Methane and gas monitoring devices have been or will be installed in these buildings and all other buildings on the landfill property.

B. OPERATIONAL ACTIVITIES

1. Incoming Material

1a. Main Transfer Building (Pit) Unloading (Map Location #1)

The primary activity of the transfer station complex occurs inside the Main Transfer Building. Here, waste received from the incoming vehicles is dumped into an 18-foot deep pit which functions as a breakdown, surge, and storage pit. Vehicles dumping directly into the pit from within the Transfer Building are primarily WMAC curbside collection vehicles or other commercial haulers.

1b. Waste Material Storage in the Pit (Map Location #1)

Bulldozers equipped with specially designed air conditioned/air filtration environmental cabs, push the waste toward the two loading slot areas at the north end of the building. The waste is crushed and broken down by the repeated passage of the dozers. The dozers break down bulky items, break open containers and plastic bags, compact and increase the density of the loosely dumped waste, and facilitate attainment of maximum payload in the transfer trucks and subsequently aid in achieving greater compaction at the landfill.

1c. Public Disposal Area (Map Location #32)

Unloading private cars, pickups, vans, trailers, and any other vehicles which require the unloading of waste by hand or by special means (e.g., by dragging or lifting awkward loads from flatbed trucks or from large vans) are directed to the Public Disposal Area, located south of the Main Transfer Building. Vehicles are backed up on a level pad where the waste is deposited. Numbered dumping positions are utilized to assist with traffic control and overall safety.

The Public Disposal Area alert is a communication between WMAC Operators and Traffic Directors in the Public Disposal Area designed to ensure safety to all employees and customers. Traffic Directors will activate the Public Disposal Area alert for the following reasons: Any person walking in the public area, accidents and injuries, emergencies (fire, etc.). The Traffic Director will immediately communicate to management the reason for the alert. All Operators and Traffic Directors must clear the public site radio channel for communication while the Public Disposal Area alert is on and listen for the type of emergency. Once the emergency is over, the Traffic Directors will communicate the all clear via radio so that all operations can continue.

1d. Transfer Waste/Processing Residuals Removal

Residuals from all operating materials recovery facilities located at Davis Street Transfer Station are transported and/or conveyed to the main Transfer Station. Other residuals are collected from around the facility by site maintenance crews at least daily and transported to the transfer pit by conveyor, loader/dozer or the site's roll off trucks. In order to monitor removal of the residuals within 48 hours in the transfer pit, the DTSC SWFP allows for one week to remove all MSW that is tipped or delivered via conveyor or pushed into pit. Pictures are taken weekly to document.

Transfer trucks refuel at the Auxiliary Fuel Island for diesel (Map Location 22). However, the majority of the fleet operates on landfill-created Compressed Natural Gas (CNG) and fuels at Altamont Landfill. After each trip, trucks stop at the Auxiliary Fuel Island or staging area before

entering the transfer tunnel where they are loaded. From the Auxiliary Fuel Island or staging area, the transfer trucks loop left into the transfer tunnel, located at the north end of the Transfer Building. In the tunnel, loading of the transfer trucks takes place by gravity. The dozers in the pit can feed the waste at a rapid rate. The dozer operator notes the gross truck weight registered on a large scale indicator mounted above the loading slots, monitors the loading operation, and, if necessary, distributes the waste until the maximum permissible load is reached. A crane is used to remove excessive waste and to help distribute the waste when necessary. The operator can switch the load indicator to check individual axle loads. Weight of the three axles and a total weight are constantly displayed on the scale readout. When a transfer vehicle reaches capacity, the dozer operator ceases loading, changes the traffic light from green (load) to red (no load), and dispatches the transfer truck and trailer with another traffic light signal. When the next transfer vehicle is in position, the dozer operator switches the traffic signal back to green and loading commences.

Loading is accomplished with one dozer per loading slot. There are two loading slots. During peak periods, a third dozer may be utilized to push waste to the two loading tractors. The two electrically powered, fixed ¼-cubic yard clamshell cranes are used to monitor and assist in the loading of the transfer vehicles, when necessary.

As noted above, the transfer vehicle loading tunnel provides for two transfer vehicles to be loaded simultaneously. The tunnel is two lanes wide, with axle scales provided at each loading station. The scales automatically display the vehicle's gross weight, and are capable of indicating weights at each axle to assure no axles are over legal load. Net weights are computed from the gross and tare weights and then recorded for each vehicle, for compilation of total tons of waste transferred to the landfill. Transfer vehicles are refueled each trip before entering the loading tunnel to assure fuel weight is accounted for.

The transfer vehicles are possum-belly, semi-truck/trailer combinations that are approximately 42 feet in length and have a total carrying capacity of approximately 24 tons net or about 140 cubic yards. The truck and trailer bodies are aluminum to minimize truck weight and increase payload. The transfer vehicles are not self-unloading but are emptied by raising them on a large tipper at the landfill. Plastic mesh covers are used to prevent debris from blowing out or spilling during the trip. The units conform to the California Vehicle Code and highway regulations.

Since the throughput volume and transfer vehicle traffic generally does not reach capacity, additional transfer vehicles can be dispatched when waste volumes increase, either for a short period of time or over the long term. Walking floor trailers can also be utilized eliminating the need for a tipper at the landfill. The transfer vehicles are generally parked north of the tunnel area when not in use. Except for major repairs that must be accomplished off-site, vehicles and heavy equipment are serviced and maintained in the on-site maintenance shops.

Waste leaving the station is a combination of waste received at the station for transfer (from public and commercial vehicles) and residuals from station materials processing. Residuals are transported to Altamont Landfill located at 10840 Altamont Pass Road, Livermore California. Trucks utilize interstates 880, 238, and 580 to travel to and from the landfill.

1e. Green Waste Processing and Transfer (Map Location #4)

The Green Waste / Wood Waste area was formerly located outside on the west side of the DSTS facility (Map Location #7) and moved when construction for the OMRF started early 2016. The Green Waste area is currently located inside on the north-east side of the DSTS single stream MRF

facility (Map Location #4) and will be relocated once the construction of the Organics Material Recycling Facility is complete in Quarter 1 2018. WMAC will place the Green Waste / Wood Waste operations in three potential areas: (1) Map Location 27 and 28 (primary location); (2) Map Location 4 (alternative location); and (3) Map Locations 8B and 8C (alternative locations). Once the location has been determined, WMAC will inform the LEA of its final location.

This operation consists of a drop-off and processing area for yard materials (leaves, grass, prunings, tree limbs, etc.) and wood delivered by public self-haul customers (e.g., landscapers). Current material received in this building amount to 319 tpd. Public vehicles unload on a permanent concrete surface pad that allows for operation during inclement weather. Wood is also salvaged from the MRF and Public Area MRF (PAM) operation and delivered to this processing area. An adjacent area is used primarily for processing equipment. Wood and green material are currently processed by a 3rd party grinder contractor offsite. As conditions change, the facility may process the wood and yard waste onsite. The "load out" of material is at the north and south end of this area. Processed material is loaded into trucks by loader and shipped to intercompany and third party destinations by transfer truck. Ground wood waste is predominantly transported to facilities that use it for biomass such as Rio Bravo-Rocklin located at 3100 Thunder Valley Rd Lincoln, CA and Pacific Ultrapower located at 8755 Enterprise Dr. Jamestown, CA. Depending on markets, ground wood waste material may be taken to other locations.

Once the new Organics Material Recycling Facility is up and running in Quarter 1 2018, green / wood waste / food scraps material may be conveyed and/or delivered by truck to a separate tipping area located in the south-east corner of the Organics Material Composting Facility and mixed with the Organic Fraction of MSW (OFMSW) material from the OMRF building. Depending on the volume of source separated green / wood waste, it may still be taken to the locations stated above, sent to other WM locations for sale or sold directly to third party customer.

Landscape products, which are the processed and un-processed light dimensional wood, are taken to Tri-Cities Landfill located at 7010 Auto Mall Pkwy, Fremont, CA. Processed green material is transferred off-site to a composting facility or it may also be transported to a biomass facility.

Materials are processed and shipped out within 48 hours. Green waste is stored for up to 48 hours. The exception being material processed on Friday which may not be transported until Monday. The wood and green material is loaded daily for grinding Monday through Saturday. Ground material is used for bio mass, mulch or other applications. The grinding process will remain the same once the OMRF is operating. Also, unusually large volumes (not exceeding permitted capacity) or extreme weather conditions in which delivery to end-uses would be unsafe may increase holding times but processed material is always moved expeditiously to prevent off-site odor migration. Clean wood waste is kept onsite no more than 30 days.

Note that treated wood waste is not accepted or stored at the DSTS facility. Customers who bring in treated wood waste are provided with information on alternate disposal options by DSTS personnel. If treated wood is identified after tipping occurs, treated wood will be stored in a designated bin located in the Public Disposal Area (Map Location #32) for treated wood, and disposed of at WMAC's Altamont Landfill. Refer to Section F.12 of this TPR document regarding load check and customer notification procedures.

1f. Organics Processing and Transfer Building (Map Location #6)

The Organics Processing and Transfer Building is a 29,000-square foot building where green

material and source separated organics material such as source-separated green and food waste, is tipped by WMAC's intercompany collection vehicles. Green Waste programs in Alameda County do allow green waste and food waste to be mixed at the curb. Current material received in this building amount to 800 tpd. The building is not open to the public. Trucks enter the building to the south and exit to the north. Material is tipped on to a concrete pad until top loaded in to transfer trucks.

Material is shipped to facilities such as Redwood Landfill located at 8950 Redwood Hwy Novato, CA, Recology Grover located at 3909 Gaffery Rd Vernalis, CA, Altamont Landfill located at 10840 Altamont Pass Road, Livermore, CA, Harvest Power located at 916 Frewert Rd Lathrop, CA, and other destinations for processing and composting. Incoming material is shipped within 48 hours or up to 7 days with LEA approval from the time of tipping. Newer material will be temporarily stockpiled to allow for the rotation of older material to be loaded into trucks first.

Source Separated Food Waste may be transferred for off-site processing, pre-processed in the SSI/OREX units to prepare for transfer to off-site processing, or conveyed to the OMCf for pre-processing, composting and post-processing. The composting operations that will process the Source Separated Food Waste are in compliance with existing 14 CCR Section 17868.3.1 Physical Contamination Limits and are expected to meet 14 CCR Section 17868.3.1 Physical Contamination Limits requirements that will become effective on January 1, 2018.

To facilitate additional OFMSW and Source Separated Organics Waste processing, an OREX organics extrusion press will be installed in the Organics Processing and Transfer Building to process incremental 0"-6" OFMSW volume that is not processed in the OMCf. The OREX extrusion press will extrude an organic fraction material that is suitable for use as a feedstock for composting and or anaerobic digestion at a wastewater treatment facility. The extruded organic fraction will be shipped via truck to permitted wastewater treatment facilities located in Alameda County and or other destinations for compost. The sites designated to compost the extruded organic fraction from the OREX units will meet future 14 CCR Section 17868.3.1 Physical Contamination Limits requirements that will become effective January 1, 2018. (See **Appendix G-1** for a site plan and layout for the OREX OFMSW press.

Excess liquids on the Organics Processing and Transfer Building tipping floor are currently managed by the attending loader operator in the Organics Processing and Transfer Building. The loader operator as a routine task will push liquids with the loader bucket into the green waste pile to absorb the liquid and facilitate the outbound transfer. The installation of the OREX system will include a sanitary sewer discharge (floor drain) for removal of liquids that are generated as part of that process.

1g. C&D / Dry Waste / MMW Material Recovery Facility (Map Location #3)

The Construction & Demolition (C&D) / Dry Waste / Multi-family Municipal Waste (MMW) Material Recovery Facility (MRF) or Dry Waste MRF is a 39,000-square foot facility where up to 1,920 tpd of C&D and mixed materials including, scrap metal, cardboard, paper and other dry waste materials are salvaged for recycling. Material is received from self-haulers, intercompany, and third party haulers. Materials are processed and removed within 7 days of receipt. If additional time is required, WMAC will notify the LEA.

The Dry Waste MRF currently includes two infeed conveyors and associated stockpiles. The first infeed is dry waste which consists of recyclable and non-recyclable materials including such items as bottles, cans, clothing, plastic, wood, glass, metals and paper, etc. The second infeed is for C&D,

consisting of cardboard, mixed or commingled paper, wood metal, concrete, green material, and soil. Both are sorted manually and mechanically to collect recyclable materials.

The Dry Waste MRF was recently upgraded to include the addition of a third stockpile for processing, Multi-family Municipal Waste (MMW), from multi-family residents in the City of Oakland. DSTS receives up to 150 tons per day (tpd) of this material. Overall site traffic patterns remain the same with the one exception, the 15-25 trucks containing MMW will be directed to the Dry Waste MRF as opposed to the Transfer Pit. Other than upgrades to the Dry Waste MRF, no additional equipment is necessary for the operation. Any shared equipment will be cleaned after each shift. DSTS plans for this sorting to be temporary in nature while the Organics Material Recycling Facility described in the DSTS 2010 Master Plan update is constructed (anticipated startup date - January 2018). According to the letter from the City of San Leandro for Approval of CEQA Addendum and Site Plan Review Amendment (see last paragraph of this section for further details), the Dry Waste MRF may not continue to process MMW after the OMRF is completed.

C&D is unloaded on the east side of the Dry Waste MRF onto an asphalt or concrete tipping floor. WMAC will place proper signage in the facility that will direct drivers to unload in the appropriate location. Dry Waste and MMW material is unloaded on the west side of the Dry Waste MRF onto an asphalt or concrete tipping floor (See **Appendix H** which provides a site plan showing stockpile locations). K-rails and push walls are used as a barrier to delineate the Dry Waste from the MMW to prevent mixing of materials with the MMW kept under cover. The MMW area is large enough to stockpile 150-200 tons of material and will be removed within 24 hours. In the event the Dry Waste MRF is down for major repairs and unable to process the material within 24 hours, alternative methods to manage the MMW will be employed (i.e. transfer to offsite location, taken to the transfer pit, etc.). Pest control will be provided for all buildings, including the C&D / Dry Waste / MMW MRF.

The MMW and Dry Waste will enter the Dry Waste MRF on the same infeed conveyor system but during two separate shifts to prevent mixing of material. This conveyor and screen system has been permitted by the Bay Area Air Quality Management District (BAAQMD) and allows for two infeeds to process C&D, Dry Waste, and MMW material separately to allow for maximum recyclable material recovery. The first shift consists of C&D and Dry waste materials and the second shift consists of C&D and MMW material. At the end of each shift, the line will be run dry to push through any remaining material in the screens and/or conveyors. All sorted materials collected in the five bunkers (two for C&D fines, two for dry waste fines and one for mixed inert material) will be emptied after the shift. The organics bunkers are scraped to remove any residue that would attract vectors. The organics material will be transferred to the Organics Processing and Transfer Building and loaded with other food/organic waste transferred offsite for composting.

Excavator operators will load Dry Waste, MMW and C&D into the appropriate hopper, metering the flow. Operators will also capture extra-large items, inappropriate for this system (mattresses, couches, appliances) for separate processing. Both lines will run parallel at the start, and material will initially cross a presort area where larger material will be removed and wood and old corrugated cardboard (OCC) will be collected in roll off boxes.

C&D material will discharge onto a shaker screen that will size the material into two (2) different fractions, greater than 8 inches (overs) and less than 8 inches (unders). The overs will be sorted along a conveyor for recovery in an area called "post-sort". A series of sorting positions will allow sorted material to be conveyed to several streams including wood, mixed rigid plastics (MRP),

OCC, concrete and metals. The remaining material after post-sort will be then conveyed to the transfer station as residue on the same conveyor that handles the presort residue. The unders will pass under an overhead magnet for removal of ferrous metals. The ferrous metals will be conveyed to the pre-sort metal roll off box. Remaining material will go to the double deck screen to be further separated by size. The first deck will have an opening of 3/8 inches where the unders will be discharged via conveyors to a storage bunker. The second deck will have an opening of two (2) inches, and the unders from there will then go into a trommel screen for further sizing. The first trommel cut will be set at 9/16 inch, and the second trommel cut will be set a 1.25 inch. Both streams (the screened material and trommel overs) will then be conveyed to two (2) separate destoners to do heavy/light separation. The overs from the 2-inch deck will go across an optical sorter used to sort wood. The ejected wood will go onto a sorting conveyor for quality control. The negative fraction from the optical sorter will be conveyed to a destoner for separation of the rocks and concrete (heavies). The heavies will discharge onto the same conveyor that transports the concrete from the post-sort past a quality control station. Lighter material from the destoner will be conveyed back to a final sort conveyor. The remaining material will be then conveyed to the residue line to the transfer station.

The Dry Waste and MMW material will be loaded by an excavator to a waste size reducer and conveyed to a star screen that will size the material into two (2) different fractions, greater than 2 inches (overs) and less than 2 inches (unders). The unders will be diverted to the trommel screen for further sizing with the unders (less than 9/16") directed to a storage bunker and overs (greater than 9/16") directed to the transfer station. The overs from will be conveyed to another star screen that will size the material in two (2) different fractions, greater than 10 inch (overs) and less than 10 inch (unders), and the other fraction will be discharged back onto the new trommel screen for further sizing, and transferred to a sorting conveyor that will run parallel to the C&D overs sort conveyor. The unders from the star screen will be going under an overhead magnet to remove ferrous metals which will discharge onto the same line described in the C&D process above. Once the ferrous fraction is removed, material will go to a single deck roll screen that will remove less than 2-inch material, and be conveyed to the trommel screen. The overs on the screen will go across an optical sorter equipped with a metal detector that will eject single stream recyclables (fiber, plastics, and metals). The negative fraction from the optical sorter will be transferred to the same final sorting line described in the C&D process. A process flow diagram can be found in **Appendix G-2**.

A Mitigated Negative Declaration (MND) was prepared for the Dry Waste MRF in 1998 as part of a 5-year infrastructural improvement plan (**Appendix I**). It was approved by the City of San Leandro Board of Zoning Adjustments CUP revision 96-1 dated February 19, 1998 and evaluates the processing of MSW. An Initial Study/Mitigated Negative Declaration (SCN# 2010112069) and 2010 Site Master Plan Update dated January 4, 2011, the Site Plan Review Amendment and CEQA Addendum (PLN 15-0024) dated July 22, 2015 (letter from City of San Leandro seen in **Appendix J**) were all approved by the City of San Leandro.

The Dry Waste MRF houses a control room for supervisors and managers to observe the operation. The control room has a PC to monitor all functions of the processing equipment.

1h. Organics Material Recycling Facility (Map Location #7)

The Organics Material Recycling Facility (OMRF) is considered part of the Construction Phase 1 of future improvement with construction beginning March 2016 and completion in Quarter 1 2018. It will be located north of and adjacent to the Green Material Processing and Transfer Building. The

OMRF will be a 61,400-square foot building that will receive between 1,000 to 1,300 tpd of waste from multi-family, single family residential and commercial trash and will be removed within 48 hours of being tipped (excluding weekends and holidays). Incoming materials will be received at the OMRF and tipped on the floor, pre-sorted and delivered to the OMRF via conveyors or trucks. The OMRF will be a self-automated material recovery facility which includes screening, air separation and optical sorting technology. The material will go through a series of steps to size material in 5 size ranges (12" plus, 6-12", 2½-6", 2½-4", and 0-2½"). These steps include separation by density, 2D and 3D separation, and final separation with optical sorters. Any residual material will be taken back to the Transfer Building via a conveyor system. This system will remove recyclable and inorganic material to prepare feedstock for onsite composting.

The building is under negative pressure with doors and louvers providing fresh air supply. Exhaust air ventilation occurs through bio filters on the ground floor. When entering the building the doors open and then automatically close keeping odor inside the building. Additionally, the facility will be built with sort cabins (HVAC enclosure structure for sorters to occupy while performing sorting tasks) for the workers who will receive ventilation through HVAC conditioned air from exterior of building. Further details on the OMRF operations can be seen in **Appendix K** and the equipment layout can be found in **Appendix G-3**.

The City of San Leandro's letter dated April 4, 2016 (**Appendix L**) states the proposed plans for the new construction is consistent with the previously approved Master Plan and CEQA IS/MND, PLN2010-00026.

1i. Organics Material Composting Facility (Map Location #8)

The Organics Material Composting Facility (OMCF) is a future improvement to begin construction in Quarter 3 of 2017 with completion in Quarter 1, 2019 and is also considered Construction Phase 1 of this project. It will be located adjacent to and east of the Green Material Processing and Transfer Building (#6), and the OMRF Building (#7). The OMCf will be approximately 135,000 square feet (interior area; 190,000 square feet including exterior hardscape and loading areas), and per the approved Master Plan, will ultimately be sized for up to 1,000 tpd. During initial operation, it is expected that the OMCf throughput will average 300 tons per shift of OFMSW feedstock and 145 tons per shift of GM and CCO materials with a maximum design capacity of 890 TPD (averaged monthly) and maximum peak tonnage of 1,000 tons per day. All organic waste received in the OMCf is controlled and supplied by WMAC. At all times during operating hours there will be close coordination and communication between WMAC and the SPE concerning the volumes of waste available to the OMCf and the OMCf's capacity to accept additional feedstock ensuring maximum tpd thresholds are not exceeded. The system utilizes conveyor belt scales for all inbound OFMSW. During periods of unusual peak loading and / or achieving capacity in the OMCf, material will bypass the OMCf and conveyed for direct feeding in the OREX unit(s) in the Organics Processing and Transfer Building (Map Location #6), or conveyed to the transfer station for disposal.

Construction Phase 1 of the OMCf will consist of the Pre-Treatment processing system. Construction Phase 2 will consist of the Dynamic Enclosed-Lane Composting System and a Compost Refining Processing system. Both Phase 1 and 2 are expected to be completed in Quarter 1 2019. Construction Phase 3 will consist of the Anaerobic Digester and in-vessel composting configuration to be completed after Construction Phase 1 and 2 are finalized. The material from the OMRF will be conveyed to the pre-processing equipment located in the south-east corner of the OMCf and, as required, mixed with green / wood waste / food scraps from the Green Material

Processing and Transfer Building and source separated food scraps. All construction phased (1, 2 and 3) operations will be fully enclosed, with negative air pressure, and an air handling bio-filter system(s) for odor and emission control. All exhaust air generated in the OMCF will be captured and treated in an integrated scrubber and bio-filter systems for the management of odors. A full In-Vessel Digestion Report (IVDR) that further details the different processes can be found in **Appendix M** and the equipment layout can be found in **Appendices G-4 to G-7**.

In 2015 WMAC met with CalRecycle and the Alameda County Environmental Health Department, Local Enforcement Agency (LEA) to review organics processing and composting alternatives then being considered by WMAC. The agencies determined that for a composting project that entails anaerobic or aerobic digestion in enclosed vessels or tunnels, a CEQA amendment would not be necessary (refer to meeting summary dated October 23, 2015 in **Appendix L**). The City of San Leandro's letter dated April 4, 2016 (**Appendix L**) states the proposed plans for the new construction is consistent with the previously approved Master Plan and CEQA IS/MND, PLN2010-00026.

1j. Pre-Treatment Process (Map Location #8C)

The OMCF will host the Pre-Treatment processing system and process materials from three sources: (1) the OMRF which includes the Organic Fraction of Municipal Solid Waste (OFMSW), (2) co-collected organics (CCO) and (3) green material (GM) from the Green Material Processing and Transfer Building. See **Appendix G-4** for a schematic equipment layout. The OFMSW will include mixed paper, plastic, glass, food scraps, compostable paper and other typical items found in the waste stream where recyclables and green / food waste have been removed via other source separation collection programs. The Pre-Treatment processing includes mechanical sorting and material preparation system capable of processing up to 60 tph of OFMSW (300 tons per shift) and (145 tons per shift) of GM and CCO. During peak periods 1,000 tpd of total material in the OMCF may be received and processed. The OMCF will host the pre-compost processing system to process the 0-2.5" fraction and 2.5"-12" light fraction from the material. This system is focused on recovering ferrous metals, glass and inerts and preparing the materials for active composting.

Due to the potential for a high percentage of non-recyclable paper and fiber products in the OFMSW, the OMCF Pre-Treatment process will also include the necessary equipment and balance of plant to process this material in Rotary Drum Reactors (RDR). RDRs are a proven composting and anaerobic digestion feedstock preparation technology that rapidly induce aerobic decomposition and material size reduction in MSW and OFMSW through the constant turning and rapid agitation of material in a rotating drum with forced air. The Pre-Treatment process will include up to two (2) RDRs capable of processing all or a portion of the material fractions ranging from 0" to 12" as described above. The RDRs would be a nominal maximum length of 185' and diameter of 16' and be designed with a maximum material retention time of 3 days. Following pre-treatment in the RDR system the organics will be screened at 1" with the 0-1" fraction conveyed to the In-Vessel composting system and the 1" (+) further processed to remove recoverable materials such as wood and plastics utilizing state of the art optical processing technologies.

1k. Anaerobic Digestion (Map Location #8D)

The system will be built as part of a future Construction Phase 3 of the project and is based upon ten (10) digester tunnels each with a 21-day retention time which will be unloaded sequentially every 2 to 3 days. The Anaerobic Digester (AD) is capable of processing approximately 40,000 tons of organic material each year. This system will process the OFMSW, CCO and GM with 250 to 325 tons of material loaded into a digester every 2 to 3 working days (Stage 1 of the Master

Plan). The renewable biogas will be conditioned to remove hydrogen sulfide and condensate prior to use in a 1000 kW combined heat and power system (Stage 2 of the Master Plan). Digestate generated from the Anaerobic Digestion facility will be processed in the In-Vessel Composting system (Stage 3 of Master Plan) or pre-treated in In-Vessel Composting tunnels. All byproducts will either be returned to In-Vessel Composting for additional composting or sent to Altamont or other permitted composting facility for processing and marketing of compost material. Refer to **Appendix G-5** for a schematic equipment layout and architectural section.

11. In-Vessel Composting (Map Location #8B)

The In-Vessel Composting (IVC) system will have eight (8) composting lanes to start and are expandable to a total of sixteen (16) lanes which will be the maximum number of composting lanes available. The expansion from (8) lanes to a total of (16) will required the construction of (8) lanes and an additional 54,000 square feet of building. Both the building and the lanes have been configured to facilitate future expansion. Each of the composting lanes is 175 feet in length, designed to process OFMSW, CCO, GM. and digestate over a 21-day retention time. The total annual maximum design processing capacity is approximately 78,000 tons and will accept 250 tpd of material on average over the six (6) days with 670 tpd at maximum design capacity. Through a high level of process air, temperature, water and material agitation / turning control, organic materials will be actively composted to achieve (Chapter 3.1 Compostable Materials Handling Operations and Facilities Regulatory Requirements, Article 7 Environmental Health Standards, 17868.1 Sampling Requirements) a level of material self-heating suitable for blending with other compost products and mulch materials by a third-party compost facility operator. A ventilation chamber housing fresh air and exhaust fans runs the length of the vessels between turning lanes 4 and 5, and lanes 8 and 9. Compost in the lanes will be actively turned and agitated by a remote-controlled Lane Turner machine that drives on the composting lane walls. The Lane Turner is powered by EPA Tier IV diesel engine and will process material in each of the 16 lanes 6 days per week. The Lane Turner will also moisturize compost via an attached sprinkler system. Refer to **Appendix G-6** for a vendor rendering of the In-Vessel equipment and a schematic vessel/equipment layout.

System-Specific Temperature Monitoring Plan

Method of material temperature monitoring (Refer to IVDR, **Appendix M**):

This System-Specific Temperature Monitoring Plan demonstrates compliance with 14 CCR, Division 7, Chapter 3.1, Article 7, Section 17868.3.b.2.A in the following manner:

1. The Vessels have temperature sensors in the exhaust air duct in two locations in Zone 2 of the system: one near the beginning; and one near the end of Zone 2. Temperature sensors are installed at each lane where exhaust ducts are attached.
2. Projected residence time within Zone 2 is approximately 8 to 9 days.
3. The temperature of the exhaust air in Zone 2 within the open space under the lane cover, but above the material mass will be measured at a minimum of three (3) locations and plotted daily. The temperature of the exhaust air in Zone 2 will be maintained at a minimum temperature of 55°C for a minimum of 72 consecutive hours.
4. The three (3) locations will be spaced at the approximate distance the material is moved in a daily turning event which is 3 meters. Therefore, the material temperature will be measured indirectly from exhaust air temperature measurements as it moves through Zone 2 for a minimum of three consecutive days.

5. If the plotted temperature drops below the prescribed limit of 55° C, the 72-hour duration clock will be reset and the material within the portion of Zone 2 will be held within the Zone until compliance with the standard is achieved.

1m. Compost Refining Processing system (Map Location #8A)

Once the composting process is complete, the material is discharged onto a conveyor belt and transported to the Compost Refining Processing system which will focus on recovering remaining ferrous and non-ferrous metals, a plastics fraction, two compost sizes (3/8" minus and 3/8"-1") and a residual fraction. The screened and refined compost will be loaded out to walking floor trailers and offsite to a blending and mixing operations, and the residual fraction will go to Altamont landfill for disposal. The Compost Refining Processing facility will receive an expected average of 216 tons per day, six days a week with a design capacity maximum of 250 tpd. Conveyed material received from the In-Vessel facility will be received in a mechanical metering bin with a maximum storage capacity of 60 cubic yards. The purpose of the metering bin is to buffer and balance the batch discharge of compost from the In-Vessel facility via the Lane Turner machine to the continuous process of the Compost Refining Processing system. The metering bin will also allow for temporary storage of compost during planned and unplanned Compost Refining Processing system outages. Refer to **Appendix G-7** for a schematic equipment layout.

The OMCF will produce approximately 55,000 to 60,000 TPY of quality compost. The final products will be loaded via conveyors into walking floor trailers located in the Compost Refining Processing building and transported to a third-party compost facility operations where they will be prepared for final sale into soil amendment applications. The following materials are anticipated to be generated in the OMCF and include:

Metals: Approximately 1,000 TPY of recovered metals from the Pre-Treatment and Compost Refining Processing systems will be loaded into 20 cubic yard containers. The containers will be delivered to the Organics Material Recycling Facility where the materials will be classified and recycled by Waste Management.

Glass: Up to 4,000 TPY of mixed glass and ceramics will be recovered in the Pre-Treatment and Compost Refining Processing systems. These materials will be collected in 20-yard roll-off containers and delivered to either the OMRF for classification and recycling or the Davis St transfer station for disposal.

Rigid Plastics: Approximately 2,000 TPY of rigid plastics will be recovered in Compost Refining Process. These materials will be stored in a 20-cubic yard container and delivered to the Organics Material Recycling Facility for classification and recycling.

Light Residue/Film Plastics: Up to 8,000 TPY of light inert residue and film plastics will be recovered from the Compost Refining Processing system. This material will be delivered to the Waste Management transfer station for disposal.

Wood: Up to 2,400 TPY of wood will be recovered for further classification and processing at DSTS.

Method of Compost Sampling and Testing

The OMCF consists of a Pre-Processing System, a Rotary Drum Reactor Pre-Treatment System, an In-Vessel Composting (IVC) System, and a Post-Processing Material Refinement System. These

systems will produce compost that complies with the regulations of 14 CCR, Division 7, Chapter 3.1, Article 7 for Pathogens, Heavy metals and Contamination, which states:

Article 7. Environmental Health Standards

Section 17868.1. Sampling Requirements.

All composting operations that sell or give away greater than 1,000 cubic yards of compost annually, and all composting facilities shall meet the following requirements:

(a) Operators shall verify that compost meets the maximum acceptable metal concentration limits specified in section 17868.2, and pathogen reduction requirements specified in section 17868.3. Verification of maximum acceptable metal concentrations and pathogen reduction requirements shall occur prior to the point here compost is removed from the site or beneficially used onsite. Test results of samples must be received by the operator prior to removing compost from the composting operation or facility where it was produced. This verification shall be performed by taking and analyzing at least one composite sample of compost, following the requirements of this section as follows:

An operator who composts agricultural material, green material, food material, vegetative food material, or mixed material shall take and analyze one composite sample for every 5,000 cubic yards of compost produced. If the composting operation or facility produces less than 5,000 cubic yards of compost in a 12-month period, the operator shall analyze at least one composite sample of compost produced every 12-month period.

To comply with these provisions stated above, and to demonstrate the process technology represented in the "System-Specific Temperature Monitoring Plan" summarized above and in more detail as an attachment to the IVDR located in **Appendix M**, the facility will conduct an accelerated sampling and testing program for the initial 77 calendar days or eleven (11) weeks of commercial operation. This accelerated sampling schedule will entail the sampling and testing of samples every week for the first eleven weeks of initial operations. A detailed timeline of the sampling, testing and receipt of results can also be reviewed in **Appendix M**.

1n. Used Oil Collection (Map Location # 15 and 16)

Public vehicles and curbside collection vehicles unload used oil into designated collection tanks. The used oil for public drop off is taken to the reuse center located at Map Location 15 and the oil collected at curbside goes to the main fueling island located at Map Location 16, then stored temporarily in two 500-gallon, double-walled tanks and a 1,000-gallon double-walled tank. The station is covered and drains to a blind sump, and all unloading and loading of oil occurs within this covered and contained area. The used oil tanks are emptied by a certified oil recycling company when they are full or within a period of 90 days, whichever is sooner. The used oil collection station is for collection of oil only and no processing occurs. All site vehicles and equipment, including all transfer trailers and heavy equipment, are now running on re-refined oil.

1o. Tire Drop-Off (Map Location #L)

The tire drop-off area is located in a covered area on the north side of the Davis Street Recycling Tipping floor. Public customers, clean-up crews from nearby cities, and Waste Management hauling companies off-load tires in that location. Periodically throughout the day the tires are loaded into a trailer or debris boxes and are stored covered. Tires are then transported off-site to a tire recycler. Recycled tires go for various end uses such as alternative daily cover at landfills, playground cover, and asphalt additive. The site's Tire Program ID is 1002868-01

1p. Food Waste (Map Location #6)

Commercial food waste currently averages to a 120 tpd operation. It is unloaded in the Organics Processing and Transfer Building. The food waste is then mixed with the green material and transported in a trailer to an off-site processing and composting facility such as Recology Grover, Redwood Landfill, and other end permitted users. Depending on processing and operational needs at the OMCF, some fraction of the 120 tpd of food waste may be diverted to this facility as feedstock for composting. Storage time is up to 48 hours with 7 days upon LEA approval.

1q. Processing Equipment Upgrades

CORE (Project on Hold)

Food waste processing equipment upgrade. WMAC may choose to use the WM CORE System or other commercial systems. If chosen, it will be located on the east side of the facility in the existing Transfer Station (Map Location #1) and/or Green Material Processing and Transfer Building (Map Location #4), will be sized to process 200 - 400 tons per day of source separated food waste. A specialized receiving station and process control system made up of tanks and pumps, along with bio-separator allow for the introduction of the slurry product to be pumped into tanker trucks for transfer to nearby wastewater treatment facilities. This process allows the feedstock product to be introduced into an anaerobic digester at consistent and controllable rates, and regulated in a manner that keeps the digester operating without process upsets.

OREX

OFMSW and food waste processing equipment upgrade. WMAC will use the Anaergia OREX unit(s) (see **Appendix G-1**) to process incremental volume of OFMSW and food waste. The unit(s) will be in the Organics Processing and Transfer Building (Map Location #6), will be sized to process 200-400 tons per day of OFMSW and or Source Separated Food Waste. OFMSW will be directly conveyed to the OREX unit(s). Commercial Food Waste will be loaded into a specialized receiving station and process control system made up of tanks and pumps, along with bio-separator allow for the introduction of the slurry product to be pumped into a tanker trucks for transfer to nearby wastewater treatment facilities and or loaded as a wet fraction for composting. Future will evaluate if material will be pumped via a pipeline and if that should occur, the LEA will be notified. This process allows the feedstock product to be introduced into an anaerobic digester at consistent and controllable rates, and regulated in a manner that keeps the digester operating without process upsets as well as reducing outbound vehicle traffic.

1r. Garden Center (Map Location #11)

The Garden Center is located on the west side of the facility, adjacent to the Maintenance Shop and Transfer Building. Customers can purchase mulch, decorative bark, and compost in bags or in bulk. The material is stored in bunkers made of concrete blocks until it is bagged or sold.

1s. Public Re-Use and Electronic Waste (E-waste) Drop-off (Map Location #15)

The Davis St. Transfer Station is registered with the Department of Toxic Substances Control (DTSC) as a Cathode Ray Tube (CRT) Collection Center. At the Public Re-Use and E-Waste Area (Map Location #15), customers may drop off televisions, monitors, and other consumer electronic devices. All this electronic waste will be labeled with the accumulation date and transported off-site to eRecycling of California (or other DTSC-approved vendor) for recycling. At no time are any of the CRT's or electronic waste shipped internationally for disposal.

1t. Compact Florescent Lights (CFL) Drop-off (Map Location #16)

The DSTS is a registered universal waste collector. Compact Florescent Lights are picked up from residential route trucks. No CFL's are accepted from the general public. The drop-off located for the CFL's is the south-west side of the Used Oil Collection Center by the Main Fuel Canopy (Map Location #16). CFL's will be packaged and shipped off-site for recycling.

1u. White Good Drop-off (Map Location #5)

Appliances such as refrigerators, stoves, and air conditioners are brought into the transfer station by both the general public and Waste Management hauling companies from neighborhood collections. Refrigerants such as Freon are removed by licensed technicians working for a subcontractor and the appliances are transported off-site for recycling. The drop off is located next to the Bale Storage Parking Lot (Map Location #5)

1v. Single Stream Recycling and Bale Storage (Map Locations #4 and #5)

Source-separated residential and commercial mixed recyclables (single stream) and recyclables from other DSTS operations are processed to recover plastic, glass, corrugated and fiber. These materials are segregated via mechanical and hand sorting. Materials are baled or containerized for shipments to recyclable materials markets. Recyclable materials may also be transferred loose to other recycling processing locations off-site.

1w. Inert Materials Storage and Transfer (Map Location #H)

Source-separated and sorted and processed inert material at DSTS will be stored and transferred from the inert stock piles at the following location (Map Location #H)

2. DAYS AND HOURS OF OPERATION

The start of the operating day for the purpose of calculating amount of waste received per operating day is midnight. **Table 1** provides the DSTS Hours of Operations for each facility and **Appendix N** provides the Waste Removal Operations Schedule documentation.

Currently, the DSTS facility remains temporarily closed to the public on Sundays with plans to reopen as economic conditions allow. If the facility was to reopen to the public on Sundays, the hours of operation will be 8:00am – 4:00pm as allowed under the current SWFP. The facility is closed to non-company vehicles on Christmas Day, New Year's Day, Easter Sunday, Labor Day, and Thanksgiving Day, Memorial Day, and 4th of July. The site closes to the public at 1:00pm on Christmas Eve and New Year's Eve.

TABLE 1. HOURS OF OPERATION

Operation	Operating Hours	Open to Public	Operating Days	Notes
Trucks				
WMAC Vehicles	24 hours a day	Closed to public	7 days a week	
Non-WMAC Vehicles	24 hours a day	Closed to public	7 days a week	
Transfer Trucks	24 hours a day	Closed to public	7 days a week	
Buildings				
Public Disposal (MSW, Organics, Garden Center, Reuse)		7:00 am - 5:00pm	Monday - Friday	
		8:00am - 4:00pm	Saturday-Sunday	Open Sunday as business conditions allow
C&D / Dry Waste / MMW MRF (SMART MRF)*	4:00am - 12:30pm	Closed to public	7 days a week	Shift 1 (C&D and Dry Waste)
	1:00pm - 11:59pm	Closed to public	7 days a week	Shift 2 (C&D and MMW)
Public Area MRF* (processing of WM Commercial Recycling only)	6:30am - 2:30pm	Closed to public	7 days a week	Shift 1
	2:30pm - 10:30pm		7 days a week	Shift 2
Public Reuse and E-Waste	6:30am - 2:30pm	7:00 am - 5:00pm	Monday - Friday	
	2:30pm - 10:30pm	8:00am - 4:00pm	Saturday-Sunday	Open Sunday as business conditions allow
Public Wood and Green Waste Drop Off	6:30am - 2:30pm	7:00 am - 5:00pm	Monday - Friday	
	2:30pm - 10:30pm	8:00am - 4:00pm	Saturday-Sunday	Open Sunday as business conditions allow
Wood Waste Transfer	6:30am - 2:30pm	Closed to public	7 days a week	Shift 1
	2:30pm - 10:30pm		7 days a week	Shift 2
Davis Street Recycling Process Center	6:30am - 2:30pm	Closed to public	7 days a week	Shift 1
	2:30pm - 10:30pm		7 days a week	Shift 2
Organics Processing and Transfer Building	4:00am - 11:59 pm	Closed to public	7 days a week	
Organics Material Recycling Facility*	4:00am - 11:59pm	Closed to public	Monday - Saturday	1 to 2 Shifts (depends on operational need)
Organics Material Composting Facility*	4:00am - 11:59pm	Closed to public	Monday - Friday	1 to 2 Shifts (depends on operational need)
	4:00am - 11:59pm	Closed to public	Saturday	Shift 1

*Start times may be adjusted based on operational need.

*Maintenance operates 24 hours per day (Monday-Friday) and Saturday/Sunday as needed.

Transfer trucks may also be engaged in material removal seven days per week, 24 hours per day depending on volumes of material received. Normally, there is one shift of drivers engaged in material removal (although the number of shifts may vary as material volumes fluctuate). A second shift may be added to remove material. Start times may be staggered for efficiency. The first shift would begin around 3:30am and end around 12:00pm. The second shift would begin around 3:30pm and end at approximately 11:00pm.

Maintenance Operations are normally manned 24 hours per day in order to maintain equipment at the time that it is not in service but this time may also fluctuate in accordance with material volumes.

C. TOTAL ACREAGE

The Davis Street Transfer Station encompasses a 53.8-acre area of land (Assessor's Parcel Number: 079A-0475-007- 32 [Waste Management of Alameda County, Inc, 53.2 acres] and 079A-0475-010-05 [City of San Leandro, 0.6 acres]).

D. FACILITY DESIGN CAPACITY

The maximum theoretical engineered design capacity for the various Davis Street Transfer Station operations is as follows:

- Waste transfer to landfill activities: 9,216 tpd
- Material recovery activities: 5,201 tpd.
- Organic Materials Recycling Facility (OMRF): 1,300 tpd
- Organic Materials Compost Facility (OMCF): 1,000 tpd
- Tire recycling: <150 tires per day
- E-waste: 200 tpd
- Public wood and green waste: 400 tpd

These figures are based on estimated times required to load and unload vehicles, and on estimated manpower and equipment processing capacity. The theoretical capacity ensures that there will be no stacking of vehicles on public streets or blocking of internal traffic lanes. The above figures are not additive and assume recommended system control settings and average material densities.

The current SWFP for the entire DSTS facility allows a maximum throughput of 5,600 tpd. No change is proposed.

Table 2 calculates waste transfer activities and material recovery infrastructure. Bullets reflect assumptions. Waste Transfer Activities do not exceed the currently permitted 5,600 tpd limit and applies to all incoming materials in the Waste and Material Recovery Activities.

TABLE 2
STATION DESIGN CAPACITY CALCULATIONS

MAXIMUM ENGINEERED DESIGN CAPACITY***
WASTE TRANSFER ACTIVITIES (existing & proposed): 9,216 tpd
Main Transfer Building (existing): 9,216 tpd 2 transfer trailers can be loaded at a time (in 5 minutes; 24 tons/trailer). For each bay: 12 trailers/hour x 8 hours = 96 trailers 96 trailers x 24 tons = 2,304 tons Two bays = 2(2,304tpd) = 4,608 tpd With two shifts = 2(4,608 tpd) = 9,216 tpd
Note: MSW materials may be directed to the Organics Material Recycling Facility for further processing in lieu of solid waste transfer.
MATERIAL RECOVERY ACTIVITIES: 5,201 tpd
Organics/Green/Wood Waste Processing: 1,821 tpd Organics Processing and Transfer Building = 800 tpd With portable Grinder on site (58tph)x(5.5hrs/day)= 319 tpd With OREX units = (54tph)x(13 hrs/day)= 702 tpd Davis Street Recycling Processing Center: 840 tpd 35 tph x 24 = 840 tpd C&D / Dry Waste / MMW MRF and PAM: 2,240 tpd 80 tph x 24= 1,920 tpd C&D / Dry Waste / MMW* 20 tph x 16 = 320 tpd PAM (within permitted hours) Electronic Waste: 200 tpd Public Wood and Green Waste: 400 tpd
Proposed Tire Recycling: less than 300 tires per day
Organics Material Recycling Facility (OMRF): 1,300 tpd
650 tpd per shift or 1,300 tpd maximum peak tonnage
Organics Material Composting Facility (OMCF): 1,000 tpd **
• Pre-Treatment/Receiving Processing Facility: 60 tph or 890 tpd • Rotary Drum Reactors: 53 tph or 396 tpd per two Rotary Drum Reactors. • Anaerobic Digestion System: 325 tons of material being loaded into a digester every 2 to 3 working days. • In-Vessel Composting System: 43 tph or 250 tpd for each 8 lanes. • Compost Refining Processing facility: 27 tph or 250 TPD.
* The C&D / Dry Waste / MMW MRF has a maximum design capacity of 1,920 tpd (80 tons per hour, 24 hours) with an annual maximum throughput limit of 313,000 tons per year. Average daily throughput is 800-850 tpd (approximately 50-65 tons per hour, 13 hours per day) and includes processing of up to 150 tpd of MMW. ** maximum throughput based on two shifts, 16 lanes in In-Vessel and Anaerobic Digestion System and a range of material density. *** Maximum engineered capacity is not additive

E. TYPES AND DAILY QUANTITIES OF SOLID WASTE TO BE RECEIVED

Waste types accepted at the facility include the following: residential, commercial and industrial MSW; food waste (i.e., material that will decompose and/or putrefy including (i) all kitchen and table food waste, and animal or vegetable waste that attends or results from the storage, preparation, cooking or handling of food stuffs, (ii) paper waste contaminated with food waste, and (iii) compostable plastic food service ware); green material, electronics, appliances and other white goods, tires, construction and demolition material and commingled recycling. An average ton per day was calculated by taking the total of each commodity received for the last twelve months and dividing by the average of 26 work days per month. The calculation is 6 workdays x 52 weeks divided by 12 months. Grand total of material received is usually much higher on weekdays than on weekends. **Table 3** below is average tons per day calculated by using weekdays only over a 12-month period during 2014. It gives a more accurate picture of average daily tonnage.

TABLE 3
AVERAGE TONS PER DAY BY WASTE STREAM

Commodity	Average Tons per day
Solid Waste	1,369.32
Green Material	480.55
E-Waste	1.33
Appliances	0.81
Food Waste	77.29
Tires	0.56
C&D/Dry Waste/MMW MRF Material	675.20
Residential/Commercial Commingled Recycling	357.58
Total	2,962.64
*The volume that is being processed by the PAM / OMCF / OMRF and Wood Waste is represented.	

Total inbound average around 2962.64 tpd and can rise as much as 1,000 tpd more during spring and summer months due to organics from households. The current permit allows 5,600 tpd inbound to the facility. As the facility continues to expand its processing capacity in the future, the 5,600 tpd limit will allow DSTS to meet community, county and statewide diversion goals for commercial and C&D volumes. No changes to the permit limit for inbound materials tonnages are contemplated for operation of the Organics Material Recycling or Organics Material Composting Facility.

Increased processing for C&D, Dry Waste, and MMW will reduce volumes inbound to the transfer station pit, keeping the daily inbound tonnage relatively stable and well below the permitted capacity of 5,600 tpd. These materials will be internally diverted from the Main Transfer Building to the other facility operations.

F. COMPLIANCE FOR THE SOLID WASTE HANDLING, DISPOSAL AND ODOR IMPACT MINIMIZATION

F1. Waste Tire Storage (14 CCR, Section 17350)

In accordance with 14 CCR, Section 17350, DSTS has a tire drop-off area located in a covered area on the north side of the Davis Street Recycling Tipping floor. Public customers, clean-up crews from nearby cities, and Waste Management hauling companies off-load tires in that location.

Periodically throughout the day the tires are loaded into a trailer or debris boxes and are stored covered. Tires are then transported off-site to a tire recycler. Recycled tires go for various end uses such as alternative daily cover at landfills, playground cover, and asphalt additive. The site's Tire Program ID is 1002868-01.

F2. Siting on Landfills (14CCR 17406.1, 27 CCR Section 21190)

The Davis Street Transfer Station is located on the closed Davis Street Landfill. In accordance with 14 CCR, Section 17406.1 and 27 CCR Section 21190, the closed landfill is monitored and maintained by Waste Management's Closed Site Group in such a way as to protect public health and safety and prevent damage to structures, roads, utilities and gas monitoring and control systems. Leachate is discharged by permit into the local POTW and methane is burned off by flare. All new structures are designed so as to maintain the integrity of the closed landfill and all enclosed structures are equipped with methane alarms. WMAC will submit methane alarm system plans for all proposed new structures to the LEA for approval. Quarterly methane migration monitoring is also conducted around the transfer station's perimeter.

F3. General Design Requirements (14 CCR Section 17406.2)

In accordance with 14 CCR, Section 17406.2, when WMAC is designing new operations and structures, experts are employed to ensure that the design takes into account the safety of the public and the environment and the quality of life of nearby residents. Not all loading and unloading areas are paved.

F4. Odor Control (14 CCR, Section 17406.2(d))

In accordance with 14 CCR, Section 17406.2(d), odor control measures are instituted at DSTS. The main odor control feature at DSTS is the processing of waste within the enclosed Transfer Station (Pit) and Green Material Processing and Transfer Building. Further odor control is the rapid processing and transportation of waste after unloading. If an odorous load is identified, it is immediately mixed with non-odorous material and aerated by wheeled-loader. Incoming materials of higher moisture content, such as yard clippings, are mixed with drier material. If needed, misting at the Transfer Station and Green Material Processing and Transfer Building also aids mitigating odor at the facility. Additionally, the water truck is available to wet down the waste streams to prevent dust while unloading and processing. DSTS expects the water spray will be adequate to prevent any odor issues. The Organics Processing and Transfer Building ventilation occurs through mechanical filters on the ground floor. The large bay doors are normally kept open during operational hours to assist with ventilation.

The Organics Material Recycling Facility will be fully enclosed and negative air pressure within, with an air handling bio-filter system(s) for odor and air emission control. Ventilation occurs through bio-filters on the ground floor to be sized and permitted in accordance with BAAQMD requirements. When entering the building the doors open and then automatically close keeping odor inside the building.

The OMCF (e.g. Pre-Treatment process, Anaerobic Digestion, In-Vessel Composting, Compost Refining Process) will be fully enclosed with an air handling bio-filter system(s) for odor and air emission control. When entering the building the doors open and then automatically close keeping odor inside the building. All exhaust air generated in the Facility will be captured and treated in an integrated scrubber and bio-filter system for the management of odors. Once the organic material is loaded into the anaerobic digester cell, the digester hatch device is closed with a gas tight seal to maintain process conditions and so biogas does not escape. Odor is controlled through the injection

of oxygen into the digester at the end of the process, which helps to strip odors (primarily hydrogen sulfide). Exhaust air produced from the shutdown process is oxidized in a bio filter for further odor mitigation.

More detail about odor control at DSTS is found in the Odor Impact Minimization Plan (OIMP) located in **Appendix O**.

F5. Burning Wastes and Open Burning (14 CCR, Section 17407.1)

Open burning of solid waste at DSTS is prohibited in accordance with 14 CCR, Section 17407.1(b). In accordance with 14 CCR, Section 17407.1(a), burning waste is separated and isolated by heavy equipment operators. Burning waste is typically extinguished by the site water truck which is filled with 5,000 gallons of water 24 hours a day. The facility does not openly burn wastes on-site.

F6. Cleaning (14 CCR, Section 17407.2)

In accordance with 14 CCR, Section 17407.2, the site is cleaned daily along with the entrance, Davis Street, Business Center Drive and exit. The street sweeper collects dust and litter multiple times per day. A magnet is also used to collect any metal objects that are not vacuumed up in the sweeper truck. Monthly, a manned litter patrol is sent out on Davis Street from the facility entrance to Warden Street. This program features a Self-Inspection Checklist which is completed on a regular basis and entails the monitoring of the general work environment. Elements of the Self Inspection Checklist are monitored on a daily, weekly, or monthly basis as needed by Management. Management is tasked with monitoring the site for litter and dust and adjusting the cleaning schedule as needed. A street sweeper patrols the site on a routine basis cleaning the site, including driveways, parking areas, and truck maneuvering areas.

All containers (i.e. recycle bins, refuse cans, debris roll-off boxes) that need to be repaired or cleaned are taken to the Container Repair Shop which moved off-site in May 2014. This operation includes a Container Wash Rack and a fully-enclosed, permitted, paint spray booth. Constant monitoring of containers by facility personnel allows the operator to ensure that all of the containers are cleaned to prevent the creation of nuisances (e.g., odors and the harborage of vectors).

Interior and exterior building cleaning is evaluated quarterly. Buildings are power washed as needed to remove excess debris and include a sweeper in each building. Buildings evaluated for washing are Administration, Material Recovery Office, Transportation Building, C&D / Dry Waste / MMW MRF, Main Transfer and in 2018 will include the Organics Material Recycling Facility and Employee Building and the Organics Material Composting Facility. The OMRF will also be evaluated quarterly, at a minimum, one column section will be power washed quarterly. In addition, the attending loader operator is required to push liquid that accumulates from tipping or drainage from stock piled material into the green waste to manage and minimize pooled liquid on the tipping floor. WM has the responsibility for cleaning the OMRF buildings. WM will be responsible for ensuring that the SPE cleans the OMCF, with all details of compliance written into their operating contract.

The Public Dumping Area and the Main Transfer Pit are cleaned by the dry clean-up method. In the dry clean-up method, transfer station personnel utilize a wheel loader to clear debris on the tipping floor on a daily basis between shifts. If needed, for smaller areas of the transfer station, station personnel use a shovel and/or broom to sweep the tipping floor to remove material. Cleaning of this area happens at least every seven days as prescribed by the Solid Waste Permit.

At the end of the shift, the C&D/Dry Waste/MMW MRF and the Organics Material Recycling Facility lines will be run dry to push through any remaining material in the screens and/or conveyors and any shared equipment cleaned. Sorted materials will be removed from storage bunkers at the end of the shift and the organics bunker will be scraped to remove any residual material and prevent vector attraction.

The Organics Material Composting Facility, which includes the Pre-Treatment process system, Anaerobic Digestion, In-Vessel Composting, and the Compost Refining Process system will all be cleaned by SPE staff. The lines for the Pre-Treatment and Compost Refining Process will be cleaned by dry clean-up method. In the dry clean-up method, organic processing personnel utilize a wheel loader to clear debris on the tipping floor. The In-Vessel Composting system consists of two (2) related but independently operated modules of 4 lanes and in the expansion, an additional 3 lanes. Each composting module will have an annually scheduled inspection and maintenance program. In preparation for the annual inspection and maintenance, all compost material will be removed from the lanes and air systems will be shut-off. An inspection team will focus on signs of wear and cracking in the concrete lane walls and also inspect the air spigot nozzles for signs of clogging. Any required cleaning and maintenance identified during inspections will be addressed and prior to re-starting the module. If needed, for smaller areas of the facility, personnel will use a shovel and/or broom to sweep the floor to remove material. Cleaning of this area happens at least weekly as prescribed by the Solid Waste Facility Permit.

See **Appendix P** for the Comprehensive Station Site Maintenance Cleaning Program checklist.

F7. Drainage Control (14 CCR, Section 17407.3)

In accordance with 14 CCR, Section 17407.3, DSTS is designed with drainage control features. Grading on the site has been minimized to avoid disturbance of the waste in the underlying portion of the closed landfill. Storm drainage of all buildings and open areas has been provided in accordance with City of San Leandro requirements and the General Industrial Storm Water Discharge Permit (Number 201S002422). Minimum ground slopes of two percent have been established based on conditions of approval for closure of the transfer station area of the Davis Street Landfill, considering the then-proposed end uses for solid waste transfer. The relatively high elevations of the underlying landfill allow most areas to drain by gravity. However, the depressed loading tunnel drops to elevation 1.5 feet below mean sea level (msl). A small sump pump lifts storm drainage to the main discharge sanitary sewer from this low area. The public disposal area slopes toward the main transfer building pit so that water that comes into contact with garbage runs into the pit and isn't discharged into the storm sewers. An existing storm drain in Davis Street drains the north portion of the site to the San Francisco Bay. The east and south portions of the site drain to the existing slough that begins at the south boundary of the site and runs south to San Francisco Bay.

For more details on the drainage, please refer to **Appendix Q** for the Water Runoff Control Plan. DSTS has submitted a Storm Water Pollution Prevention Plan (SWPPP), citation # WDID: 2 011002422, to the National Pollutant Discharge Elimination System (NPDES) that regulates water quality for material handling facility activities. The SWPPP addresses all pollutants and their sources through the implementation of Best Management Practices (BMPs).

The Davis Street Transfer Station employs preventative measures, in accordance with its Storm Water Pollution Prevention Plans (one for industrial activity and one for construction activity), to eliminate non-storm water discharges. Preventive measures include the following: paving, berming, covering of materials storage areas, use of wattles to reduce solids entering storm drains,

etc. The only non-storm water discharges which were not feasible to eliminate on site are minimal amounts of water from dust control and landscape irrigation (per the General Permit Fact Sheet, these non-industrial discharges are appropriate and are not required to be eliminated) but storm water treatment units have been installed before four of the site's five discharge points. Review **Appendix R** for the map showing discharge points. The treatment units slow the water so that suspended solids fall out and the water is passed over an absorbent to remove oils and grease. Underground Media Vaults are installed as additional treatment. To ensure compliance, the site conducts required inspections and storm water sampling.

F8. Dust Control (14 CCR, Section 17407.4)

In accordance with 14 CCR, Section 17407.4 and 18221.6(i), dust control measures are conducted at DSTS. The main Transfer Station (Pit) and Organics Processing and Transfer Building are equipped with a system of dust suppression sprinklers used as needed when dumping generates excessive dust inside the building. Sprinklers in the Organics Material Processing and Transfer Building may be used during non-peak or overnight hours to prevent slip/trip hazard (DSTS will not use the sprinklers if a slip/trip hazard exists). In the main pit, natural ventilation occurs through the large doors and through a roof vent running the entire ridgeline of the building. In addition, the transfer tunnel is generally swept twice a week and washed daily during non-drought years to reduce the accumulation of dust. Dust control at the Organics Processing and Transfer Building ventilation occurs through mechanical filtration at ground level. The large bay doors are normally kept open during operational hours to assist with ventilation. In the event of excessive dust, the mobile sweeper is used to remove accumulated dust on the ground.

In order to control dust throughout the site, a mobile water truck and a sweeper truck are housed on-site and are used on an as-needed basis throughout the site. Dust control measures, such as use of the water truck or other misting source, are also utilized as needed with the green waste processing equipment and MRF, in accordance with the Air District permits.

Misters in the C&D/Dry Waste/MMW MRF building and water trucks are available to wet down the waste streams to prevent dust while unloading and processing. DSTS expects the water spray will be adequate to prevent any odor issues. In the event odors are observed, an odor neutralizer will be added to the misting system (similar to what is currently used at the transfer station building). Incoming unprocessed MMW will be removed within 24 hours as per 14 CCR, Section 17410.1.

The OMRF and OMCF will be equipped with dust control and ventilation systems consisting of industrial air circulation fans, baghouse particulate collectors and bio filter scrubbers. This equipment will be sized and permitted in accordance with BAAQMD requirements, which is still under review by BAAQM and no permits currently issued. The application was deemed complete. The OMRF will be built with sort cabins for the workers who will receive ventilation through HVAC clean air circulated throughout. The OMCF will have a remote external control rooms to monitor and manage the process and equipment, including the In-Vessel Composting Lane turner.

F9. Hazardous Liquid, and Special Waste (14 CCR, Section 17407.5)

In accordance with 14 CCR, Section 17407.5(a), WMAC will not intentionally accept or store hazardous wastes, including batteries, oil, paint, and special wastes, unless it has been approved to handle the particular waste by the appropriate regulatory agencies. Descriptions of permitted used oil, E-waste, and CFL handling operations are provided in Section B of this TPR document.

In accordance with 14 CCR, Section 17407.5 (b), the facility implements control measures as necessary to protect public health, safety and the environment. Disposal of hazardous wastes, including asbestos, medical wastes, and pesticides is not permitted at the facility. WMAC has several internal programs to eliminate hazardous wastes that may enter the waste stream at both the collection point and at the unloading/transfer point at the transfer station.

Signs are posted near the entrance of the site and at the scale house which clearly states the types of wastes not accepted at the site. Additionally, all collection truck drivers are instructed to be watchful for drums, pails, cans, or cartons that may contain hazardous wastes. Drivers are instructed not to pick up such loads. However, if a load containing hazardous waste is noticed only after it was picked up, the load is set aside and inspected by the site's Hazardous Materials Technician.

The Hazardous Materials Technician conducts the facilities load check program. Eight load checks are conducted weekly on public, 3rd party and intercompany customers. Hazardous materials are documented along with the driver's information, date, and time. Hazardous materials found in load checks are stored in the Hazardous Materials Shop.

In the event of a spill, the LEA will be contacted. All unlawful incidents of disposal are noted in the special occurrence log located in the Field Office (Building #20). The waste is stored in the temporary hazardous waste storage area located near the transfer station. The waste is removed within the time frame required by CCR 22, Section 66262.34. All site records are open to inspection during normal business hours by authorized LEA, CalRecycle or other recognized regulatory or enforcement agency personnel.

In accordance with 14 CCR Section 17407.5(c) liquid wastes and sludges shall not be accepted or stored at the DSTS, except with written approval to accept such wastes from the appropriate agencies and the LEA. A description of permitted used oil handling operations is provided in Section B of this TPR document.

F10. Litter Control (14 CCR, Section 17408.1)

In accordance with 14 CCR, Section 17408.1, litter control is conducted at DSTS through housekeeping measures, covered vehicle loads, and site design features. Signage at the entrance of each scale house states that all loads entering the facility are required to be covered (tarp). Windblown paper and debris at the facility are controlled by catch fences that are located along the perimeter of the public dumping area. In addition, a secondary litter control fence is located between the perimeter of the public dumping area and the property line. Company employees police the station daily for litter.

F11. Medical Wastes (14 CCR, Section 17408.2)

In accordance with 14 CCR, Section 17408.2 and as mandated by its Solid Waste Permit, the Davis Street Transfer Station does not accept medical waste. Medical waste stopped at the scale house is refused. Medical waste found in random load checks is returned to its generator. If medical waste is found on site, every attempt is made to determine its origin, return it to its generator, and prevent the generator from bringing it in again. If the generator cannot be located the medical waste is disposed of in accordance with all applicable laws and regulations.

F12. Noise Control (14 CCR, Section 17408.3)

In accordance with 14 CCR, Section 17408.3, noise control measures are instituted at DSTS. Noise complaints by residents are taken very seriously by the Davis St. Transfer Station because we know that noise pollution can affect the quality of life of our neighbors. If noise complaints are received and the site staff cannot determine the cause of the noise professional Industrial Hygienists are brought in to measure the decibel level and octave of the noise to determine its origin. Engineers are then employed to design measures to mitigate the noise. An OSHA approved back up alarm is used 24 hours per day on all rolling stock and heavy equipment.

F13. Non-Salvageable Items (14 CCR, Section 17408.4)

In accordance with 14 CCR, Section 17408.4, no drugs, cosmetics, foods, beverages, hazardous wastes, poisons, medical wastes, syringes, needles, pesticides nor other materials capable of causing public health or safety problems are salvaged at Davis Street Transfer Station. Items such as hazardous wastes, poisons, medical wastes, syringes, needles, and pesticides that cannot be disposed of with class III municipal solid waste are refused at the scale house, returned to the generator (if found during a load check), or disposed of properly if the generator cannot be found. Public customers may drop-off oil for recycling and Waste Management hauling companies bring in oil for recycling.

F14. Nuisance Control (14 CCR, Section 17408.5)

In accordance with 14 CCR, Section 17408.5, DSTS is operated so as to not create a public nuisance, health or safety problems. Facility operations have not caused any nuisance conditions requiring special nuisance control. The facility is in an industrial area and its activities are compatible with surrounding land uses.

F15. Maintenance Program (14 CCR, Section 17408.6)

In accordance with 14 CCR, Section 17408.6, maintenance of vehicles are central activities at Davis Street. The main area on-site where vehicles are serviced is in the Vehicle Maintenance Building which houses the Vehicle Maintenance Shop.

The Davis Street Transfer Station employs a full staff of mechanics and technicians, which allows vehicles, heavy equipment, and processing equipment to be maintained on site. All equipment is on a regular preventive maintenance schedule and as a result downtime is minimal. Only major repairs and overhauls require a piece of equipment to be sent off-site to a third-party facility.

F16. Personnel Health and Safety (14 CCR, Section 17408.7)

In accordance with 14 CCR, Section 17408.7, DSTS has prepared a safety plan in accordance with SB 198 (Injury and Illness Prevention Program). The Injury and Illness Prevention Plan is kept fully up-to-date and is available for viewing by the EA, and can be found in **Appendix S**.

All personnel directly involved with operations are equipped and required to use safety equipment that complies with the ANSI standards. Safety equipment, such as hard hats, gloves, and safety glasses and reflective clothing are provided. Ear plugs and dust masks are required when performing any task that could produce excessive noise levels or flying particles. Appropriate gloves are provided and required when handling materials with sharp or jagged edges which may result in lacerations. Protective footwear must comply with ANSI Z41-1991 and is the responsibility of employees to provide. In addition, heavy equipment operators use radios to communicate constantly with ground crew personnel to minimize the potential for accidents.

Industrial first aid kits are provided and located in each building which are located in the Emergency Response Plan. Emergency eyewash/shower units are provided and are located in the transfer station. Hand washing facilities and liquid hand soap are provided in all administrative offices, and their use is required for personal hygiene.

F17. Protection of Users (14 CCR, Section 17408.8)

In accordance with 14 CCR, Section 17408.8, DSTS operates in such a manner so as to minimize contact between users, waste, and waste handling processing and transfer operations. In order to ensure public safety and minimal public contact with solid wastes, public and commercial customers are directed to designated areas on-site by directional signs, as well as by personnel at the scale house and personnel on-site. The Public Disposal Area and public area for green waste drop off are staffed with an attendant(s). Since PAM employees work within the public area, a crosswalk has been constructed for them to safely exit the area. MRF/Dry Waste employees utilize the pedestrian bridge which is connected to the MRF building and leads employees to the Material Recovery Building. In the event of an emergency in the public area, the public alert system can be activated. This alert system provides instructions to the public in English and Spanish. Customers entering the facility are given instructions at the scale house prior to dumping material. The entire facility perimeter is enclosed by a combination of fence and brick wall to prevent unauthorized access.

F18. Roads (14 CCR, Section 17409.1)

In accordance with 14 CCR, Section 17409.1, the facility roads, parking areas and the primary areas where vehicles operate are paved with asphalt. The paved areas are constructed to withstand regular cleaning and usage. A water truck is used on-site to minimize the generation of dust on the paved and non-paved areas of the site. A sweeper truck is also used during hours of operation to minimize accumulation of dirt and dust on the roads.

F19. Sanitary Facilities (14 CCR, Section 17409.2)

In accordance with 14 CCR, Section 17409.2, sanitary facilities are available for facility personnel in the break room. An adequate number of sanitary facilities are available at the site and in close proximity to work areas. All key buildings on-site have sanitary facilities (i.e., the Administration Building, the Vehicle Maintenance Building, the Davis Street Recycling Breakroom, the Transportation Building, the C&D / Dry Waste / MMW Material Recovery Office, and the Heavy Equipment Building). In areas where workers cannot rapidly access sanitary facilities in a site building, hand wash stations with containerized soap and paper towels will be provided adjacent to the portable toilets.

F20. Scavenging and Salvaging (14 CCR, Section 17409.3)

Scavenging is strictly prohibited by the Davis Street Transfer Station in accordance with 14 CCR, Section 17409.3(a). Employees found scavenging are disciplined and customers found scavenging are stopped. Informational signs also warn against scavenging. However, salvaging operations including collection of recyclable materials (e.g., including corrugated paper, mixed paper, newspaper, plastics, aluminum, ferrous metal, green materials and glass) are performed at the MRF as allowed under 17409.3(b). Materials from MRF operations are stored and removed based on market conditions and trucking considerations. Salvaging operations are performed on a "not to interfere" basis with other operations per Section 17409.3(c). Any recyclable materials identified for salvaging on the transfer station tipping floor are removed/separated within 48 hours. Note that the C&D/Dry Waste/MMW MRF, Organic Material Recycling Facility and Organic Material Composting Facility are all closed to the general public. Per section 17409.3(d), materials salvaged

from the MRF operations are stored or stockpiled as designated in map locations (A-L) and removed based on market conditions and availability of outbound trucking on a daily basis.

F21. Signs (14 CCR, Section 17409.4(b))

In accordance with 14 CCR, Section 17409.4(b), identification signs are posted at the Main Entrance, located at the very end of Davis Street and used by both public and company vehicles. These signs, which are large enough to be visible and clearly read by vehicle drivers entering the site, provide the following information:

- Name of site operator
- Phone number for site operator
- Hours open to the public
- Proposition 65 sign.
- Tarping requirements
- Rules (i.e., speed limit, children/pets to stay in vehicle, etc.)
- Schedule of charges
- A listing of the general types of materials that will be accepted or not accepted.

Inside the front gate is a list of materials not accepted at the site (hazardous wastes, etc.). A list of disposal fees is also posted near the scale house.

F22. Load Checking (14 CCR, Section 17409.5(a))

In accordance with 14 CCR, Section 17409.5(a), DSTS implements a load checking program. A random load-check program is in place, which requires that at least eight loads are randomly checked weekly to identify any hazardous or unacceptable wastes such as asbestos, treated wood and household hazardous wastes. The loads to be checked are distributed among the various haulers, waste sources, and vehicle types entering the station. In particular, load checks are performed on Public MSW, third-party MSW, Multi-Family MSW, Commercial Dry Waste and construction and demolition debris deliveries. Load checks for these materials are conducted at the Public Disposal Area and C&D/Dry Waste/MMW MRF. Load checks are also performed on Source Separated Food Waste and Green Waste. Load checks for these materials are conducted at the Organics Processing and Transfer Building. Load checks for Public Green/Wood Waste will be performed in the Wood Waste Transfer Area. Load check for Public Reuse and E-Waste and Recycling is performed in the Public Reuse and E-Waste drop off. Additionally, all "suspicious" loads entering the site will be checked. The employee performing the load-check inspection spreads the loads onto the inspection area as thinly as possible so that the maximum amount of refuse is visible. Using rakes or other hand tools as needed, the inspector then proceeds to examine the loads for any suspect hazardous or designated wastes. If no hazardous or designated wastes are discovered, the load is pushed to the working area and mixed with the regular waste. If suspected hazardous or designated wastes are discovered, then the load-check inspection team follows the proper procedure for isolating and returning the unacceptable wastes to a known generator or (if a positive identification of the generator cannot be made) packing and transporting the material to the Hazardous Waste Storage Area. All load check team members are trained in handling hazardous materials and in implementing proper procedures to protect the public.

The load checking program will include records of load checks and the training of personnel in the recognition, proper handling and disposition of prohibited waste. A copy of the load checking program and copies of the load checking records for the last year will be maintained in the operating records and available for review by the appropriate regulatory agencies.

F23. Parking (14 CCR, Section 17409.6)

In accordance with 14 CCR, Section 17409.6, sufficient parking is available so that all transfer vehicles and staff may park on site. No off-site parking is required. There are five (5) general parking areas: two for visitors to the facility and administrative staff located in front of the administrative office (Map Location #13); one for employees of the MRF and Transfer Station (Map Location #19), one by the employee services and administration office (Map Location #17), and two employee parking areas by Map Locations #23 and #10, one by the green waste enclosure (Map Location #6) and the parking area for the transfer vehicles located to the left of the transfer station (Map Location #1).

F24. Solid Waste Removal (14 CCR, Section 17410.1(a)(2))

In accordance with 14 CCR, Section 17410.1(a)(2) solid waste at DSTS is removed within 48 hours of receipt. Waste is removed from the site by the transfer trailers at a frequency delineated by the Waste Removal Operations Schedule approved by the LEA in May 1992). A layer of solid waste is maintained along the bottom of the concrete pit in the Main Transfer Building in order to protect the loading tractor's tracks from damage. The approved Operations Schedule prepared by site management requires that the station rotate the refuse layer weekly and record this in the Log of Special Occurrences. The Operations Schedule also acknowledges that since transfer vehicles do not operate on all weekends, there may be occasions when solid waste received on the weekends maybe stored for more than 48 hours as allowed under 14 CCR 17410 (alternate frequency approved by EA). Waste received on Friday is used to rebuild the mat, with the remainder to be pushed to the front of the pit for removal on Monday. The pit building is fitted with overhead sprinklers which release a mixture of water and deodorant when needed, such as during removal of the mat.

The only exception is MMW. This material will be processed within 24 hours of receipt and bunkers with sorted materials will be emptied after each shift.

F25. Supervision and Personnel (14 CCR, 17410.2)

In accordance with 14 CCR, 17410.2, DSTS is staffed at all times with at least one Supervisor to manage operations. Trained employees are readily available to handle facility operations, maintenance, environmental controls, records, emergencies, and health and safety at the facility. The site's Emergency Management Plan (EMP) outlines how the site should respond to all types of emergencies (see **Appendix T** for the contents of the EMP; a full copy of the plan is available for inspection on site).

Communication between buildings on-site can be conducted by telephone. Other communication systems on-site include cell Phones and site radios for managers, supervisors and some key personnel to communicate with operational personnel throughout the site. The enforcement agency will be notified in writing of the name, address and telephone number of the operator or other person responsible for the operation. A copy of this notification shall be placed in the operating record.

F26. Training (14 CCR, Section 17410.3)

In accordance with 14 CCR, Section 17410.3, all DSTS employees receive training on code of conduct, operating procedures, company policies, and safety practices conducted monthly by site management. Emphasis is placed on safety, health, environmental controls and emergency spill response. Site managers are generally briefed once per week on pertinent issues and information.

To facilitate the review of training records during a site inspection, a summary of training topics and the sign-in sheets for each topic will be available at the Field Office (Map Location #20).

F27. Vector, Bird and Animal Control (14 CCR, Section 17410.4)

In accordance with 14 CCR, Section 17410.4 and in order to prevent propagation or attraction of flies, rodents or other vectors, wet refuse is not generally stored overnight outside of the transfer pit. Bulky goods (very large, normally non-putrescible solid waste that cannot be transported to the landfill via the normal transfer truck operation) are the exception. The Organics Transfer building, OMCF, OMRF and Transfer Building pit is where this material will be received and tipped. If bulky goods are received, they placed outside in a corner of the public disposal area then loaded into a heavy-duty trailer for transport to the landfill. Another exception is food-waste. Food waste received late in the day may not be transported out until the next day. No food and non-recoverable material is left outside overnight. Also, roll-off bins located on-site may be utilized for temporary placement of non-recoverable materials from material recovery operations, or for debris from ongoing litter pick up. These bins are dumped into the main pit frequently enough that they do not cause vector problems.

The control of rodents and other large vectors is achieved by setting traps at the transfer station. A pest control vendor is utilized in operational and non-operational areas. The vendor is currently scheduled on a bi-monthly basis for rodent and insect control. The vendors schedule may be adjusted based on site needs or any immediate issues.

The Oakland Airport is located approximately 2 miles from the Transfer Station. To minimize bird problems, the station's program consists of a falconer who flies the falcon over the entire facility as a scare tactic to make it uncomfortable for the birds to propagate. The falconer will be used onsite from 9:00 am to 4:00 pm. Hours may be adjusted throughout the year based on seasonality and bird habits. Pyro-technics are not in use at the facility thus other applications such as a whistle or flash flag are used to help abate the bird population. Davis Street TS meets yearly with Oakland Airport Operations to discuss bird control. The site is cleaned continuously to reduce the number of potential areas that would attract birds. Site personnel will also use pilot a program to use decoy falcons on the loaders at the site to minimize bird roosting.

MMW will not be stored outside of the C&D/Dry Waste/MMW MRF building overnight to prevent attraction of vectors, birds, and animals.

F28. Record Keeping Requirements (14 CCR, Section 17414)

In accordance with 14 CCR, Section 17414 and Section 18809 et seq, records are maintained at the DSTS at the following locations for a period of at least three years: Transportation Operation Building (Map Location 21); Material Recovery Department Employee Services Building (MRD, Map Location 23); Operations/Field Office (Map Location 20); Maintenance Shop (Map Location 10); and Administration Building (Map Location 13). To facilitate the review of records during a site inspection, a summary of training topics and the sign in sheets for each topic, load check log and the complaint log will be available at the Field Office (Map Location #20).

Weight/volume records of incoming vehicles are entered at the Main Scale House. The data entered at the Main Scale House is linked to the site's main administrative records database. The data entered at the scale house of the Davis Street Recycling Processing Center is tracked and summarized separately. Based on the site's historical tonnage data, the conversion factor of 5.61 cubic yards per ton is used to convert measured loads to tons. Reports of incoming material can

easily be printed for inspectors. Daily tonnage reports shall be submitted to the LEA monthly as prescribed by the Solid Waste Facility Permit. The daily tonnage reports and records of incoming/outgoing loads shall be made available during inspections. Assembly Bill 901, effective January 1, 2016, requires disposal, recycling and composting operations and facilities to submit specified information directly to CalRecycle, and to counties upon request.

The Enforcement Agency will be notified by telephone and email within 24 hours of all incidents requiring the implementation of emergency procedures. Special Occurrences are logged and maintained by Management. The log is kept in the Operation Manager's Office. This record includes complaints and any unusual incidences involving fires, injury and property damage accidents, explosions, spills, flooding or other unusual event. This log will track the nature of the complaint, the date the complaint was received, the name, address and telephone number of the person(s) making the complaint, and the action taken. The special occurrence log is available for review by authorized agency personnel upon request. All site records are open to inspection during normal business hours by authorized LEA, CalRecycle or other recognized regulatory or enforcement agency personnel.

In accordance with 14 CCR, Section 17414.1 (Documentation of Enforcement Agency Approvals, Determinations, and Requirements), DSTS will take all documents including approvals, determinations, and other requirements the LEA provides in writing, and place in the operating records maintained by WMAC staff.

F29. Communications Equipment (14 CCR, Section 17415.1)

In accordance with 14 CCR, Section 17415.1, DSTS will have adequate communication equipment available to site personnel to allow quick response to emergencies.

F30. Fire Fighting Equipment (14 CCR, Section 17415.2)

As part of the City of San Leandro building permit process, all buildings and operations within the Davis Street Transfer Station have received approvals from the City Fire Department. In accordance with 14 CCR, Section 17415.2, firefighting equipment is located in buildings and throughout the site to ensure that station personnel have such equipment readily accessible. Fire sprinklers are in place in the following areas on-site:

- Main Transfer Building [tipping floor, main pit area, and transfer/tunnel loading area]
- Vehicle Maintenance Building [main work area, spray booth, petroleum storage room]
- Heavy Equipment Maintenance Shop
- Transportation Operations Building
- Material Recovery Building
- Davis Street Recycling
- Green Material Processing and Transfer Building
- Organics Material Recycling Facility (OMRF) and Employee Building
- Organics Material Composting Facility (OMCF) Facility
 - a. Pre-Treatment processing building
 - b. Anaerobic Digestion processing building

- c. In-Vessel Composting processing building
- d. Compost Refining Processing building

Fire extinguishers are inspected monthly and the site's fire alarm system is also tested monthly. Quarterly and annual inspections of other key equipment (sprinkler systems, etc.) are also conducted for the entire site, as required by the local Fire Department or state regulations.

The OMCF will include an Auto Fire Sprinkler System within the building areas. Since the feedstock materials are typically moist with a limited processing time, it is not anticipated that the feedstock would dry out and become a fire hazard potential. In addition, areas that generate a high volume of dust and air-borne debris such as the Dual Pass Windshifters and 3/8"-1" Processor will capture dust and pneumatically transfer it to a bag house mitigating potential combustion conditions.

The Anaerobic Digestion AD system generates flammable biogas. A key process consideration in the design and process controls of the Anaerobic Digestion is that methane-containing biogas is never in the presence of air and an ignition source. Biogas can only be produced in "anaerobic" or oxygen-free conditions. Moreover, the design of the reinforced concrete and steel facility physically places all potential ignition sources outside of the biogas production and storage areas. Finally, aside from the biogas itself, there is no viable supply of fuel as the organic waste itself is wet and absorbs additional moisture throughout the AD process as part of the biological process. Additional fire prevention and control features include the following:

- A closed-head sprinkler, water-curtain will be provided at the interface between the dry digester and AD Loading area. The sprinklers will be provided 6 feet apart, within 18 inches of the hatch, and will work to cool the digester hatch assembly.
- The digesters house a highly monitored and remotely controlled process. Upon detection of a hazardous condition, the process may be terminated, and the biogas in the digester evacuated. This process is controlled from the Electrical and Control Container.
- In the case of a fire the production of biogas can be quickly terminated, and the biogas extracted from a digester in a few hours.
- Except for a very brief 10 to 12-minute period of time during the termination of the 21-day process cycle, when biogas is present in the digesters, there will be no oxygen to support combustion. Air is injected into the digester during the digester shut-down and there will be 10-12-minute period where the mixture of air and biogas is combustible; however, there are no sources of ignition in the digester. During this time period, the material will contain the maximum amount of saturation from the liquid percolate. There are no sources of ignition contained in the sealed digester such as electrical wiring or motors. All employees will receive training to work in this environment.
- The AD Loading area will be provided with a gas detection system to provide an alarm upon detection of concentrations of gas in excess of 20% of the lower flammable limits (LFL) of the biogas outside the digesters.
- The purpose of the AD Loading area is to facilitate loading and unloading of digesters. Because of this no materials will be stored in this area, and thus no fuel load will be present to support combustion. Additionally, the staging hall area will be equipped with an Auto Fire Sprinkler System.

- The entire facility will be provided with both auditory and visual hazard alarms. The alarm system will alert occupants of any hazardous conditions, and will be activated both manually and automatically by the flammable gas detectors or other fire alarm devices.
- All personnel entering the AD Loading area and Anaerobic Digestion facility will be required to have a personal biogas detector.
- The steel digester hatches cannot be opened unless the concentration of flammable gas in the vault is less than 1% of the LFL.
- The AD Loading area will be provided with an emergency ventilation system to exhaust and ventilate the space. It will activate and rapidly dilute any gases in the common areas. The system may be activated manually or automatically and will be set to activate at 20% of the LFL.
- The Anaerobic Digestion emergency systems will be supplied with standby power from an on-site uninterruptable power system (UPS).
- Each digester will be separated from adjacent digesters and other areas by 10-inch thick concrete walls and from the percolate tank below by at least a 15-inch thick concrete floor slab. Additionally, the digesters feature a 13 -inch thick structural concrete ceiling.

In the event of a fire, procedures for notifying the Fire Department and for site evacuation are detailed in the site's Emergency Management Plan.

F31. Housekeeping (14 CCR, Section 17416.1)

In accordance with 14 CCR, Section 17416.1, general housekeeping is conducted at the facility to minimize the accumulation of material (i.e. fuel drums, used parts, inoperable equipment, tires, scrap and similar items) inherent in the operation of DSTS. On a monthly basis, department supervisors conduct in-depth inspection of their areas in order to identify existing and potential issues that need to be addressed. The inspection is geared to identify deficiencies in areas such as housekeeping, condition of equipment, materials storage practices, and personnel compliance with safety practices. Any non-satisfactory findings, or areas of concern, are noted and addressed.

F32. Lighting (14 CCR, Section 17416.2)

In accordance with 14 CCR, Section 17416.2, lighting is on-site and provides for safe operations. To ensure safe operations during evening hours, outdoor lighting is provided in all employee parking areas, outside of all buildings, and on green material equipment for evening operations. The OMCF is designed with a combination of natural light from translucent panels and artificial light provided by lighting fixtures designed to withstand high humidity environments.

F33. Equipment (14 CCR, Section 17416.3)

A variety of equipment is used at DSTS. The equipment (numbers and types) is adequate to meet operational and maintenance needs to comply with 14 CCR, Section 17416.3. A detailed list of equipment to be utilized at DSTS is shown in Table 4 under Section G of this report. The Davis Street Transfer Station maintains an ample amount of well-maintained equipment to fully execute its operation and comply with regulatory requirements. All heavy equipment will have back-up alarms and lights, and be equipped with adequate fire suppression equipment.

The backup power philosophy in the OMCF is to provide for safe shutdown of equipment in the event of a power outage. Should power be lost, the Pre and Post Processing equipment will stop

which will cease the delivery of material into and out of the In-Vessel Composting lanes. The lane supply and exhaust air fans will also be shut down in an orderly manner with the assistance of a 30-kW natural gas fired backup generator. The biological process will continue within the lanes though at a reduced rate since no air or water will be added during the outage. The SPE does not envision any problems with the process for an outage of less than 48 hours. If an extended outage were to occur, then portable diesel powered generators would be rented to supply power to supply and exhaust air systems. Based on the historic electrical availability from PG&E, the local utility, an outage of more than a few hours is highly unusual.

SPE will maintain an inventory of common wear parts, the manufactures of the equipment will carry an inventory for specialized sorting equipment, and common parts such as belts, bearings and motors are off the shelf items located in Alameda County.

F34. Site Security (14 CCR, Section 17418.1)

In accordance with 14 CCR, Section 17418.1, site security at the facility is provided using a combination of fences and gates to secure the site at all entry and exit points. Video surveillance is conducted after normal operating hours, and yard lights are kept on during night hours. Gates at the facility are locked at night and the entire site is enclosed with an eight-foot high chain link fence with barbed wire on top. Furthermore, a private security contractor provides a watchman for 14 - 16 hours per day during the week and on weekends. Access is allowed to company vehicles 24 hours a day and is monitored by the guard at the Main Entrance gate after the site is closed to the public.

F35. Site Attendant (14 CCR, Section 17418.2)

In accordance with 14 CCR, Section 17418.2, DSTS has a site attendant present at the scale house during public operating hours. A facility open to the public shall have an attendant present during public operating hours or the facility shall be inspected by the operator on a regularly scheduled basis as approved by the LEA to ensure that it meets all of the requirements of Articles 6.2, 6.3 and 6.35. During public operating hours, site management is present at the facility.

F36. Traffic Control (14 CCR, Section 17418.3)

Pursuant to 14 CCR, Section 17418.3, traffic flow through DSTS is controlled to prevent interference with and/or creation of a safety hazard on adjacent public streets or roads, or create on-site safety hazards and/or interference with waste handling operations. Public traffic accesses the site via Davis Street and traffic lanes into the site and to the scale house are designed to accommodate vehicle flow, thus preventing vehicle stacking on nearby roads. In the event traffic does begin to extend onto the public street, traffic directors are utilized to ensure that traffic is distributed fully across all inbound lanes. Transfer trucks use Business Center Drive to access.

Traffic flow through the facility shall be controlled to prevent the following:

- Interference with or creation of a safety hazard on adjacent public streets or roads,
- On-site safety hazards, and
- Interference with operations.

Traffic is controlled by facility signage and traffic directors located throughout the facility. Refer to **Appendices F-1 through F-7** for traffic and circulation plans

F37. Visual Screening (14 CCR, Section 17419.1)

In accordance with 14 CCR, Section 17419.1, DSTS walls, fences, and landscaping are used to shield the transfer station from public view in those areas where it is required by City of San Leandro Conditional Use Permit.

F38. Water Supply and Waste Water (14 CCR, Section 17419.2)

In accordance with 14 CCR, Section 17419.2, potable water is available for drinking, cleaning, and emergency use in all buildings except for the main transfer building. The Transfer Building is equipped with emergency eyewashes.

The transfer facility discharges sanitary wastewater to the City of San Leandro sewer system. The transfer station is located across Davis Street from the City's sewage treatment plant. Most discharge is from common domestic facilities, with minimal discharge from the following sources: the water recycling system connected with the vehicle wash pads and drive-through truck wash; the container repair wash rack; the wash pad at the Heavy Equipment Shop; a collection sump located under the vehicle maintenance building; and another small sump located under the depressed transfer truck loading tunnel. The site discharges to the City sewer system in compliance with its City of San Leandro Industrial Wastewater Discharge Permit.

It is anticipated that up to 11,000,000 gallons of process water may be used annually. The majority of process water will be used in the In-Vessel Composting IVC process to accelerate the composting of organic waste. The process water used will be a combination of potable water supplied by the East Bay Municipal Utility District (EBMUD) and reclaimed water supplied by the San Leandro Water Pollution Control Plant. Wastewater effluent will be generated by both the Anaerobic Digestion and In-Vessel Composting IVC facilities with an anticipated maximum annual volume of 2,000,000 gallons. The process water from organic composting will be metered (flow) and analyzed for BOD, TSS, pH, etc. (similar to what occurs now at the transfer tunnels), then discharged to the Publicly Operated Treatment Works (POTW) by the combined sampling manhole where monthly Biological Oxygen Demand (BOD) / Total Suspended Solids (TSS) samples are currently collected. Wastewater will be discharged to the San Leandro Water Pollution Control Plant. No pre-treatment is currently required.

F39. Provisions to Handle Unusual Peak Loading (14 CCR, Section 18221.6(k))

In accordance with 14 CCR, Section 18221.6(k), provisions for handling peak loadings have been incorporated into the design of the station. The main pit has the capacity to store surplus waste when the daily inflow rate exceeds the outflow rate due to its configuration.

The refuse pit has a storage capacity of 18 feet high by 62 feet wide by 200 feet long. The total storage capacity is about 20,000 cubic yards or about 5,000 - 7,000 tons.

The space provided in the public disposal area, which is immediately to the south of the transfer building, and the paved area south of the main pit is also available as a surge area. In case of unusual peak loading caused by emergency circumstances, the refuse could be temporarily stored outside the building in the public disposal pad. The 110 by 350-foot concrete slab surrounding the public disposal pad is also available for temporary surge storage if necessary. In the event this area is needed to store MMW, the LEA will be contacted immediately. Material that cannot be processed within 48 hours of receipt will be sent for off-site processing at an approved location or pushed into the transfer pit for disposal offsite. When the Organics Material Recycling Facility and the Organics Material Composting Facility buildings have peak tonnage, the loading areas will not accept any new material and will rely on the plan stated above for the overage of that material.

WMAC can modify route schedules or transfer vehicle work schedules if needed to ensure sufficient main pit storage for public dumping.

Station personnel monitor the daily throughput so that action can be taken, if needed, to keep the site within its permitted daily capacity. The procedure involves a check each day to identify tonnage received that day so far and to then project the estimated daily throughput. If the projection indicates that the facility may exceed its permitted capacity, measures are taken to ensure compliance with the permitted tonnage. These measures may include contacting the hauling division to divert any large single loads from the site, diverting loads directly to the landfill or closing the site to additional incoming loads.

G. DESCRIPTION OF TRANSFER, RECOVERY AND PROCESSING EQUIPMENT

The Davis Street Transfer Station has adequate numbers and types of equipment to perform day-to-day operations. The type, capacity, and number of units currently used in the transfer of waste and material recovery and processing activities at the station is shown on **Table 4** below.

**TABLE 4
FACILITY EQUIPMENT**

Type	Capacity	Number Of Units
Bulldozer	D-8	3
Crane	Stationary with ¼ cy bucket	3
Man lift (hydraulic)	N/A	2
Power Sweeper	N/A	2
Water Truck	N/A	1
Wheel Loaders	N/A	20
Excavator	N/A	3
Possum Belly Transfer Trailers	N/A	36
Walking Floor Transfer Trailers	N/A	8
Pickup Truck	N/A	16
Service Truck (incl. lube, fuel and pump trucks)	N/A	6
Trommel Screen (for recyclables)	50 tph	1
Single Stream Sorting line (Davis Street Recycling area)	25 tph	1
Fiber baler (Davis Street Recycling area)	25 tph	1
MRF Portable sorting system (PAM)	20 tph	1
C&D/Dry Waste / MMW MRF	80 tph	1
Forklifts	N/A	11
L110 Volvo Loader		3
300 E Excavator		1
L90 Volvo Loader		2
Backhus Lane Turner		1
OMRF System	100 tph	1
OREX System	54 tph	1
OMCF – In-Vessel Composting Facility	60 tph	1
Anaerobic Digestion	250 – 325 tpd	1
• No additional equipment needed to process MMW. Equipment will be cleaned at the end of each shift.		

H. FINAL DISPOSAL OF SOLID WASTE

In accordance with 14 CCR, Section 18221.6(m), solid waste will be transferred to a landfill for burial.

Most solid waste received by Davis St. Transfer Station is disposed of at the Altamont Landfill in Livermore, CA.

I. REMOVAL OF SALVAGED MATERIAL

Most salvaged material is removed as part of a recovery processing (MRF, PAM, Green Waste, Davis Street Recycling) operation. In these operations, material is removed on a regular schedule. For example, MRF and PAM sorting line boxes are pulled multiple times per day as they fill up. Recyclables from Davis Street Recycling also have a regular and frequent shipping schedule.

J. MANAGEMENT ORGANIZATION

An organizational chart is provided in **Appendix U** and a DSTS Contact List is in **Appendix V**.

K. PERMITS

A list of current permits is provided in **Appendix W**.

L. COMPOST DOCUMENTS

The In-Vessel Digestion Report (IVDR) can be found in **Appendix M**. These technical documents have been prepared in accordance with 14 CCR, Sections 18227 and 17896.15, respectively.

M. METHANE DETECTION AND ALARM SYSTEMS

The DSTS facility overlies a portion of the closed Davis Street Landfill. Combustible gas (methane) detection and alarm systems have been installed in several existing buildings at the DSTS. Methane detection and alarm systems will also be installed in the OMRF process area and administration building. Details on existing and proposed gas barrier, detection and alarm systems are provided in **Appendix X**.

GLOSSARY OF TERMS

Bay Area Air Quality Management District (BAAQMD): The regional government agency that regulates sources of air pollution within the nine San Francisco Bay Area Counties.

Biological Oxygen Demand (BOD): The amount of dissolved oxygen needed by aerobic biological organisms in a body of water to break down organic material present in a given water sample at certain temperature over a specific time period.

California Code of Regulations, Title 14 (14 CCR): The California Code of regulations pertinent to the California Department of Resources Recycling and Recovery (CalRecycle), as approved by the office of Administrative Law and specific to solid waste handling and disposal.

Co-Collected Organics (CCO): Organic material that is collected together, such as food scraps and green waste.

Construction and Demolition material (C&D): Waste generated in construction or demolition activities including carpet, wood, aggregate, shingles, wallboard, etc.
Davis Street Transfer Station

Dry Waste: Material that does not include food scraps or other wet organic material.

Food Waste: Food that is discarded and may include fruits, vegetables, meat, pasta, etc.

Green Waste: Compostable material that may include leaves, grass, prunings, tree limbs, etc.

Material Recovery Facility: A facility that receives, separates and prepares recyclable materials for marketing to end-user manufacturers.

Multi-family Municipal Waste (MMW): Material coming from multi-family complexes that include all waste and considered trash or MSW.

Municipal Solid Waste (MSW): Commonly known as trash or garbage, is a waste type consisting of everyday items that are discarded by the public.

Organics Fraction of Municipal Solid Waste (OFMSW): Organic material that is removed from the MSW in the OMRF.

Organics Material Recycling Facility: A new facility at Davis Street Transfer Station that will include a material recovery facility that sorts the residuals from MSW.

Organics Material Composting Facility: A new facility at Davis Street Transfer Station that includes pre-treatment process, anaerobic digestion, composting and a refining process.

OMCF Pre-Treatment Process: A new Material Recovery Facility at Davis Street Transfer Station that removes recyclable and organic material prior to the composting process.

OMCF Refining Process: A new Material Recovery Facility at Davis Street Transfer Station that removes contamination after the composting process has been completed.

Organics Processing and Transfer Building: is a 29,000-square foot building where green material and source separated organics material is tipped by WMAC's intercompany collection vehicles.

Overs: Any material that is greater than 8 inches in size.

Publicly Operated Treatment Works (POTW): A term used for a sewage treatment plant that is owned, and usually operated, by a government agency.

Residuals: A quantity remaining after other things have been removed.

Anaerobic Digester: An enclosed process by which microorganisms break down biodegradable material in the absence of oxygen creating a methane bioproduct that can be used for energy, and material that can be composted after the process is complete.

In-Vessel Composting: A new indoor compost process at Davis Street Transfer Station that includes an Enclosed-Lane Composting System specifically designed by one company.

Special Purpose Entity: A business operation legally created for a special purpose, and in this instance created to own and operate the OMCF.

Total Suspended Solids (TSS): Is a water quality parameter used to assess the quality of wastewater after treatment in a wastewater treatment plant.

Transfer Station: A place where residual garbage and commercial wastes are compressed, baled, and loaded on vehicles for moving to disposal sites, such as landfills.

Unders: Any material that is less than 8 inches in size.

Wood Waste: Material that includes lumber, shipping pallets, etc.