DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

M414848096

FACILITY: DETROIT RENEWABLE POWER, LLC		**SRN / ID:** M4148
LOCATION: 5700 RUSSELL ST, DETROIT		**DISTRICT:** Detroit
CITY: DETROIT		**COUNTY:** WAYNE
CONTACT: Robert Suida , Plant Manager		**ACTIVITY DATE:** 03/12/2019
STAFF: Todd Zynda	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: March 12 and 13, 2019 Inspection and April 17, 2019 Inspection		
RESOLVED COMPLAINTS:		

PURPOSE OF INSPECTION: Targeted
INSPECTED BY: Todd Zynda (AQD), Jon Lamb (AQD), Dana Bradt (DEQ Emergency Management)
PERSONNEL PRESENT: Mark Fletcher, DRE Director EHS; Brandon Chase, Environmental Specialist; Erin Barry, DCO Energy Environmental Manager; Scott Venman, Barr Engineering Co.; Rob Suida, Plant Manager; Demall Goosby, MSW Control Room Operator; Grayson Goarcke, Power Block Shift Supervisor; Jody Tuner, Power Block Control Room Operator
FACILITY PHONE NUMBER: (313) 963-3695
FACILITY WEBSITE: http://www.detroitrenewablepower.com/

FACILITY BACKGROUND

Detroit Renewable Power LLC (DRP), also known as the "Detroit Incinerator", a subsidiary of Detroit Renewable Energy LLC (DRE) operates 7 days per week, 24 hours a day. In November 2010, DRE bought the incinerator (operated under DRP) along with Detroit Thermal Company and Hamtramck Power Plant. At that time, DRE was 75 percent owned by Atlas Holding Company. In January 2018 Basalt Infrastructure Partners II LP (Basalt) and DCO Energy (DCO) acquired DRE. The facility currently has approximately 140 employees. The facility converts incoming municipal solid waste (MSW) into a processed-refuse derived fuel (RDF) to generate steam and electricity for sale. The facility consists of an MSW processing facility to produce RDF, three RDF combustors, a generator with a 68 MWe nameplate capacity, and associated support equipment. The facility began commercial operation in 1991. Significant retrofit modifications to install new air pollution control equipment were made between June 1991 and October 1995.

DRP is located at 5700 Russell Street in Detroit, County of Wayne, next to the City of Detroit Public Works Yard. The site is in the southeast quadrant of the city and is bounded by the I-94 Freeway to the north, Ferry Street to the South, the Grand Trunk Railway to the east and Russell Street to the West. The facility is permitted to process 20,000 tons per week and 1,043,000 tons per year of MSW. The RDF fired in the boilers is processed onsite through the use of sorting, shredding, and sizing equipment to create a "homogeneous" fuel mixture. No hazardous waste, pathological waste, infectious waste or sludge is processed at the facility. The nearest residential area is approximately 0.3 mile northeast of the facility.

The RDF combustors also operate on No. 2 fuel oil as an auxiliary fuel that is generally used during start-up, shutdown, and malfunction operations or at other times as needed.

The municipal waste processing begins at the Waste Processing Facility (WPF) tipping floor where MSW is delivered by truck. Waste deposited on the tipping floor is inspected, and unacceptable waste is segregated from the primary waste. The processing of the waste involves following steps:

A picking station to remove or break up large items
A primary shredder to break apart and reduce the size of the material
A secondary shredder unit to further reduce the size of any oversized material

Material from the secondary shredders produces RDF which is delivered to the RDF storage area through a series of conveyors. The dust generated from the solid waste processing equipment is controlled by building roof vent filters and dedicated cyclones and baghouses. The primary shredder in each of the three MSW process lines has a dedicated stack where particulate emissions are controlled by its own baghouse. A combination of

cyclone and baghouse control system is used to control particulate emissions from each secondary shredder in each of the three process MSW lines.

The RDF is burned in three combustion units. The combined high-pressure superheated steam generated by the three combustion units is supplied to the turbine/generator. The turbine produces electrical power for sale to the Detroit Edison Company (DECO) grid system. Steam is also provided to Detroit Thermal LLC's central heating and cooling system. A four-cell wet cooling tower is operated to dissipate the excess heat output of the facility.

The products of combustion from the RDF furnaces are controlled by a spray dryer, a fabric filter system, and good combustion practices. Combustor flue gas first enters the spray dryer absorber (SDA) where it is contacted by a cloud of finely atomized droplets of hydrated lime slurry. The flue gas temperature is decreased and the humidity is increased as the lime slurry simultaneously reacts with acid gases present and evaporates to dryness. The lime slurry removes acid gases, trace metals, and organics. The fabric filter, located downstream of the spray dryer absorber, removes the reacted lime compounds and particulate matter from the combustion flue gas. Unreacted lime reagent embedded in the baghouse filtercake provides added acid gas removal. Particulate matter captured by the fabric filter is discharged into hoppers and subsequently delivered by transfer conveyors to the ash discharger, wetted and mixed with bottom ash. The control of Carbon Monoxide, oxides of Nitrogen, and organic compound emissions is provided through the use of good combustion practices such as burning preprocessed fuel (RDF), combustion air preheating, a high degree of control of combustion air flow distribution and controlling combustion temperature.

The products of combustion from firing No.2 fuel oil are minimized by good combustion control, burner design, and the use of lower Sulfur content oil (0.3 wt%).

The bottom ash that is produced during the combustion process collects on the traveling stoker grates and is discharged from the grates into the water-quench trough and moves the ash up an inclined de-watering slope, prior to discharge onto bottom ash belt conveyor. The belt conveyor transports the ash from the Power Block building through the fly ash pugmill building and ultimately to Ash Disposal Building.

Fly ash generated by the combustion process that is collected by the fabric filter, economizer, and air heater drops into ash hoppers. The ash is then metered into an enclosed horizontal drag-flight conveyor for transport. At the end of the conveyors, the fly ash is collected in a surge bin equipped with a level controller. Based on bin level, the fly ash is fed by a rotary control valve into one of two pugmills. After mixing with water in the pugmills, the wetted fly ash is dropped onto the bottom ash conveyor belt that runs directly under the pugmills.

The ash conveying system ultimately ends in the ash loadout/storage building. With the exception of two truck doorways, the building is enclosed on all sides.

Ash transported on the belt conveyor is discharged on the floor of the building. Dust generation is minimized due to the high moisture content of the ash. Ash hauling trucks enter the building through a doorway at the north side of the building. Ash is loaded into ash haul trucks by front-end loaders. The trucks continue to the southern portion of the building where they are washed, inspected and covered with a tarpaulin prior to exiting the building. The trucks exit through a doorway at the south side of the building.

COMPLAINT/COMPLIANCE HISTORY

During 2016, there were 231 complaints received over 90 days regarding odors from DRP. As a result of 2016, AQD complaint investigations, DRP was issued violation notices for 17 days of Rule 901 violation during 2016. During 2017, there were 240 complaints received over 93 days regarding odors from DRP. As a result of the 2017 complaint investigations, DRP was issued violations for 11 days of Rule 901 violation during 2017. During 2018, there were 430 complaints received or 116 days regarding odors from DRP. As a result of the 2018 complaint investigation DRP was issued violations for 24 days.

A Consent Judgement (File No. 14-1184CE) to address ongoing odors from the facility was issued on October 20, 2014. During the negotiations of the Consent Judgment and leading to the entry date on October 20, 2014, DRP installed an odor neutralizer spray system in the RDF Storage Building. The Consent Judgment requires that DRP properly operate odor neutralizer systems in the RDF and municipal solid waste (MSW) processing areas from April 15 through October 15.

Additionally, the Consent Judgment required DRP to design a system for controlling odors from the RDF Storage Building and RDF Conveyor Gallery (collectively, the RDF Control System). The RDF Control System collects and carries exhaust air to the boilers for combustion. Combusting the air is intended to reduce odorous emissions from the processes. The Consent Judgment established a schedule for the design, construction, and testing of the RDF Control System to assure it was built and is operating as designed. This testing was conducted on October 28, 2016; the Company's contractor reported that the RDF Control System is operating consistently with the design plans.

Since entry of the Consent Judgment, DEQ staff has continued inspections to verify compliance with its terms, including odor control requirements. The DEQ may determine that additional odor control measures are necessary if the DEQ identifies Rule 901 nuisance odors attributed to the Company. If so, the DEQ must provide written notice to the Company seeking additional odor control measures. On July 31, 2018, a written Notice of Determination of Necessity for Additional Measures was provided to the company's attorney. The written notice states that the measures described in Section III of the Consent Judgement have proven insufficient to control odors from the facility. The notice included, the number and type of odor complaints received by the AQD and attributed to operation of the facility, the estimated time duration of each odor incident, field observations of each odor incident that the AQD alleges constituted a violation of Rule 901, and the basis for AQD's determination that the odors are attributable to the facility.

Additionally, the facility was cited for multiple emission limit violations for particulate matter (PM), carbon monoxide (CO), and sulfur dioxide (SO2) during both 2015 and 2016 (see facility file). As a result, a Consent Order was developed and underwent public comment from December 12, 2016 through March 8, 2017. A public hearing was held on March 8, 2017. The Consent Order requires the Company to comply with an approved Startup, Shutdown, and Malfunction Plan (SSM); to comply with existing PM, CO, and SO2 emission limits for three boilers; and comply with the quality assurance requirements for the continuous emission monitoring systems (CEMS) that are in operation at the facility. The Consent Order (AQD No. 6-2017) has an effective date of June 19, 2017.

Since the last inspection on May 14, 2018, violation notices not pertaining to Rule 901 have been issued to DRP. The below table summarizes violation notices issued since the last inspection. For further information please see the facility file.

5/18/2018	various	Failure to include excess emission and monitor downtime for Q1 2018. Failure to report SSM and corrective action for excess emissions for Q1 2018. Subpart Cb report does not included all data for excess emissions
5/18/2018	5/2/2018	2nd VN- Failure to respond to VN dated 4/11/18 (ROP Certs).
7/20/2018	various	SO2 24 hour geometric mean exceedances (boiler 12 and 13), CO 24 emission exceedances (12 and 13), 1 hour CO emissions exceedance (boiler 13), failure to operate SDA (boiler 11, 12, and 13), failure to maintain SDA weekly, monthly, and semiannual PM checks, failure to report all excess emissions, flue gas oxygen content less than 4%, combustion zone temperature less than 1800 F while firing RDF.
7/26/2018	2nd half 2017	Subpart Cb report, Failure to list the highest emission level recorded for Boiler 11 (Sulfur dioxide [SO2] at 66 ppmv on 12/31/2017) and Boiler 13 (carbon monoxide [CO] at 204 ppmv on 12/29/2017).
9/19/2018	2018 Inspection	Process line baghouse pressure drop, monthly exhaust filter inspections, negative pressure at Tip East 5, SSM checklist records
9/25/2018	2nd Quarter 2018	1-hour CO exceedances, 1-hour NOx exceedance, and flue gas oxygen content

9/26/2018	NA	Correspondence regarding DRP's VN responses, 1hr CO, 1hr NOx, 24 SO2, 24 hr CO, flue gas oxygen content, SDS operating satisfactorily, Subpart Cb reporting
9/28/2018	1st Half 2018	Subpart Cb report, Failure to list the highest emission level recorded for Boiler 12 (Sulfur dioxide [SO2] at 38 ppmv on 1/15/2018 and carbon monoxide [CO] at 283 ppmv on 1/30/18) and Boiler 13 (SO2 at 33 ppmv on 1/23/2018).
10/12/2018	10/2/2018	Solid waste tipping floor, pit area, and processing equipment not clean
10/24/2018	10/18/2018	EUASH-HANDLING - Ash Build up outside of ash conveyor
11/21/2018	3rd Quarter 2018	24-hour SO2 and CO exceedances, 1-hour CO and NOx exceedances.
12/12/2018	6/19/17 thru 8/21/18	ACO AQD No. 6-2017 SSM records missing or not complete.

On October 18, 2018, the AQD Detroit District referred DRP to the AQD Enforcement Unit to resolve the above listed violations (non Rule 901). At this time a legal document (ACO or CJ) resolving the violations has not been finalized.

On March 27, 2019, the facility announced that plant will be closing (see facility file for news articles).

INSPECTION NARRATIVE

On March 12, 2019 the MDEQ Air Quality Division (AQD) inspectors, Mr. Todd Zynda and Mr. Jon Lamb, conducted an inspection of DRP located at 5700 Russell, Detroit, Michigan. During the inspection Ms. Dana Bradt, MDEQ Assistant Health and Safety Coordinator/PEAS Administrator accompanied the inspection. During the inspection Mr. Mark Fletcher, DRE Director EHS, Mr. Brandon Chase, Environmental Specialist, Ms. Erin Barry, DCO Energy Environmental Manager, Mr. Scott Venman, Barr Engineering Co., Mr. Rob Suida, Plant Manager, Mr. Demall Goosby, MSW Control Room Operator, Mr. Grayson Goarcke, Power Block Shift Supervisor, and Mr. Jody Tuner, Power Block Control Room Operator, provided information and tour of facility operations.

The inspection was conducted to determine the facility's compliance with the Natural Resources and Environmental Protection Act (NREPA), Act 451, Part 55, and MI-ROP-M4148-2011a and associated Odor Management Plan and Fugitive Dust Management Plan, and Consent Order AQD No. 6-2017.

During the opening meeting, facility operations were discussed. Following the opening meeting, an inspection of the facility was conducted. The inspection began with a walk around outside of the RDF Building and MSW Building. At that time, a large panel of siding was damaged and falling off the south side of the MSW building (see attached photo). According to Mr. Suida, the siding was damaged during the recent wind storm. The siding was slated to be fixed in the next few days.

The inspection continued with observation of the upper and lower tipping floors. At that time, several haulers were tipping at both locations. According to Mr. Suida, the tipping floors are cleaned (scraped) at the end of each day. According to Mr. Chase, the facility still has difficulty maintaining negative pressure at Tip Floor East 5. Observation of velometer readings were not observed during the inspection.

Following observation of the tipping floors the cold cleaner located in the facility maintenance shop was observed. The cold cleaner has surface area dimensions of approximately 2.5 feet by 3 feet (air/vapor interface of approximately 7.5 square feet). The solvent in the cold cleaner is not heated or agitated. During the inspection the cold cleaner lid was closed and operating instructions were posted in a visible location. New operating instruction stickers were provided to the facility.

Following observation of the facility maintenance shop cold cleaner, the WPF tipping floor and process lines were observed from inside the WPF. During the inspection process lines 100, 200 and 300 were in operation. Correspondence provided by the facility via email on May 3, 2017 indicates the operating pressure drop range is

2 inches to 10 inches (see 2017 file inspection – Greater Detroit Resource Recovery, Instruction Book for Ray-Jet Dust Collectors). During the inspection, the pressure drop for the primary baghouse and secondary baghouse were recorded as follows from the WPF control room log book.

Primary 100 – 4.1"
Primary 200 – No reading, gage down for maintenance for last two days
Primary 300 – 2.6"

Secondary 100 – 12.8"
Secondary 200 – 8.3"
Secondary 300 – 8.1"

During the inspection, the secondary 100 pressure drop readings were outside of the operating range. According to the previous inspections, all baghouse maintenance and calibration of the gages is conducted by an outside contractor.

During the inspection secondary process lines and conveyors were observed from the windows on the control room floor. The primary shredder and associated baghouses are located in the same area as heavy equipment (front loaders, etc.) and therefore the equipment was not visually inspected. A level detector is installed at the air lock location on at the end of the cyclone. The level detector provides indications if the air-lock is jammed. According to Mr. Suida and Mr. Goosby, each processing line can process 50 tons MSW per hour and MSW is received from 5:00 AM to 5:00 PM Monday through Friday (with some Saturday morning deliveries).

Within the WPF control room the fans for the roof vents are monitored continuously by indicator lights (green =on, red= off, blank = circuit is shutoff for service). It was verified during the inspection that circuits for fans 2, 4, and 5 were shut off as maintenance was being conducted on the roof vent fans and filters. The control room log for roof fans indicated that all fans were "off for odor control". According the facility the record observed during the inspection is incorrect (and subsequent records) as the fans are always operating. This was verified as the fans appeared to be in operation based on the indicator lights in the control room. The control room operator has not recorded fan operations accurately. According to DRP, the fan log will be revised so that accurate information is collected going forward. Barr is planning to help the facility revise the fan log sheet.

The tipping floor area was also observed from the glass windows on the control floor of the WPF. At this time, the picking stations were observed. The picking stations remove bulky or noncombustible materials (mattresses, couches, propane tanks, etc.).

During the inspection the WPF roof vents were not observed as the process lines need to be shutdown prior to going out on the roof, and additional fall protection is required (not accessible from the roof catwalk). The roof was later observed from the catwalk at the SDA for Boiler 11. At that time visible emissions were not observed from any baghouse stack or roof vent.

During the inspection, the ash load-out storage building was observed. During the inspection there was a truck in the ash load-out storage building being loaded. According to email correspondence on May 4, 2017 from Ms. Peebles, regarding the 2017 inspection, the fans and associated filters were removed on during April 2016. The filters have been replaced with Styrofoam insulation board. According to the facility, visible emission readings are collected at the door ways of the ash load-out building. During the inspection there were no visible emissions from the ash load-out storage building.

The facility inspection continued with observation of the boiler control room. During the inspection Boilers 11 and 12 were in operation. The following instantaneous readings were collected during observation of the boiler control room.

Boiler 11	
Boiler Temperature (F)	2175
Steam Flow (klb/hr)	299
Baghouse Pressure Drop (inches H2O)	7.6125
Baghouse Inlet Temperature (F)	329
Slurry Flow (gpm)	16.775

SDA Pressure Drop (inches H2O)	3.6726

Boiler 12	
Boiler Temperature (F)	2351
Steam Flow (klb/hr)	302
Baghouse Pressure Drop (inches H2O)	7.2337
Baghouse Inlet Temperature (F)	304
Slurry Flow (gpm)	6.2812
SDA Pressure Drop (inches H2O)	2.8560

According to the previous inspection, the boiler baghouse pressure drop operating range is 6 inches to 10 inches.

The RDF control system was not in operation during the inspection. Per facility Odor Management Plan the RDF control system is to operate during the odor season (April 15 through October 15 annually).

Next, the SDA control and lime storage silo were observed. During the inspection, the SDAs were in operation on Boilers 11 and 12. The flow meter in the SDA control area indicated a lime slurry flow rate of 17.54 gallons per minute at Boiler 11. The flow meter screen for the lime slurry flow rate at Boiler 12 was not readable (screen malfunction). From the catwalk where the SDA's are located, the lime storage silo and associated baghouse was observed. Visible emissions were not observed.

Following observation of SDA control and lime storage, the cold cleaner in the mobile equipment maintenance shop was observed. The cold cleaner has surface area dimensions of approximately 2.5 feet by 3 feet (air/vapor interface of approximately 7.5 square feet). The solvent in the cold cleaner is not heated or agitated. During the inspection the cold cleaner lid was closed and operating instructions were posted in a visible location.

A follow up meeting was held on March 13, 2019 to review the AQD records request (see attached document). Some records were provided during the March 13, 2019 meeting. The remaining records were provided via email on March 22, 2019.

On April 17, 2019 an inspection of the RDF Building, Process Line Building, and MSW Storage Building was conducted with DEQ Waste Management and Radiological Protection Division (WMRPD) – Greg Morrow, Wendy Lukianoff, Alex Whitlow, and Wayne County Department of Public Services – Environmental Services Group, Land Resource Management Division (LMD) – Jennifer Depaulis, Craig Bell. Records were not requested as part of this visual inspection.

APPLICABLE RULES/PERMIT CONDITIONS

Renewable Operating Permit No. MI-ROP-M4148-2011a

The ROP was renewed with an effective date of August 19, 2011. The ROP was revised on September 16, 2014. For brevity, permit conditions and the language of federal and state rules have been paraphrased.

SOURCE-WIDE CONDITIONS

SC VI., SC IX 6, 7, and 8. Shall implement and keep records as outlined in the facility's Fugitive Dust Management Plan, Odor Management Plan, and Abnormal Conditions/Startup/Shutdown Malfunction Abatement Plant. The records associated with these plans are evaluated below.

SC IX. 1, 2, 3, 4, 5. 40 CFR Part 60, Subpart Cb, Db, Eb, 40 CFR Part 62, Part 62, Subpart FFF, and Michigan Air Pollution Control Rule 932 (R 336.1932) are discussed below. These regulations are incorporated into the MI -ROP-M4148-2011a.

SC IX. 9. **NOT IN COMPLIANCE**. Shall sweep all plant roadways and paved areas using water when weather permits. During the inspection on March 12, 2019 the facility appeared to meet this requirement. However, a subsequent inspection on April 17, 2019 observed excessive track out in the yard immediately north of the MSW building and the truck exit road on the west and north side of the facility.

SC IX. 10. **NOT IN COMPLIANCE**. Shall pick up debris on the plant yard and along property line fences on a daily basis or other schedules approved by the division. During the inspection it was observed that garbage debris was littering the fence line on the east end of the facility. A subsequent visit outside property on April 8, 2019 observe similar debris along the fence line and plant yard. During a subsequent inspection on April 17, 2019 garbage debris was observed along the fence line and plant yard.

EUASH-HANDLING

SC I.1 and V.1. **COMPLIANCE**. No visible emissions, excluding uncombined water vapor. Testing completed once a year. Testing was completed on October 2, 2018 by RWDI Consulting Engineers & Scientists (RDWI). Testing results indicate zero visible emissions.

SC I.2 and V.2. **COMPLIANCE**. PM emissions not to exceed 0.1lb particulate per 1000 lbs of exhaust air. Testing conducted as requested by the AQD. At this time testing has not been requested.

SC VI. 1 and 2. **COMPLIANCE**. Shall perform daily visible emission observations on all applicable emission points by either a certified or non-certified reader and keep records as specified in SC VI.2. As described above, the facility has removed the fans and filters for the ash/load-out building. The filters have been replaced with Styrofoam insulation board. According to the facility, visible emission readings are collected at the door ways of the ash load-out building. The facility performs visible emission readings on a daily basis as demonstrated by the "Ash Handling – Baghouse Stack Emission Form". There is no baghouse associated with EUASH-HANDLING; it appears the form is mislabeled. Records were provided for February 8, 2019 through March 8, 2019. During the inspection visible emissions were not observed.

SC VI. 3. **NOT APPLICABLE**. Shall inspect any roof vent filters, insertable dust filters in wall-mounted exhaust fans, at a minimum every two weeks. There are no filters or fans to inspect.

SC IX. 1, 2, and 3. **COMPLIANCE**. Shall dispose of collected ash in a manner that minimizes introduction of air contaminants. Shall inspect and clean the covered ash trucks prior to leaving the site. Shall control spillage of excess covered ash trucks by discharging excess water to the sewer system. During the inspection the loading of an ash truck was observed. During the inspection, these conditions appeared to be met.

EULIME-FEEDSYS

SC I.1, V.1 and 2, VI.1, 2, 3, 4, 5, 6, and 7. **COMPLIANCE**. Visible emissions not to exceed 10% opacity on a 6-minute average. Shall conduct VE readings by a certified or non-certified reader per SC VI. If visible emissions are observed, loading shall be ceased and baghouse inspections shall be conducted. The malfunction shall be corrected prior to resuming loading. Daily VE readings to be conducted in addition to VE readings during loading and after loading. Any repairs and corrective actions needed to address the cause of malfunction or failure shall be conducted immediately. Records of inspections, malfunctions, repairs to be maintained. The facility provided daily records (February 2, 2019 through March 8, 2019) and lime loading VE records (December 23, 2018 through March 6, 2019). Daily records indicate no visible emissions. During the inspection visible emissions were not observed. The facility did not provide any records of inspections, cause of equipment malfunction, etc. for the requested time period of February 2, 2019 through March 8, 2019.

SC I.2 and SC III.3. **COMPLIANCE**. PM emissions not to exceed 0.0.2 grains/dry standard cubic feet exhaust gas. Testing conducted as requested by the AQD. At this time testing has not been requested.

SC VIII.1. **COMPLIANCE**. SVLIME-BAG-FILT not to exceed 12 inches and shall be a minimum 54 feet above ground surface. During the inspection the exhaust dimensions appears to meet ROP requirements. Measurements were not collected.

SC IX. **COMPLIANCE.** Shall not substitute any raw material which would result in an appreciable change in air quality. The facility appears to be meeting this requirement.

EUSTORAGETANK

SC VI. 1. **COMPLIANCE**. Shall maintain true vapor pressure of all organic compounds stored in kilopascals at actual storage conditions. The facility provided a Safety Data Sheet for "No. 2 Diesel Fuel – Phillips 66" dated October 1, 2014. The vapor pressure is listed as 0.4 mmHg (0.053 kPa).

SC VI. 2 and 3. **COMPLIANCE**. Readily accessible records showing the dimensions and design capacity of the storage vessel. The facility maintains records showing the dimensions and design capacity of the storage vessel. Records were provided as part of the 2017 inspection via email on April 26, 2017. The design capacity is listed at 500,000 gallons.

SC IX. 1 and 2. **COMPLIANCE**. Shall comply with NSPS Kb. Shall not store any volatile organic liquid with a maximum true vapor pressure of more than 3.5 kPa at actual storage conditions. As listed above, the vapor pressure for No. 2 fuel oil is 0.053 kPa. The storage tank is not subject to NSPS Kb per §60.110b(b).

FGMSWPROC-LINES

SC I.1, V.3, and VI.6. **COMPLIANCE**. PM emission not to exceed 0.0028 lb particulate per 1,000 lb of exhaust gas. Shall determine particulate emissions on the process lines according to EPA Method 17. Shall measure air flow for the primary and secondary baghouses. Testing was completed on the 200 process line (EUMSWPROC-LINE2) on October 2, 2018 by RWDI. Primary shredder baghouse emissions are reported as 0.0024 lb/1000 lb flue gas. Secondary shredder baghouse emissions are reported as 0.0024 lb/1000 lb flue gas. Flow rates were measured as required.

SC I.2, V.1 and 2, VI.11 and 12. **COMPLIANCE**. No VE, excluding uncombined water vapor. VE readings by a certified or not certified reader. Daily VE readings to be collected. The facility provided daily VE records (February 3, 2019 through March 10, 2019). The facility reports no visible emissions and no malfunction or corrective action.

SC II. 1 and 2, III. 1. **COMPLIANCE**. MSW shall not receive or process more than 20,000 tons per week or 1,043,000 tons per year. Shall accept, process and combust only MSW. The facility provided records for February 25, 2018 through February 24, 2019 demonstrating compliance with the material limits. The facility only processes MSW. The highest reported weekly MSW occurred for the week ending February 25, 2018 at 17,148 tons received and 18,125 tons processed. The facility reports annual tonnage weekly (rolling) with processed tons less than 750,000 tons or less during the reporting period.

SC IV. 1.and 4, VI. 3, and 5. **NOT IN COMPLIANCE**. Shall not operate process lines unless the designated cyclones and baghouses for the process lines are installed and operating properly. Shall maintain the differential pressure gauge and associated equipment across the baghouses in proper operating condition. Shall monitor and keep records (daily), of the pressure drop across each of the three primary and secondary baghouses. Shall not operate the applicable emission unit if the particulate control equipment pressure drop falls out of the range established during the most recent stack test and/or per the manufacturers recommended operating pressure drop range.

As described above, the operating pressure drop range both primary and secondary baghouses is 2 inches to 10 inches. The most recent stack testing event occurred on October 2, 2018 on process line 2 with pressure drops as follows: Primary 200 – 2.28 to 2.30 inches, Secondary 200 – 2.04 to 3.09 inches. During the inspection on March 12, 2019, the pressure drop for the primary baghouses and secondary baghouses were recorded as follows from the WPF control room log book.

Primary 100 – 4.1"
Primary 200 – No reading, gage down for maintenance for last two days
Primary 300 – 2.6"

Secondary 100 – 12.8"
Secondary 200 – 8.3"
Secondary 300 – 8.1"

In review of the records provided for January 28, 2019 through March 10, 2019, the pressure drop readings for the primary and secondary baghouses were out of the operating range on multiple days at secondary baghouse for Line 1 and secondary baghouse for Line 2 over a 41 day period (January 28, 2019 through March 10, 2019)

as outlined in the below table. The remaining baghouses (primary lines 1, 2, and 3, and secondary line 3) were within the specified pressure drop range.

Baghouse	days out of operating range	% days outside operating range	lowest reading outside of operating range	highest reading outside of operating range
Secondary Baghouse - Line 1 (135)	41	100	NA	14.5
Secondary Baghouse - Line 2 (235)	14	34	NA	11.8

Secondary baghouses for lines 1 and 2 have multiple days with pressure drop readings outside the recommended operating range and the range established during the most recent stack test. This is a violation of SC IV.1 and VI.3.

SC VI. 13. **NOT IN COMPLIANCE**. Any repairs and corrective action needed to address the causes of malfunction or failure of the control equipment shall be performed immediately. Maintenance records were not provided. The facility provided baghouse inspection preventative maintenance scheduling, but no maintenance records documenting the events took place. The facility did not provide maintenance records for repairs and corrective actions during the 2018 inspection. During the 2017 inspection the last maintenance performed occurred on October 20, 2016 on primary line 207. At that time, the primary baghouse 207 was leaking at the manifold. The work order provided indicates that the leak was repaired. On October 2, 2016, the secondary baghouse 235 had a solenoid valve replaced. There were no other repairs reported for 2016. The last full change out of the baghouses was conducted during October 2013. Based on the maintenance records provided in 2017 and the lack of records provided for 2019, the facility has not conducted the necessary repairs to bring the pressure drop back into the operating range in a consistent manner. As described above under SC IV. 1 and 4, VI. 3, and 5, the facility continues to operate the baghouses when the pressure drop is out of the specified operating range.

SC IV. 2, VI.8 and 10. **COMPLIANCE**. Shall not operate FGMSWPROC-LINES unless all roof exhaust vent filters are in place and operating properly. Shall inspect the roof exhaust filters, at a minimum, once per month for damages. The appears to be meeting this requirement. Records were provided for February 2019.

SC IV. 3 and VI. 2. **NOT IN COMPLIANCE**. Shall maintain a negative pressure in the solid waste receiving, processing, and storage rooms during facility operations. A velometer shall be used to periodically check open doors to ensure that inward airflow is maintained. Doors shall be kept closed when not receiving waste. Shall monitor the negative pressure from the solid waste receiving room at least once per day. The facility measures the wind speed in feet per minute every two hours during times when waste is received. Records are not collected on the weekend as the doors are typically closed. Records provided for February 1, 2019 through March 8, 2019 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door). Velocity readings indicate a measurement for wind speed going out Tip East 5 for nearly all readings provided from February 1, 2019 through March 8, 2019. This is a violation of SC IV.3.

During the inspection on April 17, 2019, it was observed that the MSW fans were not in operation. Within the WPF control room the fans for the roof vents are monitored continuously by indicator lights (green =on, red= off, blank = circuit is shutoff for service). During the inspection April 17, 2019 the indicator lights for the fans were either red (off) or blank (shutoff for service).

SC VI.7 and VI.14. **COMPLIANCE**. Shall conduct inspections at a minimum at least once a month to determine the operational condition of the cyclones and the baghouses. Items to be check shall include items listed in SC VI. 7. Shall maintain records of inspection, cause of equipment malfunction or failures, repairs, and corrective action taken for each control equipment. Baghouse monthly inspection records for January and February 2019 were provided. The inspection records match the required items listed in SC VI.7.

SC IX.1 **NOT IN COMPLIANCE**. Shall clean the solid waste receiving tipping floor, pit area, and processing equipment on a daily basis, or more if required, such that odors from these sources are minimized. During the inspection on April 17, 2019, the MSW tipping floor and primary shredder areas were observed to have

significant garbage accumulation on the stairs and catwalks to the primary shredders. The amount of material built up in this area, is likely not the result of "transfer station operations", but rather accumulated over an extended period of time during process line operation. According to Mr. Suida and Mr. Fletcher, the tipping floor is anticipated to be cleared by April 23, 2019. At that time the facility will begin cleaning the other remaining areas that material has accumulated.

FGBOILERS011-013

SC I.1 through 8, 10, 12, 14, SC VI.1. **COMPLIANCE**. Various emission limits as listed in the below table. DRP performed stack testing and relative accuracy test audits (RATAs) on the following dates.

Boiler #11 (EUBOILER011) – October 18 and November 2, 2018 (RATA) and December 17 through 19, 2018
Boiler #12 (EUBOILER012) – October 12, 2018 (RATA), October 29 through 31, 2018
Boiler #13 (EUBOILER013) - November 14 through 16, 2018, November 21, 2018 (RATA)

Measured emissions were in compliance with the appropriate emission limit.

	Boiler 11	Boiler 12	Boiler 13	Permit Limit
Particulate Matter	0.0011	0.005	0.001	0.010 gr/dscf
Cadmium	<0.26	<0.7	0	35 ug/dscm
Hexavalent Chromium	0.14	<0.61	<0.09	4.2 ug/dscm
Total Chromium	2.20	9.60	2.30	200 ug/dscm
Lead	0.002	0.015	0.003	0.440 mg/dscm
Mercury	<1.10	<1.9	<0.74	50 ug/dscm
Total Dioxins/Furans	25	13.9	10.97	30 ng/dscm
Fluoride	0.22	0.23	0.20	5 ppmdv
Hydrogen Chloride	3.7	3.8	5.8	25 ppmdv
Carbon Monoxide, 24 hr average	114	43.7	93.9	200 ppmdv
Nitrogen Oxides, 1 hr average	198	209.3	168	247 ppmdv
Sulfur Dioxide, 24 hr average	11	15.8	10.6	30 ppmdv
Volatile Organic Compounds	8.3	7.6	5.3	65 ppmdv
Visible Emissions, 6 min. average	3	2	3	10% Opacity

The facility utilizes a continuous opacity monitoring system (COMS) to demonstrate compliance with the visible emissions (SC I.14) on a continuous basis. COMS data provided for February 2019 demonstrates compliance with the SC I. 14 for all three boilers. The facility also reports any opacity exceedances in quarterly excess emission reports. During the Second Quarter 2018, Third Quarter 2018, and Fourth Quarter 2018 zero hours of excess emissions (opacity) were reported.

SC I.9, SC VI.2 through 12. **NOT IN COMPLIANCE**. SO2 emissions not to exceed 29 ppmv (dry basis) corrected to 7% oxygen (24-hour daily geometric mean). As demonstrated in the above table, SO2 emissions were in compliance with the emission limit during stack testing conducted during October 2018, November 2018, and December 2018. The facility utilizes continuous emissions monitoring systems (CEMS) to demonstrate compliance with the SO2 emission limit on a continuous basis. As part of the review of Continuous Emissions Monitoring Systems Reports for the Second, Third, and Fourth Quarter 2018, the following SO2 emissions exceedances were identified and documented through violation notice dated November 11, 2018: Boiler 12 on 8/11/18 (31 ppm), and Boiler 13 on 8/11/18 (39 ppm).

SC 11.a, b, and c, SC VI. 22 through 28. **NOT IN COMPLIANCE**. CO emissions not to exceed 200 ppmv (dry basis) corrected to 7% oxygen (24-hour block daily average), 267 ppmv (dry basis) corrected to 7% oxygen (1-hour block average), and 2500 ppmv (dry basis) corrected to 7% oxygen (3-hour block average during periods of startup and shutdown). As demonstrated in the above table, 24-hour CO emissions were in compliance with the

emission limits during stack testing conducted during October 2018, November 2018, and December 2018. The facility utilizes CEMS to demonstrate compliance with the CO emission limits on a continuous basis. CEMS data has been provided during quarterly reporting since the Third Quarter 2017. As part of the review of quarterly CEMS data, the below CO exceedances were reported.

Q2 2018– Boiler 11 - 5 hours total (5 hours process problems)
Q3 2018- Boiler 11 - 28 hours total (9 hours Startup/Shutdown, 19 hours process problems)
Q4 2018 – Boiler 11 - 9 hours total (4 hours Startup/Shutdown, 5 hours process problems)

Q2 2018 – Boiler 12 - CO – 3 hours total (1 hour Startup/Shutdown, 2 process problems)
Q3 2018- Boiler 12 - 10 hours total (5 hour Startup/Shutdown, 5 process problems)
Q4 2018 – Boiler 12 - 11 hours total (7 hour Startup/Shutdown, 4 process problems)

Q2 2018 – Boiler 13 - 23 hours total (5 hours Startup/Shutdown, 18 hours process problems)
Q3 2018 - Boiler 13 - 6 hours total (4 hours Startup/Shutdown, 2 hours process problems)
Q4 2018 – Boiler 13 - 16 hours total (4 hours Startup/Shutdown, 12 hours process problems)

The majority of CO excess emissions are isolated incidents and do not occur for a duration longer than one hour. The AQD has previously followed a past practice of using discretion for isolated incidents of CO 1-hour excess emissions. The AQD has issued violation notices for one hour exceedances that are 2 hours or greater and exceedances of the 24-hour emission limit as documented by violation notices dated September 25, 2018 and February 25, 2019.

SC I.13, SC VI. 13 through 21. **NOT IN COMPLIANCE**. NOx emissions not to exceed 247 ppmv (dry basis) corrected to 7% oxygen (1-hour block average except during periods of startup or shutdown). As demonstrated in the above table, NOx emissions were in compliance with the SCI.13 during stack testing conducted during October 2018, November 2018, and December 2018. The facility utilizes CEMS to demonstrate compliance with the NOx emission limit on a continuous basis. CEMS data has been provided during quarterly reporting since the Third Quarter 2017. As part of the review, quarterly CEMS data, the below NOx exceedances were reported. As part of the Continuous Emissions Monitoring Systems Reports for the Second Third, and Fourth Quarter 2018 review, the following NOx emissions exceedances were identified and documented through violation notices dated September 25, 2018 and November 21, 2018: Boiler 11 on 5/22/18 (247 ppm), and Boiler 11 on 9/7/18 (248 ppm).

SC II. 1. **COMPLIANCE**. Auxiliary fuel for boilers shall not exceed 28,500 MMBtu/year heat input for starting a third boiler while operating the other two boilers on RDF. If only fuel oil is used, the limit is 208,000 gallons. The facility does not use natural gas. The facility reports 12-month fuel usage for February 1, 2018 through February 10, 2019 at 47,834 gallons.

SC II. 2, SC IX.1. **COMPLIANCE**. Combined total auxiliary fuels not to exceed 10% of the annual capacity factor calculated on a 12-month rolling basis. The facility provided calculations for March 2018 through February 2019. While calculations were not verified, it appears the fuel oil usage does not exceed 10% of the annual capacity factor.

SC II.3 and 4. **COMPLIANCE**. The steam load to boilers 11, 12, and 13 when firing RDF shall not exceed 383,000 lb/hour. Steam load to boilers 11, 12, and 13 when firing No. 2 fuel oil only shall not exceed 296,000 lb/hour. The facility monitors the steam load continuously in the control. During the inspection the steam load was observed as follows: Boiler 11 – 299,000 lb/hour and Boiler 12 – 302,000 lb/hour.

SC II. 5, SC VI. 49. **COMPLIANCE**. Steam load to boilers 11, 12, and 13 not to exceed 110% the highest load level (4-hour arithmetic average) demonstrated during the most recent dioxin/furan testing. The steam loads based on the October 2018, November 2018, and December 2018 testing were provided by the facility. The calculated steam loads are as follows: Boiler 11 – 347 klbs/hour, Boiler 12 – 376 klbs/hour, and Boiler 13 – 366 klbs/hour. During the inspection, the steam load was observed as follows: Boiler 11 – 299,000 lb/hour and Boiler 12 – 302,000 lb/hour. The facility provided February 2019 records of the steam load. Records indicate compliance with the established steam load from October 2018, November 2018, and December 2018 testing. The facility also reports average daily steam load for each boiler in quarterly reports.

SC III.2. **COMPLIANCE**. Shall not fire RDF in any boiler at a combustion zone temperature less than 1800°F on a 1-hour basis. At no time shall the temperature be less than 1600°F. During the inspection on April 20, 2017 the combustion zone temperature was recorded as follows: Boiler 11 – 2175°F, Boiler 12 - 2351°F. The facility

continuously monitors the combustion zone temperature. During review of the Second, Third and Fourth Quarters 2018 Continuous Emissions Monitoring Systems Reports the facility does not report any combustion zone excursions.

SC III. 3. **NOT IN COMPLIANCE**. Shall not operate any boiler with a flue gas oxygen content of less than 4 percent by volume prior to the dry scrubber (1-hour basis). During the inspection, the flue gas oxygen content was recorded as follows. Boiler 11 -no data, Boiler 12 – 6.3%. During review of the Second Quarter 2018 Continuous Emissions Monitoring Systems Report it was identified that on several occasions the flue gas oxygen content been less than 4 percent by volume on a 1-hour average as listed below.

- Boiler 11 – 4/5/18 (1 hour), 4/19/18 (5 hours), 5/3/18 (1 hour), 5/6/18 (3 hours)
- Boiler 12 – 4/12/18 (4 hours), 4/16/18 (1 hour), 4/18/18 (2 hours), 4/28/18 (3 hours)
- Boiler 13 – 4/10/18 (1 hour), 4/11/18 (4 hours), 4/12/18 (2 hours), 4/15/18 (3 hours), 4/16/12 (12 hours), 4/23/18 (1 hour), 4/24/18 (1 hour)

A violation notice was issued for these incidents on July 20, 2018.

The remaining quarterly report Third Quarter 2018 and Fourth Quarter 2018 were in compliance with the flue gas oxygen content.

SC III. 4, SC VI. 50. **COMPLIANCE**. The exhaust gas temperature at the fabric filter inlet shall not exceed 400°F or 30°F over the maximum demonstrated during the fabric filter inlet temperature established during the most recent dioxin/furan test which demonstrated compliance with the dioxin limit. The baghouse inlet temperatures based on the October 2018, November 2018, and December 2018 testing were provided by the facility. The calculated fabric filter inlet temperature are as follows: Boiler 11 – 366°F, Boiler 12 – 361°F, and Boiler 13 – 366° F. During the inspection, the fabric filter inlet temperature was observed as follows: Boiler 11 - 329°F, Boiler 12 – 304°F. The facility provided February 2019 records of the fabric filter inlet temperature. Records indicate compliance with the established temperature at the fabric filter inlet from October 2018, November 2018, and December 2018 testing.

SC III. 6. **COMPLIANCE**. The maximum sulfur content of the fuel oil fired in boilers shall not exceed 0.3% sulfur content by weight. The facility provided a certificate of analysis which indicates a 15 ppm sulfur content (maximum).

SC III.7 and SC VI. 52. **COMPLIANCE**. The maximum heat input of natural gas or No. 2 fuel oil shall not exceed 250 million BTUs per hour. The facility appears to be in compliance with this limit. In review of the Second, Third and Fourth Quarter 2018 reports the facility appears to be in compliance with the 250 MMBTU per hour requirement (facility reports daily fuel usage and hours of operation for each day).

SC III. 8. **COMPLIANCE**. Shall not burn any waste oil at the facility. The facility does combust waste oil.

SC III. 9. **COMPLIANCE**. Shall monitor and record the scrubber slurry feed rate on a continuous basis. The facility monitors the scrubber slurry feed rate as required. During the inspection the slurry feed rate was observed as follows: Boiler 11 – 16.775 gpm, Boiler 12 – 6.2812 gpm.

SC III. 10, SC VI. 59. **COMPLIANCE**. Lime slurry feed system shall be modulated by interfacing with the SO2 CEMS. In the event of a malfunction or failure of the SO2 CEMS, the facility shall operate the lime slurry fee system such that, at a minimum, 800 pounds per hour of pebble lime shall be added. Once during the period of monitor malfunction or failure, the facility shall manually determine the slurry density. The lime slurry specific gravity worksheets were observed during the inspection.

SC V. **COMPLIANCE**. The facility performed stack testing within 15 months following the previous performance during 2018. The remaining Special Conditions under SC V were not evaluated individually as part of this compliance inspection. It is assumed that the facility is meeting the methods specified for each pollutant and RATA requirements. Stack testing is observed by AQD Technical Programs Unit (TPU). Please see the facility file for review of testing reports.

SC VI. 29 through 37. **COMPLIANCE**. Special conditions for the O2 CEMS were not fully evaluated as part of this inspection. Evaluation of the O2 CEMS is conducted during the annual stack testing and RATA. In addition, the O2 CEMS is evaluated by the AQD TPU during quarterly reporting (excess emission reports/monitor downtime).

SC VI. 38 through 47. **COMPLIANCE**. Special conditions for CEMS and COMS listed in SC VI. 38 through 47 were not fully evaluated as part of this inspection. CEMS and COMS evaluation is conducted during annual stack testing and RATA and during review of quarter reports (excess emissions/monitor downtime).

SC VI. 51. **COMPLIANCE**. Shall install, calibrate and maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream prior to the boiler bank inlet/after the superheater and at the combustion zone. The facility continuously monitors the temperature on a continuous basis at the boiler control board. The temperature is not recorded.

SC VI. 53. **COMPLIANCE**. Shall monitor and keep records of the atomizer unit replacement data, including dates, affected boiler emission unit, length of time of replacement, and emission rate during replacements. The facility provided records of atomizer replacement and emission data. Emission data is recorded by the CEMS.

SC VI. 54.a through d, g, and j. **COMPLIANCE**. The facility appears to be in compliance with the applicable record keeping and reporting requirements specified in the listed conditions.

SC VI. 54.f. **COMPLIANCE**. Results of daily drift tests and quarterly accuracy determinations for SO2, NOx, and CO CEMS are maintained. During the inspection the daily drift test were provided for boilers 11 and 12. Quarterly accuracy determinations are reviewed quarterly by the AQD TPU as part of the excess emissions/monitor downtime reports.

SC VI. 54.h and I, SC IX. 5 through 11. **COMPLIANCE**. Records showing the names of the individuals who have been certified by ASME or state-equivalent certification program. Records of individual who have completed the EPA municipal waste combustor operator training course. Records showing when a certified operator is temporarily offsite. Records showing the names of the persons who have completed a review of the operating manual. The facility provided records of the individuals certified by ASME. According to the facility during the 2017 inspection, the EPA municipal combustor training and the operator manual training are equivalent. During the inspection records were observed. According the facility, a certified individual is always on site. The facility provided a copy of the site specific operating manual. The manual provided during the inspection appears to meet all the requirements of SC IX.9.

SC VII. **NOT IN COMPLIANCE**. During 2018 the facility has had issues submitting reports in a timely manner. On April 11, 2018 a violation notice was issued for failure to submit ROP 2018 semiannual and annual certifications. A second violation notice was issued on May 18, 2018 for failure to submit 2018 semiannual and annual certifications. ROP certifications were received on June 20, 2018. On July 26, 2018 a violation notice was issued regarding the 1st half 2018 Subpart Cb report (failure to list the highest emission level recorded at Boiler 11 (SO2) and Boiler 13 (CO). The response to the July 26, 2018 violation notice was received on August 15, 2018. Within the response, the facility states that the highest recorded emissions are not applicable to emission standards, and therefore not required to be reported per Subpart Cb, based on "partial block period language" from the ROP. The AQD does not agree with this determination. Subpart Cb does not specify language of "partial block period" and the company should be reporting all highest recorded emissions per Federal regulations.

SC VIII. **COMPLIANCE**. Stacks (SVBOILER011, SVBOILER012, and SVBOILER013) shall have a maximum exhaust dimension of 102 inches and a minimum height of 337.5 feet above ground surface. The stacks appear to meet these requirements. Measurements were not collected as part of the inspection.

SC VI. 58, SC IX.2, Consent Order No.6-2017, Startup, Shutdown, Malfunction Plant. On June 19, 2017, Consent Order AQD No. 6-2017 became effective. Exhibit A of the Consent Order include a Startup, Shutdown, Malfunction Plan (SSM). The SSM requires the company to maintain records of checklists for various operations in relation to boiler operation, CEMS, and pollution control equipment. Each of the below checklists and required records are evaluated below.

Start-up, Shutdown, Malfunction Checklist. **COMPLIANCE**. The facility provided Start-up, Shutdown, Malfunction Checklist records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

RDF Boiler Startup, Appendix 1 – Turbine Operator Startup. **COMPLIANCE**. The facility provided available records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 2 – Grate Operator Walkdown. **COMPLIANCE**. The facility provided available records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 3 – Ash Operator Walk Down/Baghouse Penthouse. **COMPLIANCE**. The facility provided available records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 4 – Slaker Operator Walk Down List/8thFloor SDA Penthouse. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 5 – Auger Walk Down. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 6 – Operator Walk Down List Doors. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 7 – E&I. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Unit Startup, Appendix 8 – CEMS Checklist. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Boiler Inspection/Shutdown Checklist. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

CEMS Preventative Maintenance Inspection Schedule. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

SDA Maintenance Weekly Checks. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

SDA Preventative Maintenance Monthly Checks. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

SDA Preventative Maintenance Semi-Annual Checks. **COMPLIANCE**. The facility provided records for the last 6 months. The facility appears to be meeting this record keeping requirement.

Baghouse Preventative Maintenance Weekly Checks. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

Baghouse Preventative Maintenance Monthly Checks. **COMPLIANCE**. The facility provided records for February 1, 2019 through March 1, 2019. The facility appears to be meeting this record keeping requirement.

AAO Slacker Log and AO Grate Log. **COMPLIANCE**. Records were observed at the time of inspection. The facility provided records for March 2019. The facility appears to be meeting this record keeping requirement.

Michigan Waste Energy Control Room Log. **COMPLIANCE**. The facility provided available records for March 2019. The facility appears to be meeting this record keeping requirement.

FGCOLDCLEANERS

SC II.1. **COMPLIANCE**. Shall not use solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. According to the SDS provided, the solvent used is 100% distillates (petroleum) hydrotreated light.

SC III. 1 and 2. **NOT EVALUATED**. Cleaned parts shall be drained no less than 15 seconds or until dripping ceases. Shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. During the inspection the cold cleaners were not in use. Maintenance records were not requested.

SC IV. 1 through 5. **COMPLIANCE**. Air/vapor less than 10 feet, emissions released to the general in-plant environment, device for draining parts, cover closed, vapor pressure requirements, etc. During the inspection the cold cleaners were observed to meet the air/vapor requirements and emissions are released to the general in-plant environment. The solvent in the cold cleaners is not heated or agitated. The SDS indicates a vapor pressure of less than 1 mm Hg @ 20°C (0.019 psi), therefore a mechanically assisted lid or freeboard height restrictions are not required.

SC VI. 3. **COMPLIANCE**. Shall maintain written operating procedures for each cold cleaner. During the inspection operating instructions were posted in a visible location.

FGRULE290

The facility states that there is no equipment that is using Rule 290. Conditions under FGRULE290 were not evaluated.

FEDERAL REQUIREMENTS

40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

The No. 2 fuel storage tank at the facility is not subject to Subpart Kb per §60.110b(b). As described above under EUSTORAGETANK the vapor pressures is less than 3.5 kPa.

40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Unit

The facility has accepted restrictions in the use of fossil fuel (No. 2 Fuel Oil) to opt out from being subject to applicable requirements of 40 CFR Part 60 Subpart Db, NSPS for Industrial-Commercial-Institutional Steam Generating Units (see FGBOILERS011-013, SC II. 2 and SC IX.1).

40 CFR Part 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning

According to 40 CFR 63.460(a), this standard applies to units that use solvents with concentrations of 5% or more by weight of halogenated compounds (methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform). The SDS provided indicates that material used in facility cold cleaners do not contain the above listed halogenated compounds. Therefore, this standard does not apply.

40 CFR Part 60, Subpart Cb – Emission Guidelines and Compliance Time for Large Municipal Waste Combustors that are Constructed on or before September 20, 1994

40 CFR Part 60, Subpart Eb – Standards of Performance for Large Municipal Waste Combustors for Waste Combustors for Which Construction is Commenced after September 20, 1994 or for which Modification or Reconstruction is Commenced After June 19, 1996

40 CFR Part 62, Subpart FFF – Federal Plan Requirements for Large Municipal Waste Combustors Constructed on or Before September 20, 1994

The facility is subject to the New Source Performance Standards (NSPS) for Municipal Waste Combustors promulgated in 40 CFR 60 Subparts A, General Provisions, and C, Emission Guidelines for municipal waste combustors promulgated in 40 CFR Part 60 Subpart Cb, which in turn references and incorporates portions of 40 CFR Part 60 Subpart Eb. These emission guidelines were promulgated on December 19, 1995 by U.S. EPA to be used by the states in developing state implementing rules. The State of Michigan previously adopted by reference the 2000 version of 40 CFR 60 Subpart Cb emission guidelines under the Michigan Air Pollution Control Rule 932 (R 336.1932). These rules were never approved by U.S. EPA as part of the state implementation plan (SIP). On November 12, 1998, the emission guidelines were incorporated into the Federal Implementation Plan (FIP) promulgated under 40 CFR 62 Subpart FFF. Therefore, during the ROP issuance on August 19, 2011, the source became subject to the provisions of 2000 version of 40 CFR 60 Subpart Cb, due to adoption by reference in R 336.1932, and the provisions of 40 CFR 62 Subpart FFF as applicable requirements. The stationary source is not directly subject to 40 CFR 60 Subpart E, Ea, and Eb but certain

provisions in 40 CFR 60 Subpart Eb become specific applicable requirements in the stationary source's ROP either as a requirement or a reference from 40 CFR 62 Subpart FFF, 40 CFR 60 Subpart Cb, or R 336.1932. During 2015, Rule 932 was rescinded. Rule 973 (replacing Rule 932) incorporated Subpart Cb in Air Quality Rules was finalized on January 2, 2019.

FGBOILERS011-013 undertook additional installation/replacement work on 5/1/95, 12/1/92, and 4/18/94 respectively to replace an existing 5-stage electrostatic precipitator emission control system (ESP) with a spray/dryer/fabric filter system and a lime injection system that includes lime storage and handling. These changes resulted in significant reductions in emissions and met 40 CFR Part 60 Subpart A (§ 60.14(e)(5)) modification exemption requirements thus excluding the emission units from the applicability requirements of 40 CFR Part 60 Subpart Ea.

The above list requirements (Subpart Cb, Eb, and FFF) are currently incorporated in the existing ROP conditions evaluated above.

PERMIT TO INSTALL EXEMPTIONS

Salamander Heaters – Distillate Fired

The facility uses small (<10 MMBTU) distillate fired heaters in the winter months. The heaters appear to be exempt from PTI requirements under the following Rule.

R336.1282(2)(b)(ii): "Permit to install does not apply to…No. 1 and no. 2 fuel oils, distillate oil…that contains not more than 0.40% sulfur by weight and the equipment has a rated heat input capacity of not more than 20,000,000 Btu per hour."

Cold Cleaner

The cold cleaners appear to be exempt from PTI requirements under the following rule.

R336.1281(2)(h): "The requirement to obtain a PTI does not apply to cold cleaners that have an air/vapor interface of not more than 10 square feet."

FUGITIVE DUST MANAGEMENT PLAN

The Fugitive Dust Management Plan (FDMP) dated February 2011 is required per MI-ROP-M4148-2011a, SOURCE-WIDE CONDITIONS, SC VI. 1 and SC IX. 6.

Section 4.4.3. **NOT IN COMPLIANCE**. Velometer readings will be collected approximately every 2 hours to ensure that inward air flow is maintained. As described above under FGMSWPROC-LINES, SC IV. 3 and VI. 2, velometer records provided from February 1, 2019 through March 8, 2019 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door).

Section 4.1.2 **NOT IN COMPLIANCE**. When weather conditions allow, paved roadways will be cleaned daily when receiving MSW deliveries. During the inspection on April 17, 2019 excessive track out in the yard immediately north of the MSW building and the truck exit road on the west and north side of the facility was observed.

Section 4.1.3. **NOT IN COMPLIANCE**. When weather allows, grounds and fence line will be cleaned daily. During the inspection it was observed that garbage debris was littering the fence line on the east end of the facility. A subsequent visit outside property on April 8, 2019 observe similar debris along the fence line. During a subsequent inspection on April 17, 2019 garbage debris was observed along the fence line and grounds.

Section 4.4.3. **NOT IN COMPLIANCE**. velometer readings will be collected approximately every 2 hours to ensure that inward air flow is maintained. As described above under FBMSWPROC-LINES, SC IV. 3 and VI. 2, velometer records provided from February 1, 2019 through March 8, 2019 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door).

Section 4.4.5. **COMPLIANCE**. The facility provided roof fan logs for the MSW building that are required under Section 4.4.5 of the FDMP. Roof fan logs were requested for March 1 through 7, 2019. The roof fan logs provided indicate that that roof ventilator fans are not operating. During the inspection, it was determined that the operator was incorrectly logging the fans as not operating, will in fact the fans were in operation. This was verified by operation lights in the MSW control room. The facility has indicated that this record checklist will be updated to clarify what is recorded by the operator. Based on the records being maintained and the facility's plan to clarify the log sheet, this condition is considered to be in compliance.

ODOR MANAGEMENT PLAN

The Odor Management Plan (OMP) dated June 2017 is required per MI-ROP-M4148-2011a, SOURCE-WIDE CONDITIONS, SC VI. 2 and SC IX. 7.

Section 2.2a. **NOT IN COMPLIANCE**. The MSW and RDF Building will be maintained under negative pressure. As described above under the FDMP and FBMSWPROC-LINES, SC IV. 3 and VI. 2, velometer records provided from February 1, 2019 through March 8, 2019 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door). Velocity readings indicate a measurement for wind speed going out Tip East 5 for nearly all readings provided from February 1, 2019 through March 8, 2019. A violation notice will be issued regarding this issue.

Section 2.2g. **COMPLIANCE**. Section 2.2g of the OMP indicates that roof ventilators on the MSW building and associated filters are inspected at a minimum monthly, and repairs are made as necessary. Records were observed during the inspection for May 2018 through February 2019.

Section 2.3a. **NOT IN COMPLIANCE**. During the odor season (and at other times necessary), weather permitting, the wet spray street sweeper will perform washing/cleaning of the facility site roadways and asphalted areas that are used by waste delivery vehicles. During the inspection on April 17, 2019 excessive track out in the yard immediately north of the MSW building and the truck exit road on the west and north side of the facility was observed.

Section 2.3c. **NOT IN COMPLIANCE**. Each day, cleaning activities are performed on the visible and accessible areas of the tipping floors, floors in processing area, stairs, handrails, and process equipment. During the inspection on April 17, 2019, the MSW tipping floor and primary shredder areas were observed to have significant garbage accumulation on the stairs and catwalks to the primary shredders.

2.4b. **NOT IN COMPLIANCE**. During the odor season the west odor neutralizer system in the MSW Building sprays a mixture of odor neutralizer and water into the air above the MSW around Building doors. During the inspection on April 17, 2019 the odor neutralizer system was not in use.

Section 3.0. **COMPLIANCE**. Section 3.0 of the OMP indicates that DRP will inspect equipment as follows: Operating Conveyors (daily), Odor neutralizer sprayers during odor season (daily), Roof ventilators and associated fan filters serving the MSW building (quarterly), Overhead doors to the tipping floors (monthly). Records observed during the inspection on March 12 and 13, 2019 and provided appear to satisfy these requirements.

MAERS

The MAERS report was received electronically on March 23, 2018. The Renewable Operating Permit (ROP) certification form was post marked on June 8, 2018. The original MAERS submittal audit was failed on April 17, 2018 (due to lack of supporting documentation for emission calculations, material throughputs off by orders of magnitude, and discrepancies in reported emissions from previous years). The MAERS submittal was revised and resubmitted with appropriate documentation. The MAERS audit was passed.

FINAL COMPLIANCE DETERMINATION:

The facility has been determined to be in noncompliance with the below items. The items listed below only included items not previously documented through a violation notice in the past year.

SOURCE-WIDE CONDITIONS, SC IX.9, FDMP Section 4.1.2, OMP Section 2.3a. - During the inspection on April 17, 2019 excessive track out in the yard immediately north of the MSW building and the truck exit road on the west and north side of the facility was observed.

SOURCE-WIDE CONDITIONS, SC IX.10, FDMP Section 4.1.3 - During the inspection on March 12, 2019, outside observations it was observed that garbage debris was littering the fence line on the east end of the facility. A subsequent visit outside property on April 8, 2019 and site inspection on April 17, 2019 observed similar debris along the fence line in addition to significant garbage debris in the plant yard.

FGMSWPROC-LINES, SC IV.1 and VI.3 - Secondary baghouses have multiple days with pressure drop readings outside the recommended operating range and the range established during the most recent stack test.

FGMSWPROC-LINES, SC VI. 13 - The facility continues to operate the baghouses when the pressure drop is out of the specified operating range. Maintenance records were not provided.

FGMSWPROC-LINES, SC IV. 3, FDMP Section 4.4.3, and OMP, Section 2.2a - Records provided from March 1, 2018 through May 10, 2018 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door).

FGMSWPROC-LINES, SC IX.1, OMP 2.3c - During the inspection on April 17, 2019, the MSW tipping floor and primary shredder areas were observed to have significant garbage accumulation on the stairs and catwalks to the primary shredders.

OMP 2.4b. - During the inspection on April 17, 2019 the odor neutralizer system was not in use in the MSW Building.

A violation notice will be issued for the above items.

NAME _____ DATE 4/22/19 SUPERVISOR W.M.