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

M414839452

FACILITY: DETROIT RENEWABLE POWER, LLC		SRN / ID: M4148
LOCATION: 5700 RUSSELL ST, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Linwood Bubar , Director of Operations		ACTIVITY DATE: 04/20/2017
STAFF: Todd Zynda	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

PURPOSE OF INSPECTION: Targeted
INSPECTED BY: Todd Zynda (AQD)
PERSONNEL PRESENT: Tabetha Peebles, Environmental Manager; Rob Suida, Plant Manager; John Baumgart, Process Supervisor; Fred Jacobsen; E&I Supervisor; James Speckmann, Board Operator; Dan Gonzalez, Process Manager
FACILITY PHONE NUMBER: (313) 972-4336
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. 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 combusters, 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 product 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 AQD complaint investigations, DRP was issued violation notices for 17 days of Rule 901 violation.

A Consent Judgement 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.

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 AQD is currently addressing comments to the proposed Consent Order. The proposed 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. At the time of this report, the Consent Order has not been finalized.

On April 7, 2017 a violation notice was issued to the facility for emission exceedances (1-hour CO and oxides of nitrogen [NOX]), operational parameter excursions (flue gas oxygen content and combustion zone temperature), and reporting requirement violations (failure to report flue gas oxygen content and combustion zone excursions in ROP deviation reports).

INSPECTION NARRATIVE

On April 20, 2017 the MDEQ Air Quality Division (AQD) inspector Mr. Todd Zynda conducted an inspection of DRP located at 5700 Russell, Detroit, Michigan. During the inspection Tabetha Peebles, Environmental Manager, Rob Suida, Plant Manager, John Baumgart, Process Supervisor, Fred Jacobsen, E&I Supervisor, James Speckmann, Board Operator, and Dan Gonzalez, Process Manager, 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.

During the opening meeting the AQD records request (see attached document) was discussed. At that time, the facility provided records for review and the AQD requested records for varying timeframes. Records were either provided as hard copies at this time, or were provided via email on the following dates: April 20, 24, 25, 26, 27,28, 2017 and May 1, 3, 4, 8, 9, and 11, 2017.

Following the opening meeting, an inspection of the facility was conducted. The inspection began with observation of the cold cleaner located in the facility maintenance shop. 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.

Following observation of the facility maintenance shop cold cleaner, the WPF tipping floor and process lines were observed. During the inspection process lines 100 and 200 were in operation. According to Mr. John Baumgart, Process Supervisor, the operating pressure drop range for primary shredder baghouses is 1 inch to 5 inches water column and 1 inch to 8 inches for the secondary shredder baghouses. Correspondence provided by the facility via email on May 3, 2017 indicate the operating pressure drop range is 2 inches to 10 inches (see attached – 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.

Primary 100 – 0.25"
Primary 200 – 9.5"
Primary 300 – 2.8"

Secondary 100 – 10.09"
Secondary 200 – 9.85"

Secondary 300 – 2.62"

According to Mr. Baumgart, line 300 was in the process of being brought online, therefore the baghouse fans for line 300 were in operation and measurable pressure drop is read. During the inspection, the primary 100 and secondary 100 pressure drop readings were outside of the operating range. According to Mr. Baumgart, the baghouses need servicing for those readings outside the recommended operational range. All baghouse maintenance and calibration of the gages is conducted by an outside contractor.

During the inspection secondary process lines and conveyors were observed. 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. According to Mr. Baumgart 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. Baumgart, 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).

During the inspection the upper and lower tipping floors were observed. MSW was being received at both the upper and lower tipping floor during the inspection. At lower tipping floor #7, velometer readings that are collected by the facility were observed. Velometer readings (feet per minute) are collected for air velocity going "in" each door and "out" each door. The records sheet used by the facility indicates the units are cubic feet per minute which should be revised to feet per minute.

Following observation of the tipping floors, the WPF roof vents and baghouse stacks were observed at roof level. During the inspection, roof vent filter #1 was observed. The filters were either clogged with material or missing all together. The fan for roof vent #1 did not appear to be operating. According to Mr. Baumgart, roof filter #1 was not operating and is currently down for maintenance. The remaining roof filters were not observed during the inspection 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). Visible emissions were not observed from any baghouse stack.

Following observation of the WPF roof vents, the WPF control room was observed. 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 several circuits were shut off as maintenance was being conducted on the roof vent fans and filters.

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 ash load-out storage building was observed. During the inspection there were no trucks in the ash load-out storage building. According to Mr. Suida, the fans and filters have been removed from the ash load-out building. According to email correspondence on May 4, 2017 from Ms. Peebles, the fans and associated filters were removed on approximately one year ago (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.

Next, the SDA control and lime storage silo were observed. During the inspection, the SDAs were operation on Boiler 11 and Boiler 13. From the catwalk where the SDA's are located, the lime storage silo and associated baghouse was observed. Visible emissions were not observed.

The facility inspection continued with observation of the boiler control room. During the inspection Boilers 11 and 13 were in operation. The following instantaneous readings were collected during observation of the boiler control room.

Boiler 11	
Boiler Temperature (F)	2338
Steam Flow (klb/hr)	359
Baghouse Pressure Drop (inches H2O)	8.0925

Baghouse Inlet Temperature (F)	299
Slurry Flow (gpm)	20.4
SDA Pressure Drop (inches H2O)	4.7547

Boiler 13	
Boiler Temperature (F)	2377
Steam Flow (klb/hr)	291
Baghouse Pressure Drop (inches H2O)	6.9225
Baghouse Inlet Temperature*	306
Slurry Flow (gpm)	16.830
SDA Pressure Drop (inches H2O)	2.3941

According to Mr. Speckmann, the boiler baghouse pressure drop operating range is 6 inches to 10 inches.

The RDF control system was observed to be in operation for Boilers 11 and 13 with the following information recorded.

Boiler 11 – Air Flow 267.7 lb/hr – damper 99% open
Boiler 13 – Air Flow 80.4 lb/hr – damper 99% open

Following observation of the boiler control room, 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.

The inspection concluded with observation of the CEMS trailer.

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.

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 4, 2016 by RWDI Consulting Engineers & Scientists (RDWI). Testing results indicate zero visible emissions.
SC I. 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 December 31, 2016 through April 14, 2017. 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. The facility provided weekly inspections records from January 6, 2016 through March 31, 2017. According to Ms. Peebles there are no filters or fans to inspect, but the form is continued to be filled out to demonstrate compliance with the ROP.
SC IX. 1, 2, and 3. NOT EVALUATED. 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 ash trucks was not observed.

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 (December 31, 2016 through April 14, 2017) and lime loading VE records (January 2, 2017 through April 13, 2017). Daily records indicate no visible emissions. Daily VE readings were missing for February 26, March 14, April 5, 7, 8, and 9, 2017 (6 days total). Loading VE records indicate no VE with the exception of VE on March 31, 2017. At that time, the location of the VE was the suction line at the silo, a leak at a 90 degree elbow. The facility provided corrective actions (work order for elbow welding on April 8, 2017) via email on April 28, 2017. During the inspection visible emissions were not observed.

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 "Marathon Petroleum No. 2 Ultra Low Sulfur Diesel" dated June 1, 2016. The SDS provided does not include a vapor pressure (no data available). As part of this review, a similar SDS was obtained for Marathon Petroleum No. 2 Ultra Sulfur Diesel Dyed 15 ppm Sulfur Max" dated May 14, 2015. The vapor pressure is listed as 1 to 10 mmHg @ 20 °C (0.133 to 1.33 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 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 ranges from 0.133 to 1.33kPa. 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 300 process line (EUMSWPROC-LINE3) on October 3, 2016 by RWDI. Primary shredder baghouse emissions

are reported as 0.0020 lb/1000 lb flue gas. Secondary shredder baghouse emissions are reported as 0.0015 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 no certified reader. Daily VE readings to be collected. The facility provided daily VE records (March 1, 2017 through April 12, 2017). 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 2016 demonstrating compliance with the material limits. The facility only processes MSW. The highest reported weekly MSW occurred for the week ending March 19, 2016 at 19,588 tons. The facility reports 876,319 tons MSW during 2016.

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 3, 2016 on process line 3 with pressure drop ranges as follows: Primary 300 – 2 to 2.4 inches , Secondary 300 – 2 to 2.5 inches. During the inspection on April 20, 2017, the pressure drop for the primary baghouses and secondary baghouses were recorded as follows.

Primary 100 – 0.25"
Primary 200 – 9.5"
Primary 300 – 2.8"

Secondary 100 – 10.09"
Secondary 200 – 9.85"
Secondary 300 – 2.62"

In review of the records provided for October 29, 2016 through April 18, 2017, the pressure drop readings for the primary and secondary baghouses were out of the operating range on multiple days over a 171 day period (October 29, 2016 through April 18, 2017) as outlined in the below table.

Baghouse	days out of operating range	% days outside operating range	lowest reading outside of operating range	highest reading outside of operating range
Primary Baghouse -Line 1 (107)	145	85	0	NA
Primary Baghouse -Line 2 (207)	96	56	0	12
Primary Baghouse -Line 3 (307)	3	2	0.4	NA
Secondary Baghouse - Line 1 (135)	12	7	NA	12
Secondary Baghouse - Line 2 (235)	12	7	NA	12

Secondary Baghouse - Line 3 (335)	12	7	0.08	NA

Primary and secondary baghouses 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. Baghouse maintenance records were provided from October 2013 through present. 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, 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 facility provided records of monthly roof exhaust filter inspections. During nearly all the inspections, the filters are replaced. During some of the inspections, filters are missing. The facility appears to be taking the necessary steps to replace filters as required. It is recommended that a more frequent inspection of the roof filters be implemented.
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 on a two hour basis during times when waste is received. Records are not collected on the weekend as the doors are typically closed. Records provided from October 3, 2016 through April 18, 2017 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 October 3, 2016 through April 18, 2017.

Additionally, on April 30, 2017, in response to an odor complaint, AQD documented that negative pressure is not maintained on the upper tipping floor doors. During the investigation, the tipping floor doors were closed, but there was excessive "mist" emanating from the tops of both upper tipping floor doors. The "mist", believed to be the facility masking agent, was also observed emanating from an area on the MSW storage building where the siding has been removed. Photographs were collected. At 6:47 PM on April 30, 2017, facility contact (Damien Doerfer) was notified of the "mist" emanating from the MSW building and of the odor complaint. On May 1, 2017, photos of the "mist" from the MSW storage building were emailed to the facility.

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. The facility provided monthly records for January through March 2017. The inspection records match the required items listed in SC VI.7. During the March 29, 2017 inspection, the facility indicates there was dust leakage for both the primary and secondary baghouses for all three lines.

FGBOILERS011-013

SC I.1 through 8, 10, 12, 14, SC VI.1. COMPLIANCE. Various emission limits as listed in the below table. During the weeks of October 3, October 10, and October 17, 2016, Detroit Renewable Power (DRP) performed stack testing and relative accuracy test audits (RATAs) on Boilers #11 (EUBOILER011), #12 (EUBOILER012), and #13 (EUBOILER013). Measured emissions were in compliance with the appropriate emission limit.

	Boiler 11	Boiler 12	Boiler 13	Permit Limit
Particulate Matter	0.001	0.004	0.01	0.010 gr/dscf
Cadmium	0.2	0.83	1.8	35 ug/dscm
Hexavalent Chromium	0.088	0.11	0.25	4.2 ug/dscm
Total Chromium	5.81	2.9	6.03	200 ug/dscm
Lead	0.0046	0.024	0.045	0.440 mg/dscm
Mercury	1.5	1.4	5.8	50 ug/dscm
Total Dioxins/Furans	21	3.6	3.8	30 ng/dscm
Fluoride	0.1	0.09	0.1	5 ppmdv
Hydrogen Chloride	2.4	3.5	3.9	25 ppmdv
Carbon Monoxide, 1 hr average	233	238	254	267 ppmdv
Carbon Monoxide, 24 hr average	172	69.5	69.6	200 ppmdv
Nitrogen Oxides, 1 hr average	245	243	239	247 ppmdv
Sulfur Dioxide, 24 hr average	18	19	20	30 ppmdv
Volatile Organic Compounds	19	3.5	17	65 ppmdv
Visible Emissions, 6 min. average	1	1.7	1	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 March 2017 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 third quarter 2016 and fourth quarter 2016 zero hours of excess emissions (opacity) were reported.

SC I.9, SC VI.2 through 12. 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 the weeks of October 3, October 10, and October 17, 2016. The facility utilizes continuous emissions monitoring systems (CEMS) to demonstrate compliance with the SO2 emission limit on a continuous basis. CEMS data provided for March 2017 demonstrates compliance with the SC I. 9 for all three boilers. During the third quarter 2016 and fourth quarter 2016 zero hours of excess emissions (SO2) were reported.

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, CO emissions were in compliance with the emission limits during stack testing conducted during the weeks of October 3, October 10, and October 17, 2016. The facility utilizes CEMS to demonstrate compliance with the CO emission limits on a continuous basis. CEMS data provided for March 2017 demonstrates compliance with the SC I. 11a and c for all three boilers. For boiler 11, there were two 1-hour CO exceedances. For boiler 12, there were two 1-hour CO exceedances. For boiler 13, there were 10 1-hour CO exceedances, 2 hours which were continuous (March 26, 2017, 8:00 AM to 10:00 AM), indicating that the facility did not make the necessary operational changes to achieve compliance with the limit after the first hour exceedance. A violation notice will be issued for this instance (SC 11b).

Within the third quarter 2016 and fourth quarter 2016 the below 1-hour CO exceedances were reported.

Q3 – Boiler 11 - 13 hrs total (5 hours Startup/Shutdown, 8 hours process problems)
Q4 - Boiler 11 - 13 hrs total (5 hours Startup/Shutdown, 8 hours process problems)

Q3 – Boiler 12 - 4 hrs total (4 hours Startup/Shutdown, 0 hours process problems)
Q4 - Boiler 12 - 16 hrs total (10 hours Startup/Shutdown, 6 hours process problems)

Q3 – Boiler 13 - 8 hrs total (3 hours Startup/Shutdown, 5 hours process problems)
Q4 - Boiler 13 - 37 hrs total (26 hours Startup/Shutdown, 11 hours process problems), a 24 exceedance was also reported on 11/18/16 for which the company claims startup.

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. On November 10, 2016, Boiler 11 exceeded the 1-hour block average CO emission limit (267 ppmv) for two consecutive hours (280 ppmv and 281 ppmv); indicating corrective action was not implemented in a timely manner. A violation notice was issued on April 6, 2017 for the 2 hour exceedance that occurred on November 10, 2017.

SC I.13, SC VI. 13 through 21. 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 the weeks of October 3, October 10, and October 17, 2016. The facility utilizes CEMS to demonstrate compliance with the NOx emission limit on a continuous basis. CEMS data provided for March 2017 demonstrates compliance with the SC I.13 for all three boilers. During review of the third quarter 2016 and fourth quarter 2016 excess emission reports it was identified that on October 9, 2016, Boiler 13 exceeded the 1-hour block average NOx emission limit (247 ppmv) for one hour (4:00 to 5:00 – 252 ppmv). This exceedance did not occur during startup for shutdown scenarios and appeared to be new emission limit exceedance that has not been reported recently. A violation notice was issued on April 6, 2017. An exceedance of the 1-hour NOx emission limit has not occurred since the October 9, 2016 incident.

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 the highest 12-month rolling fuel usage occurred January 26, 2017 at 192,875 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 2016. 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 – 359,000 lb/hour, Boiler 13 – 291,000 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 2016 testing were provided by the facility as follows: Boiler 11 – 367 klbs/hour, Boiler 12 – 374 klbs/hour, and Boiler 13 – 363 klbs/hour. During the inspection, the steam load was observed as follows: Boiler 11 – 359,000 lb/hour, Boiler 13 – 291,000 lb/hour. The facility provided March 2016 records of the steam load. Records indicate compliance with the established steam load from October 2016 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 - 2338°F, Boiler 13 - 2377° F. The facility continuously monitors the combustion zone temperature. During review of the Third Quarter 2016 Continuous Emissions Monitoring Systems Report it was identified that the 1-hour average combustion zone temperature on Boiler 11 was less than both 1800°F and 1600°F on July 2, 2016 for 7 hours consecutively (reported combustion zone temperature range of 740°F to 741°F). Additionally, Boiler 11 did not meet the combustion zone temperature requirement for one hour (reported combustion zone temperature of 1556°F) on September 22, 2016. A violation notice was issued on April 6, 2017 for the temperature excursion. Since that time the facility reports that the combustion zone temperature has been in compliance with SC III.2.

SC III. 3. 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 6.7% (Boiler 11) and 7.0% (Boiler 13). During review of the Third Quarter 2016 and Fourth Quarter 2016 Continuous Emissions Monitoring Systems Reports it was identified that on

several occasions the flue gas oxygen content at Boiler 11 has been less than 4 percent by volume on a 1-hour average as listed below.

Third Quarter 2016
8/22/16 (1-hour) – 3.9%
9/13/16 (2-hours) – 3.5%, 3.9%
9/14/16 (3-hours) – 3.6%, 3.4%, 3.8%
9/15/16 (1-hour) – 3.8%
9/16/16 (1-hour) – 3.7%
9/17/16 (6-hours) – 3.3%, 3.5%, 3.9%, 3.9%, 3.9%, 3.8%
9/18/16 (9-hours) - 3.8%, 3.1%, 3.1%, 3.9%, 3.1%, 3.8%, 3.8%, 3.7%, 3.6%
9/21/16 (1-hour) - 3.7%
9/22/16 (1-hour) – 3.6%
9/23/16 (6-hours) – 3.7%, 3.9%, 3.6%, 3.3%, 3.8%, 3.9%
9/24/16 (1-hour) – 3.7%

Fourth Quarter 2016
10/10/16 (5-hours) - 3.7%, 3.4%, 3.6%, 3.7%, 3.7%
10/11/16 (1-hour) – 3.8%
10/13/16 (1-hour) – 3.9%
10/15/16 (1-hour) – 3.8%
10/16/16 (2-hours) – 3.5%, 3.8%
10/23/16 (1-hour) - 3.9%
10/30/16 (1-hour) – 3.8%
10/31/16 (1-hour) – 3.6%
11/1/16 (4-hours) – 3.9%, 3.8%, 3.9%, 3.9%
11/2/16 (3-hours) - 3.9%, 3.6%. 3.9%
11/3/16 (8-hours) – 3.8%, 3.9%, 3.6%, 3.5%, 3.1%, 3.8%, 3.2%, 3.9%
11/4/16 (7-hours) – 3.9%, 3.9%, 3.4%, 3.9%, 3.9%, 3.2%, 3.9%
11/5/16 (3-hours) – 3.8%, 3.8%, 3.3%
11/6/16 (9-hours) – 3.7%, 3.5%, 3.4%, 3.4%, 3.9%, 3.9%, 3.1%, 3.2%, 3.7%

A violation notice was issued for these incidents on April 6, 2017. There have not been reported flue gas oxygen content excursions since November 6, 2016.

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 2016 testing were provided by the facility as follows: Boiler 11 – 360°F, Boiler 12 – 371°F, and Boiler 13 – 347°F. During the inspection, the fabric filter inlet temperature was observed as follows: Boiler 11 – 299°F, Boiler 13 – 306°F. The facility provided March 2016 records of the fabric filter inlet temperature. Records indicate compliance with the established temperature at the fabric filter inlet from October 2016 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 the most recent bill of lading 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. The facility provided records indicated the fuel oil usage during startup. The maximum fuel oil usage rate occurred during December 24, 2016 at 172,827,910 BTUs per hour. In review of the third and fourth quarter quarterly 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 – 20.4 gpm, Boiler 13 – 16.830 gpm.

SC III. 10, SC VI. 59. NOT IN 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. According to email correspondence dated May 8, 2017, "The slurry density readings cannot be located for the time frames when the SO2 CEMS was down (2-14-16 and 2-15-16, 7-2-16 through 7-4-16, 11-23-16 and 11-24-16, 12-1-16 and 12-2-16, 12-5-16 and 12-6-16, and 12-14-16)." During a phone conversation on May 8, 2017 Ms. Peebles stated that it is unknown when the last time the slurry density was recorded, but the facility believes it was recorded in the past. This is a violation of SC III.10 and SC VI.59. A violation will be issued regarding this issue.

SC V. COMPLIANCE. The facility performs stack testing and RATAs annually as required. 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 conduction 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. A screen shot of the temperature was provided via email on May 9, 2017.

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. Emission data is recorded by the CEMS.

SC VI. 54.a through e, 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 each boiler. 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 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 meets all the requirements of SC IX.9.

SC VII. COMPLIANCE. The facility appears to be meeting all reporting requirements specified under SC VII. Annual, semi-annual, quarterly excess emission and monitor downtime reports, and Subpart Cb reports are submitted as required. During review of the 2016 Annual and 2016 Semi-Annual (07/1/2016 through 12/31/2016) report certifications for MI-ROP-M4148-2011a, it was identified that the facility did not report deviations relating to combustion zone excursions and flue gas oxygen content excursions.

This is a violation of R336.1213(3)(c)(i) and ROP No. MI-ROP-M4148-2011a, General Condition 21.c. A violation notice was issued on April 6, 2017. There have not been continued violations since that time.

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. NOT EVALUATED. Records required as part of the "Abnormal Condition Startup/Shutdown Malfunction Abatement Plan" were not evaluated as part of this inspection. The facility updated the document as part of the ongoing Consent Order negotiation to address emission violations that occurred during 2015 and 2016. At the time of this report, the Consent Order has not been finalized. Full evaluation of the current SSM plan will be evaluated during the next inspection.

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 as part of the 2016 MAERS submittal, 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. The State of Michigan is currently is the process of revising Rule 973, which will incorporate Subpart Cb requirements into State Rule, with the intention of the Rule being approved by the U.S. EPA as part of the SIP.

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. In general, the facility appeared to meet the requirements of the Fugitive Dust Management during the inspection on April 20, 2016. During the inspection a wet-vacuum street sweeper was observed at several locations throughout the facility. Under Section 4.4.3 of the FDMP, the facility states that velometer readings will be collected approximately every 2 hours. As described above under FBMSWPROC-LINES, SC IV. 3 and VI. 2, velometer records provided from October 3, 2016 through April 18, 2017 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 October 3, 2016 through April 18, 2017.

The facility provided roof fan logs for the MSW building that are required under Section 4.4.5 of the FDMP. The roof fan logs provided indicate that the status of the roof ventilator fans is recorded once per hour.

ODOR MANAGEMENT PLAN

The Odor Management Plan (OMP) dated December 2015 is required per MI-ROP-M4148-2011a, SOURCE-WIDE CONDITIONS, SC VI. 2 and SC IX. 7. Section 2.2g of the OMP indicates that the MSW and RDF Building are maintained under negative pressure. As described above under the FDMP and FBMSWPROC-LINES, SC IV. 3 and VI. 2, velometer records provided from October 3, 2016 through April 18, 2017 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 October 3, 2016 through April 18, 2017. A violation notice will be issued regarding this issue.

The facility appears to be in compliance with the remaining requirements of the OMP. The facility provided records of facility odor surveys, odor neutralizers use, roof ventilator inspection and maintenance, and daily inspections of spray systems, conveyors, and doors.

MAERS

The 2016 MAERS submittal was received electronically on March 6, 2017. Based on review of the supporting documentation provided in the submittal, the MAERS audit was passed.

FINAL COMPLIANCE DETERMINATION:

The facility has been determined to be in noncompliance with the following items.

FGMSWPROC-LINES, SC IV.1 and VI.3 - Primary and 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.

FGMSWPROC-LINES, SC IV. 3, FDMP Section 4.4.3, and OMP, Section 2.2g - Records provided from October 3, 2016 through April 18, 2017 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door).

FGBOILERS011-013, SC I. 11.b - CO emissions based on a 1-hour block average exceeded 267 ppmv for two consecutive hours on March 26, 2017 (8:00 to 10:00 – 274 ppmv and 297 ppmv), indicating the facility did not implement corrective actions in a timely manner.

FGBOILERS011-013, SC III. 10 and SC VI. 59 - Records provided indicate that the lime slurry density and pounds per hour of pebble lime was not maintained during SO2 CEMS downtime on 2-14-16 and 2-15-16, 7-2-16 through 7-4-16, 11-23-16 and 11-24-16, 12-1-16 and 12-2-16, 12-5-16 and 12-6-16, and 12-14-16.

A violation notice will be issued for the above items.

NAME _____ DATE 5/16/17 SUPERVISOR W.M.