

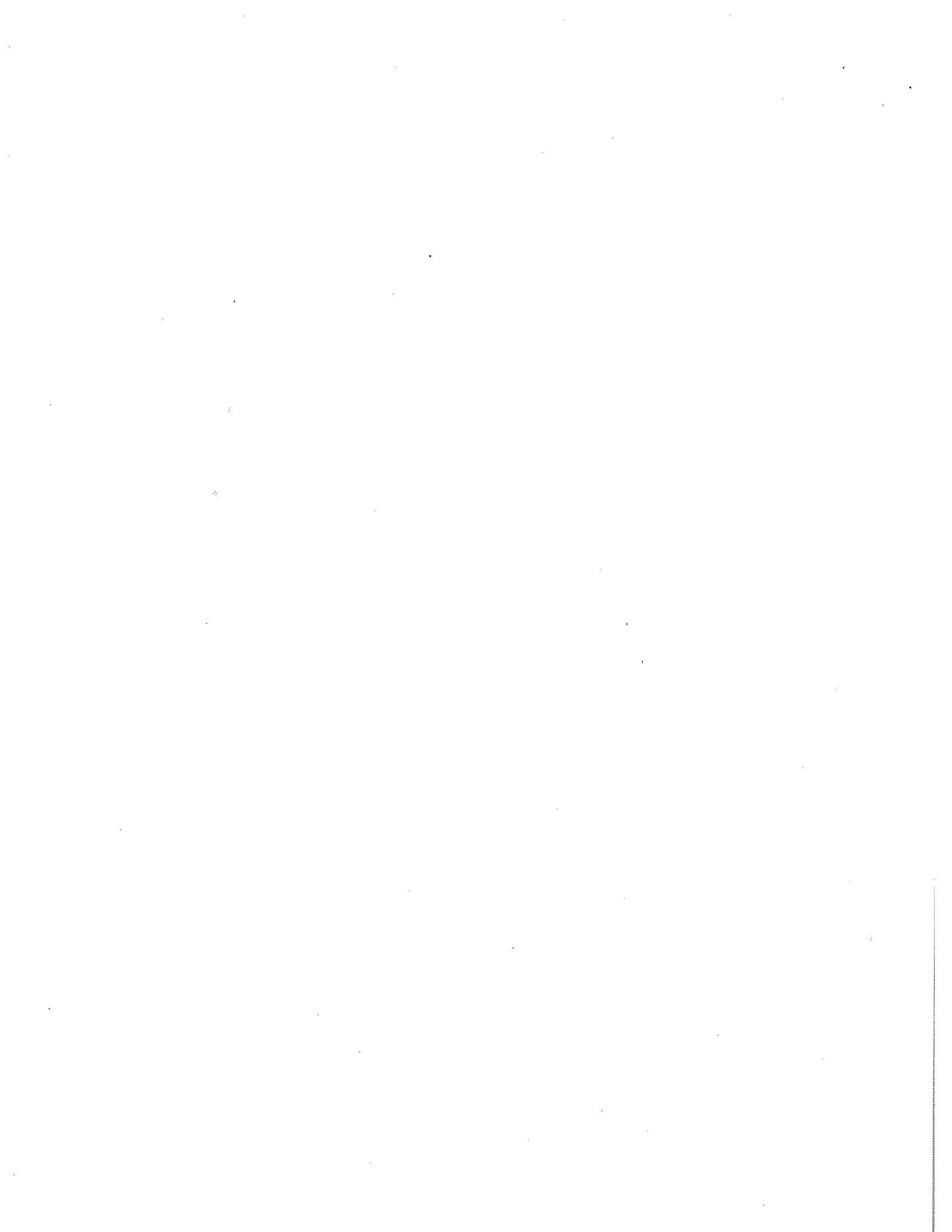
DEPARTMENT OF ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 ACTIVITY REPORT: Scheduled Inspection

N238832484

FACILITY: GRAYLING GENERATING STATION LTD PTNR		SRN / ID: N2388
LOCATION: 4400 W FOUR MILE RD, GRAYLING		DISTRICT: Gaylord
CITY: GRAYLING		COUNTY: CRAWFORD
CONTACT: Mr. Philip E. Lewis , Plant Manager		ACTIVITY DATE: 12/08/2015
STAFF: Gloria Torello	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: 2016 FCE.		
RESOLVED COMPLAINTS:		

Report attached.

NAME Gloria Torello DATE 1-19-16 SUPERVISOR 



N238832484

S. Torello 1-19-16

SRN: N2388. **Name:** Grayling Generating Station

Directions: The facility is located in Crawford County. From I-75 take the Four Mile Road exit and go east. The facility is about a mile east of I-75 on the north side of Four Mile Road.

Facility: The facility is an electric utility facility which was installed in January 1992 and includes one 523 MM Btu/hr wood and tire-derived-fuel (TDF) fired boiler equipped with natural gas auxiliary burners. The boiler is of a spreader-stroker design, and is equipped with a multiclone dust collector in order to capture and re-inject flyash, an electrostatic precipitator (ESP) for the control of particulate matter, and a selective non-catalytic reduction (SNCR) system for the control of nitrogen oxide. The facility receives both chipped wood and TDF by truck and uses these fuels in the boiler to produce steam. The boiler is initially started on natural gas then wood and TDF are added. The steam is used to produce approximately 36 megawatts of electricity at full capacity. The ash is collected, treated with water, and transported to a landfill for disposal.

Permit. On September 4, 2014, the AQD issued MI-ROP-N2388-2014. The ROP expires on September 4, 2019. An administratively complete ROP renewal application is due to AQD between March 4, 2018 and March 4, 2019. No permit to install has been issued since the ROP was issued.

The ROP includes the boiler, an emergency generator, a fire pump, a raw material handling area, and an ash handling area.

In addition to the ROP, the facility has an AQD approved Malfunction Abatement Plan (MAP), and an AQD approved Fugitive Dust Plan.

AQD has "blue files" for a CEMs Monitoring Plan, and a Solid Fuel Handling Plan.

The AQD has a "blue file" for NOx Budget Trading Compliance Certification Report. This relates to CAIR. Torello has spoken with Brian Carely, AQD, to discuss CAIR permits. CAIR expired in December 2014.

MAERS: The 2015 MAERS included these emission unit totals for:

EUBOILER		
Pollutant	ROP Limit	MAERS 2015
Particulate	25.2 tons per year	11.8 tons (PM10,FLTRBLE)
Nitrogen Oxides	343.6 tons per year	208.1 tons
Carbon Monoxide	916.3 tons per year	419.7 tons
Volatile Organic Compounds	39.0 tons per year	5.3 tons
Sulfur Dioxide	39.0 tons per year	15.4 tons

MACTS: This is an area source, minor for HAPs, making the facility an area source for these MACTS:

- **EUBOILER:** 40 CFR, Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources; and
- **EUEMERGENERATOR and EUFIREPUMP (FGCIRICEMACT):** 40 CFR, Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines for Area Sources.

The EPA has not delegated these Subparts to MI AQD and these Subparts were not reviewed.

MACES:

- Facility Information was reviewed and no change was made.
- Regulatory Info. To Regulatory Summary, HAPs was marked minor; to Subject To Subparts JJJJJJ and ZZZZ were added.

Brochure: The inspection brochure will be forwarded to the permittee with the site inspection notes via email.

Compliance: A review of AQD files and MACES report generator show no outstanding violation notice.

Inspection: On December 8, 2015 Gloria Torello of AQD staff made an inspection of the facility. Torello also had follow up questions after the site inspection and communicate with Mr. Phil Lewis including telephone communication on January 6, 2016. Mr. Lewis met Torello for review of the records at the facility. Also present from Grayling Gen's staff were Tim Porter and Mike who work in boiler operations and who provided Torello a tour of the facility grounds and boiler room. On this day the boiler was operating. There was a large steam plume off the boiler stack. It was a grey day with drizzle and there was not much contrast in color between the plume and sky. The boiler has the capacity to produce 38 megawatt of electricity and during the site visit the boiler was operating at 10 mw. Phil said the boiler has been operating at this minimum 10 mw load for several months as this is meeting the demands required of this facility at this time. Minimal tire derived fuel (TDF) is being used. Comments on the records are incorporated below. During review of the records, Mr. Lewis said the ESP is in sections. At the time of the site inspection, one section of the ESP was not operating.

During the tour of the grounds, Torello noted minimal track-out from the fly ash storage building. Bottom ash is deposited on the ground/cement outside of the boiler building where it is then scooped up with heavy equipment and transported to the fly ash building. Minimal track out was noted in the bottom ash area. The TDF is stored outdoors and is on a solid/cement surface. WACO Flakes from Weyerhaeuser are also stored outdoors and are on a solid/cement surface. The fuel yard had an abundant supply of wood chips, said to be well stocked for the cold/winter season. The wood chip piles were giving off steam/heat. A semi-truck was dumping a load of wood chips.

The emergency generator, EUEMERGENERATOR, is in a yellow structure found near the northwest side of the boiler building.

The diesel fire pump, EUFIREPUMP, is housed in a white building and located just off the permittee's property line on the neighbor's property. The fire pump is shared with the neighboring property in some type of working agreement. There is a pond on the neighbor's property and the pond water would be used in the event of a fire.

Torello met the control room operator who supplied screen shots of real time boiler operations, see attached. Examples of parameters monitored by the control room operator include:

- CEM readings of NOx in ppm, #/MMbtu, #/hr;
- TDF Flow,
- Gas Flow 24-Hr.

The PO2 log is in the control room, it is a bound paper log with hand written records including soot blowing.

Permit Conditions:

Unless otherwise noted below, the permittee submits deviation reports, semiannual reports, annual certifications, quarterly excess emission reports, test protocols, 7-day test notifications, and test results within the timeframes identified in the ROP's VII. Reporting requirements.

Source-Wide

The Source-Wide table focuses on fugitive dust control. On May 30, 2013 the AQD approved the permittee's Fugitive Dust Control Program (plan). The permittee operates EUBOILER with the plan implemented. Per conversation with Phil Lewis, the permittee reviews the plan annually, and no revision or update has been necessary.

Records: During the December 8, 2015 site visit, AQD staff requested to review Source-Wide records which are summarized below.

Emission Unit/ Flexible Group/ Process Description	Permit Special Condition	Records Requested	AQD Staff's Comment
Source-Wide Conditions	VI. 1	Records of street and parking lot washing / sweeping.	These records were provided by Tim Porter and are stored in the boiler control room building. Records show one or two times a month the parking lot is swept or washed, depending on weather conditions and facility activities.

EUBOILER

I. Emission Limits.

I. 1-27 set Emission Limits for the listed pollutants. The demonstrations of compliance are testing (V. Testing/Sampling.) or recordkeeping (VI. Monitoring/Recordkeeping) and are discussed below. As a general statement, the permittee has demonstrated compliance with the 27 Emission Limits.

The Monitoring/Testing Method column of the ROP needs to be updated when the ROP is renewed to reference the accurate special conditions numbers in V. Testing, and VI. Monitoring/Recordkeeping.

II. Material Limits.

II. 1 & 2 The permit limits natural gas usage to 53,500 scf/hr. The DCS Daily Summary record for November 1, 2015 shows zero natural gas usage. Mr. Lewis said natural gas is used on startup. TDF is permit limited to 3,750 pounds per hour. The DCS Daily Summary record for November 1, 2015 shows zero TDF used. Mr. Lewis said minimal TDF is used in recent times.

III. Process/Operational Restrictions.

III.1. EUBOILER has the following control equipment installed: mechanical dust collector, ESP, SNCR.

The ESP controls particulate matter (PM). There is not a PM CEMS. Mr. Lewis said the ESP is in three sections/fields. During the December 8, 2015 site visit, one section of the ESP was not operating because heavy rain had knocked out the ESP. On January 5, 2016, all sections of the ESP were back working as the ESP dried out.

Mr. Lewis said with two sections of the ESP operating there continues to be compliance with the permit PM emission limits because the COMs shows compliance with the 10% VE limit, and COMs shows compliance with the 5% VE in the CAM plan. Phil said opacity historically has been used as an indicator of PM compliance. The CAM plan includes, ROP page 20, VI. 10., "...use the COMs to assure compliance with PM..." When the CAM plan was developed, Phil said the facility tested and made a correlation between VEs and PM emissions and that is how the 5% VE CAM number was developed. Currently permittee staff is working to put new covers on the ESP to prevent a short caused by rain, water, snow melt.

The October 2015 compliance testing was completed with all three section of the ESP operating.

Torello discussed with Janis Ransom, DS AQD, the issue of the ESP operating with one or more sections not functioning. When the CAM plan was developed and the facility tested and made a correlation between VEs and PM emissions, it is assumed all three sections of the ESP were operating during testing. AQD is not aware of any test results correlating VE and PM emissions using less than three sections of the ESP operating. It is not known what the correlation is between VEs and PM emissions with two sections of the ESP operating. Also, there is the assumption the original application was reviewed with all sections/fields of the ESP operating.

Torello and Janis Ransom discussed the MAP. The MAP does not address the ESP's operation with one or more sections not functioning. AQD will request the permittee update MAP and address what actions will be taken if one or more sections of the ESP do not operate.

III.2. Mr. Lewis said EUBOILER begins firing from a cold start on natural gas only. After startup, fuel is switched from natural gas to wood, and TDF and other fuels if used. The DCS Daily Summary includes fuels used.

III. 3. All indications are the permittee is meeting the Startup and Shutdown definitions.

III.4. The permittee provided records of biennial tune-ups from 2014 and 2015.

IV. Design/Equipment Parameters.

IV.1. The span values for COMs and CEMS are by equipment design.

IV.2 and 4. The CEMS and COM are installed. The RATA is completed annually. Cylinder gas audits are provided with reporting. The Daily Cal Report includes information on Span and Analyzer Drift.

IV.3. The COM is installed on EUBOILER. The CEMS Daily Summary record includes Opacity 1-Hr. On November 1, 2015 the record includes zero opacity.

The IV. Design/Equipment Parameters conditions need to be cleaned up when the ROP is renewed. These existing conditions need to be changed as follows:

- IV.2 and 4 move to III Process/Operational Restrictions;
- IV.3 move to VI Monitoring/Recordkeeping.

V. Testing/Sampling

V.1. October 22, 2015 was the last day of recent metals testing. AQD received the test results on December 3, 2015. The stack test results included PM, VOC, As, Cd, Cr, Pb, Mn, Zn, Benzo-A-Pyrene, H₂SO₄. A review of the test results executive summary shows the tested emissions are below the permitted emission limits. The next metals test is due by October 2020.

V.2. The AQD's TPU approved the metals (V.1.) test plan. The approval letter includes required EPA test methods.

V.3. The results of the 2015 Annual Audit of the COMs (Opacity Filter Audit) were submitted with the April 2015 quarterly report. Per conversation with Rob Dickman, AQD, Differential Percent (Diff %) must be below three percent to pass. The audit shows the Diff % below three percent.

V.4. The 2015 RATA was completed in August 2015. AQD's comments on the RATA included, "results reviewed, within appropriate specifications, no issues."

VI. Monitoring/Recordkeeping:

During the December 8, 2015 site visit, AQD staff requested to review EUBOILER records which are summarized below.

Permit Special Condition	Records Requested	AQD Staff's Comment
VI. 1	The NO _x , SO ₂ , and CO ₂ concentration and exhaust flow rate of EUBOILER.	The boiler has CEMS for NO _x , SO ₂ , and CO ₂ . The CO ₂ monitor is used in the NO _x and SO ₂ emission calculations in #/MMbtu.
VI. 2	The CO emission rate of the exhaust gases from EUBOILER.	The boiler has CEMS for CO.
VI. 3	The amounts of natural gas, TDF, and wood fired in EUBOILER based upon a 24-hour daily average.	The <u>DCS Daily Summary</u> record for 11/1/15 includes these averages: <ul style="list-style-type: none"> • Gas Flow-zero (53,500 permitted), • TDF-zero (3,750 permitted), • Wood-20.44 tons per hour (ROP does not limit).
VI. 4	Calculation of the individual annual capacity factor for wood and natural gas.	Torello viewed the capacity factor numbers from the computer spreadsheet. There are no permit limits on these numbers. Capacity factor speaks to the actual vs. potential fuel used based on a formula. Information included: <ul style="list-style-type: none"> • Wood 39.3%, • Gas 0%.
VI. 5	Calculation of the annual capacity factor for tire derived fuel.	Torello viewed the capacity factor number from the computer spreadsheet. There is no permit limit on annual capacity. Capacity factor speaks to the actual vs. potential fuel used based on a formula. <ul style="list-style-type: none"> • TDF 16.2%.
VI. 6	Calculation of the tons of SO ₂ , NO _x , and CO emissions each month, include the 12-month time period.	The <u>CEM Emissions 12-Month Rolling Calculation</u> , includes: <ul style="list-style-type: none"> • SO₂ 5.6 tons (39 tpy permitted), • NO_x 133.17 tons (343.6 tpy permitted), • CO 235.86 tons (916.3 tpy permitted).
VI. 7	Calculation of the emissions of SO ₂ (24-hour rolling average), NO _x (30-day rolling average), and CO (24-hour rolling average).	The November 2015 <u>CEMS Daily Summary</u> includes the following: <ul style="list-style-type: none"> • SO₂ 0.001 lb/MMbtu (0.07 lb/MMbtu permitted), • SO₂ 0.2 lb/hr (11.2 lb/hr permitted), • NO_x 0.096 lb/MMbtu (0.15 MMbtu permitted), • NO_x 21.1 lb/hr (78.5 lb/hr permitted), • CO highest in November was 0.32 lb/MMbtu, (0.40 lb/MMbtu

		<p>permitted),</p> <ul style="list-style-type: none"> CO highest in November was 70.7 lb/hr (209.2 lb/hr permitted).
VI. 8	<p>Calculation of the Arsenic, benzo-a-pyrene, Cadmium, Chromium (total), Lead, Manganese, particulate matter, Sulfuric acid mist, VOCs, and Zinc Oxide measured as zinc each month, include the 12-month time period.</p>	<p>AQD staff reviewed the <u>12-Month Rolling Average</u> emissions reports. The reported emissions are below the calculated monthly and 12-month rolling emissions for the pollutants listed below:</p> <p>Arsenic , benzo-a-pyrene, Cadmium, Chromium (total), Lead, Manganese, particulate matter, Sulfuric acid mist, VOCs, and Zinc Oxide.</p> <p>The ROP's units of measurement are in pounds per hour. The permittee multiplies #/hr x 24 hrs/day x 365 days/yr to identify in their report monthly and 12-month rolling emission limits. In other words, the permittee does not record the pollutants in pounds per hour, the permittee records the pollutants calculated in pounds per month and pounds per 12- month rolling time period.</p> <p>The permittee's <u>12-Month Rolling Average</u> emissions reports include the pollutants in tpy "based on a 12-month rolling <u>average</u>." This report includes the "<u>total</u> emitted for Month," and "Previous 12-month rolling <u>average</u>." A review of the report shows the numbers are not an "average" but <u>total</u> emitted, which is in line with the ROP emission limits.</p>
VI. 15	<p>1) A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status,</p> <p>2) Records of the date of each boiler tune-up and the procedures</p>	<p>1) Mr. Lewis showed AQD staff a copy of the October 11, 2012 letter for the initial notification regarding Subpart JJJJJJ and their December 11, 2013 letter to EPA. The AQD has the October 11, 2012 letter of the initial notification in a blue file in Gaylord.</p> <p>2) Mr. Lewis showed AQD staff copies of their 2014 and 2015 tune ups.</p> <p>3) Phil will send Torello copies of an invoice and purchase order, and a statement from the TDF supplier, documenting the TDF is purchased from an "established tire collection program."</p>

	<p>followed for the tune-up (including the manufacturer's specifications to which the boiler was tuned, if applicable),</p> <p>3) Records documenting that the Tire Derived Fuel fired in EUBOILER is a listed non-waste under §241.4(a), and</p> <p>4) A copy of the energy assessment report.</p>	<p>See these links related to EPA's Non-Hazardous Secondary Materials info: http://www3.epa.gov/epawaste/nonhaz/define/index.htm ,</p> <p>http://www3.epa.gov/epawaste/nonhaz/define/rulemaking.htm#122012.</p> <p>Included is: Categorical Non-Waste Determinations for Specific NHSM Used as Fuels EPA codified determinations that certain NHSMs are non-wastes when used as fuels. Based on all available information, the EPA has determined that the following NHSMs are categorically not a solid waste when burned as a fuel in combustion units:</p> <p>1. Scrap tires that are not discarded and are managed under the oversight of including tires removed from vehicles and off-specification tires.</p> <p>4) Mr. Lewis showed AQD staff a copy of the energy assessment report. Phil said the assessment is a onetime obligation.</p>
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Although Grayling's report titled "CEM Emissions 12-Month Rolling **Average** Calculations" includes the word *average*, the record includes emissions calculated as a given month plus the previous 11 months. A review of the November 2015 record includes:

November 2015 Monthly in Tons			12-Month Total		
SO2	NOx	CO	SO2 (39.0 tpy permitted)	NOx (343.6 tpy permitted)	CO (916.3 tpy permitted)
0.09	9.99	0.66	5.6	133.17	235.86

The permittee consistently maintains their records, and made records available to the AQD during the site visit. The records demonstrate compliance with the permit limits.

VII. Reporting

VII.1. By design, the ESP is in sections. At the time of the site inspection, Mr. Lewis said one section of the ESP was not operating. Torello and Janis Ransom discussed this and concluded the permittee needs to send a Deviation Report for operating the ESP with one section not functioning. Torello discussed this with Mr. Lewis and the 2015 July - December semiannual report will include a deviation for not operating the ESP with all three sections/fields operating.

VII. 4. As of the time of this review, AQD has on file the 2015 first and second quarterly EER reports. It is noted the 2015 second quarter report does not include a Report Certification, per General Condition 18. Per conversation with Mr. Lewis on 1/6/16, Phil will mail to Gloria the Report Certification for the 2015 2nd quarter report.

VII. 8. It is noted the 2015 second quarter report does not include a summary of compliance with the monthly SO₂, NO_x, and CO emissions calculations. Phil will mail to Gloria a summary of compliance with the monthly SO₂, NO_x, and CO emissions calculations.

VII.9. The results of the 2015 Annual Audit of the COMs (Opacity Filter Audit) were submitted with the April 2015 quarterly report. Per conversation with Rob Dickman, AQD, Differential Percent (Diff %) must be below three percent to pass. The audit shows the Diff % below three percent.

VII.10. The Cylinder Gas Audit is included in the quarterly reports, AQD's TPU reviews. The 2015 RATA results were submitted, and AQD's TPU reviews.

VII.11 and 12.

The January – June 2015 semiannual CAM Excursion/Exceedance Summary Report included exceedances of the 5 percent opacity limit ranging from 2 to 12 hours; corrective actions were taken.

The July – December 2014 semiannual CAM Excursion/Exceedance Summary Report comments in MACES include: 1 deviation listed with separate occurrences for opacity during start up and shut down.

The January – June 2015 semiannual CAM Monitor Downtime Report included zero monitor downtime.

The July – December 2014 semiannual CAM Monitor Downtime Report included zero monitor downtime.

VII.13. The condition includes, "...each year the permittee shall prepare, and submit upon request, an annual compliance certification report..." for 40 CFR Part 63, Subpart JJJJJJ. AQD has not requested this report. Phil said the report will be prepared for 2015. The report will be on file for AQD's review.

VIII. Stack/Vent

VII. By visual assessment, stack appears to meet the restrictions of a maximum of 94 inches in diameter and a minimum of 220 feet above the ground height.

IX. Other Requirements

IX.1. Mr. Lewis said the facility does not burn wood containing creosote, pentachlorophenol, or copper chromium arsenate.

IX.2. The CAM plan has not been updated. Phil said the CAM plan is reviewed annually.

IX.3. This is an umbrella condition requiring the permittee comply with applicable requirements of 40 CFR, Part 64.

IX.4-9. Torello has spoken with Brian Carely, AQD, to discuss CAIR permits. CAIR expired in December 2014 and was replaced with CSAPR. Recently AQD sent the permittee a letter stating the AQD determined it is necessary to reopen their ROP pursuant to Rule 217(2)(a)(i) in order to incorporate applicable requirements associated with the Cross State Air Pollution Rule. Once MI AQD finalizes the permit, the permittee will be responsible to work with the US EPA for compliance.

IX.10 and 12. The EPA has not delegated 40 CFR, Part 63, Subpart JJJJJJ to MI AQD and the Subpart was not reviewed for compliance.

IX. 11. EUBOILER is subject to 40 CFR, Part 60, Subpart Db.

EUEMERGENERATOR:

During the December 8, 2015 site visit, AQD staff requested to review EUEMERGENERATOR records which are summarized below.

Permit Special Condition	Records Requested	AQD Staff's Comment
VI. 1	Shipment of diesel fuel as to which grade of diesel was received.	The ROP Material Limit allows use of Number 1 or 2 distillate oil. Mr. Lewis provided the <u>Purchase Order</u> from 4/20/15 that includes premium diesel "Low-Sulfur." The ROP does not limit the amount of oil that may be used.

FGMATHLHDLG

III.1. A wetting system is in place.

Records: During the December 8, 2015 site visit, AQD staff requested to review FGMATHLHDLG records which are summarized below:

Emission Unit/ Flexible Group/ Process Description	Permit Special Condition	Records Requested	AQD Staff's Comment
FGMATHLH DLG	VI. 1	Personnel shall observe ash-handling equipment and wood handling equipment, and repairs, and remedial actions.	The <u>Fuel Service Operator Log</u> includes Fugitive Emissions for Fuel handling equipment, and Ash handling equipment. The 11/1/15 log includes "SAT" meaning Satisfactory, as determined by Grayling Generating staff, and Mr. Lewis indicated this includes VE observations.
	VI. 2	Weekly inspections of equipment for FGMATHLHDLG, include corrective measures taken.	

MAP

The MAP requires ongoing/preventative maintenance. The Operations Outage Work List or Outage Report identifies maintenance completed during the outage. Torello's perusal of the reports during the site visit identified MAP maintenance items completed during the most recent outage.

Mr. Lewis said spare parts are on site for the emission unit and control equipment. Spare equipment on site may vary at a given time.

The Midnight Report includes EUBOILER operating variables. The 12/8/15 Midnight Report logged Steam Flow at +/- 108 KPPH. The MAP Steam Flow range is 85-350 KPPH.

The PO1 Log, page 2, Boiler Deck, second line, includes the Mechanical Dust Collector, Re-injecting air for reinjecting char (reinjecting carbon) from dust collector, Supply Air. The 11/1/15 PO1 Log reported the Supply Air was 26. The MAP's Supply Air range is 30-45 inches water. Phil will send AQD an updated MAP to address this.

The PO1 Log, page 5, Precipitator Log, Panel #1, Primary V, includes ESP the operating variable "Control for transformer rectifier sets." The 11/1/15 PO1 Log reported the Control for transformer rectifier sets, Primary voltage ton TR sets, was 280. The MAP "normal range is Primary voltage ton TR sets are above 60 volts."

The MAP does not include corrective procedures if the ESP operates with one or two sections/fields not functioning. Phil will send AQD an updated MAP to address the ESP's operation with one or more sections/fields not functioning.

The PO1 Log, page 3, Bottom Floor, includes SNCR operating variables. The 11/1/15 PO1 Log reported the:

- Urea circulating skid operation pump discharge pressure was 18. The MAP normal range of pump discharge pressure is 6-40 PSI.
- Urea discharge temperature range was 97-120. The MAP normal range of discharge temperature 65-115 degrees F. Phil said the temp must be above 65 degrees to prevent crystalizing. Phil will send AQD an updated MAP for the SNRC, Normal Range of Operating Variable, Discharge Temperature must be above 65 degrees F.
- The MAP SNCR, Operating Variable, Urea Distribution Panel, Urea Pressure is not recorded every shift. There is monthly Preventative Maintenance which is recorded. The MAP will be updated to show records of SNCR, Operating Variable, Urea Distribution Panel, Urea Pressure monthly Preventative Maintenance.

The following information relates to EUBOILER's SNCR. When the AQD approved the October 2015 test protocol for Arsenic, benzo-a-pyrene, Cadmium, etc., the approval letter required the recordkeeping described below.

Record keeping required by AQD's approval letter of the October 2015 test protocol:	Test Report Appendix B Included:	The Plant Operator I Log (PO1) for 11/1/15 Included:	The MAP Includes:
Urea Injection Rate	25% - 30%		Not in MAP. Urea injection rate is based upon real time NOx emissions that need to be controlled.
Urea pump circulating skid operation- Discharge Pressure	19 PSI	18	6-40 PSI.
Urea pump circulating skid	110 Degrees F	120	65-115 Degrees F.

operation- Temperature			
Urea distribution panels pressure.	South 50 PSI, North 60 PSI.	Not recorded.	40-95 PSI.

Conclusions:

EUBOILER.

1. The I. Emissions Monitoring/Testing Method column of the ROP needs to be updated when the ROP is renewed to reference the accurate special conditions numbers in V. Testing, and VI. Monitoring/Recordkeeping.
2. The IV. Design/Equipment Parameters conditions need to be cleaned up when the ROP is renewed. These existing conditions need to be changed as follows:
 - IV.2 and 4 move to III. Process/Operational Restrictions;
 - IV.3 move to VI. Monitoring/Recordkeeping.
3. Condition VI.15. Phil will send Torello copies of an invoice and purchase order, and a statement from the TDF supplier, documenting the TDF is purchased from an "established tire collection program." The AQD received the information on January 11, 2016.
4. Condition VII.1. Torello discussed this with Mr. Lewis and the 2015 July - December semiannual report will include a deviation for not operating the ESP with all three sections/fields operating.
5. Condition VII. 4. Phil will mail to Gloria the Report Certification for the 2015 2nd quarter report. The AQD received the information on January 11, 2016.
6. Condition VII. 8. Phil will mail to Gloria a summary of compliance with the monthly SO2, NOx, and CO emissions calculations. The AQD received the information on January 11, 2016.

MAP:

7. Phil will send AQD an updated MAP for the Mechanical Dust Collector, Normal Range of the Operating Variable, Supply Air range.
8. Phil will send AQD an updated MAP to address the ESP's operation with one or more sections/fields not functioning.
9. Phil will send AQD an updated MAP for the SNRC, Normal Range of Operating Variable, Discharge Temperature must be above 65 degrees F.
10. Phil will send AQD an updated MAP for the SNRC, Urea Circulating Skid Operation, Urea Discharge Temperature, with temperature above 65 degrees F.
11. Phil will send AQD an updated MAP to show records of SNCR, Operating Variable, Urea Distribution Panel, Urea Pressure monthly Preventative Maintenance.

With items 1-11 addressed, via onsite inspection, review of records, discussion with permittee staff, and discussion with AQD staff, it is Torello's determination the permittee demonstrates compliance with the conditions of the ROP.

