

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

B719233743

FACILITY: VERSO QUINNESEC, LLC		SRN / ID: B7192
LOCATION: W-6791 US HIGHWAY 2, QUINNESEC		DISTRICT: Upper Peninsula
CITY: QUINNESEC		COUNTY: DICKINSON
CONTACT: Richard Menard , Environmental Engineer		ACTIVITY DATE: 03/10/2016
STAFF: Joel Asher	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled compliance inspection		
RESOLVED COMPLAINTS:		

An unannounced inspection was conducted at this facility on March 10 and 11, 2016. My contact was Mr. Rich Menard. I introduced myself and explained the purpose of this inspection to be part of the semi-annual compliance inspection that is required by the compliance monitoring strategy established by the Michigan DEQ and the EPA.

Mr. Menard has accepted a position at Louisiana Pacific Sagola. He will remain though the end of March with his position at Verso. His first day at LP Sagola will be May 2, 2016.

It was determined we would go through the facility's ROP (MI-ROP-B7192-2013) and determine compliance with the special conditions.

EU0101-S1 Chip Screening Operations, EU0102-S1 Chip Production Operations, and EU0106-S1 Air Density Separator

For each emission unit, SC VI.2 requires measuring and recording the pressure drop once per shift. This is conducted by a rounds inspection done by the operator once per shift. The operator must enter that they have completed the round and enter any outstanding issues observed. Records for the 1st and 2nd shift of 3/9/16 indicate the pressure drop was observed and recorded.

For each emission unit, SC VI.3 requires weekly non-certified visible opacity observations be conducted on the fabric filter collector. These are actually conducted each shift to ensure they are completed. Records review show they were completed on 3/9/16. Conversations were held with Mr. Menard regarding having the operators complete the Method 9 Visible Emissions training at least once to provide education on opacity observations. He stated they have one person on staff who has completed the training. There are plans to have a second person trained.

EU0204-S1 Digester System

SC VI.1 requires the facility to keep records on a daily basis, and on a 12 month rolling time period, of the tons of pulp produced. Records were reviewed to demonstrate the facility is in compliance with this requirement.

EU0205-S1 Digester Blow Tank

SC III.1 requires the facility to monitor and record the temperature and the operating times of the cold water spray system on a continuous basis. The monitoring of operating times is done by recording the valve position. On 3/9/16 the valve was averaging 28.8% open and the water temperature was recorded at 115 degrees F.

EU0407-S1 White Liquor Oxidation System

SC VI.1 requires weekly visible opacity observation of the demister. As with other weekly reading the facility has them conducted once during each shift on a daily basis. Records on 3/9/16 were reviewed to demonstrate the readings are being conducted.

EU0508-S1, EU0513-S1, EU0514-S1 Bleach & Extraction Stages

SC VI.1 requires the facility to continuously monitor the inlet flow rate and gas scrubber effluent pH. This is being done. Records for 3/9/16 show the the D₁₀₀ flow was 47.67 gpm, the D₁D₂ was 45.97 gpm. The pH for the D₁₀₀ was 11.13 and the D₁D₂ was 10.51.

It was noted that the language in SC VI.2.b.i should be changed from "closure" to "enclosure". The enclosure is routinely observed for visible defects. The last recorded observation was done on 3/9/16.

EU0610-S1 Generating Plant (ClO₂)

SC VI.1 requires the facility to continuously monitor and record the flow of the scrubber liquid to the white liquor scrubber. Observed records show this is being done. On 3/9/16 the average flow was 51.3 gpm.

EU0611-S1 Methanol Storage Tank

SC VI.1 requires the facility to monitor and record the amount of methanol transferred into the methanol storage tank. Calculations were conducted based on methanol weighing 6.6 pounds per gallon. It was determined 512,635 gallons of methanol were transferred in 2015.

SC IX.1 limits the facility to not filling the methanol storage tank at a rate faster than 200 gallons per minute. Mr. Menard stated their pump can't pump faster than 200 gpm so the facility has no possibility of operating out of compliance with this condition.

EU0767-S1 Condensate Stripper

SC VI.1 requires the facility to measure condensate feed rate, steam feed rate, and condensate column feed temperature. This information is collected and submitted on the required MACT reports. Information was observed in the facility's records for 3/10 and the condensate feed rate was 166.6 gpm, the steam feed rate was 12.1 kpph, and the condensate column feed temperature was 112.8 degrees F.

EU0815-S1 Chemical Recovery Furnace

SC II.1 limits the facility to specific fuels to be burned in the furnace (natural gas, virgin black liquor solids, salt cake, or ESP hopper materials). Mr. Menard stated the unit is designed such that no other materials could be burned in the unit.

SC II.1 limits the facility to burn no more than 793.55 million cubic feet of natural gas per year in the chemical recovery furnace. Records show the facility burned 57 million cubic feet of natural gas in 2015.

SC II.3 limits the unit to not firing virgin black liquor solids, salt cake, or ESP hopper materials greater than 4.20 million pounds per operating day and 755,000 tons per year, based on a 12 month rolling time period. On 3/9/2016 the unit burned 4.196 million pounds and the 12 month rolling average was 718,855 short tons. Records demonstrate the facility is in compliance with this requirement.

SC III.2 requires the steam load from the chemical recovery furnace while incinerating DVGs shall not be less than 100,000 pounds of steam per hour. On 3/9/16 the average steam load was observed to be 586,000 pounds per hour. Mr. Menard stated the DVGs are primarily combusted in the waste boiler, the chemical recovery furnace is used for back-up incineration.

SC VI.1 per this condition the Continuous Opacity Monitoring system (COMS) is calibrated daily at 7:00 AM. New opacity monitors were installed in December of 2015.

EU0816-S1 Smelt Dissolving Tank

SC III.1 requires the facility to cease input feed to the smelt dissolving tank upon initiation of the collector bypass.

Mr. Menard stated there are audible and visible alarms at the operator's monitors to indicate when the collector bypass is initiated. This ensures the operators are aware of the bypass and cease the input feed. As well, all bypass events are recorded and reported via Subpart MM requirements.

SC VI.1 requires the facility to maintain a continuous monitoring system to measure fan amperage and scrubber liquid flow rate. These are installed. The fan amperage is recorded as a percentage of the operating capacity. For 3/9/16 the fan amperage was recorded as 71.79% of maximum and the scrubber flow rate was 175.2 gpm.

SC VI.2 requires the facility to establish operating ranges. The fan amperage should be >60% and the scrubber flow should be >150 gpm. Per the data recorded in SC VI.1 the facility is in the appropriate ranges.

EU0917-S1 Lime Kiln

SC III.2 requires the facility to maintain a minimum temperature in the lime kiln of 1200 degrees F. Records for 3/10/16 show the temperature to be 2519 degrees F.

SC V.2 requires the facility to maintain a complete record of fuel oil specifications for each load delivered. Mr. Menard stated they have not burned fuel oil for several years, nor have they received any shipments. Discussions were held regarding the possibility of removing the fuel oil burning option at the next ROP renewal. No final decision was made.

SC VI.2 requires the facility to install and maintain a continuous monitoring system to measure and records the pressure drop across the scrubber and the scrubber liquid flow rate. On 3/10/16 the pressure drop was recoded as 31.6 " H₂O and the flow rate was 540.3 gpm.

SC VI.3 requires the facility to establish scrubber operating ranges. These are established based on performance tests. The latest tests show the pressure drop should be > 30 " H₂O and the flow rate should be > 450 gpm. The values recorded on SC VI.2 show the facility to be in compliance.

SC VI.4 requires the facility to conduct inspections, evaluations, and quality control at least once per 24 hour period. This continuous monitoring system is run through the facility's PI Prophecy system for their required MACT reporting.

EU01019-S1 Slaker

SC III.1 requires the facility to cease input feed to the slaker upon initiation of the collector bypass. There are audible and visible alarms at the operator's monitors to indicate when the collector bypass is initiated. This ensures the operators are aware of the bypass and cease the input feed.

SC VI.1 requires the facility to maintain a continuous monitoring system to measure scrubber liquid flow rate. For 3/9/16 the scrubber flow rate was 27.8 gpm.

EU1121-S1 Waste Fuel Boiler

SC III.1 requires the facility to continuously monitor the hourly steam load and the flow from the DVGs booster fan. On 3/9 the hourly steam load was recorded as 312 kpph and the booster fan flow was recorded as 8.77 kscfm.

SC III.4 limits the facility to using < 660 million Btu per hour of wet wood refuse. Utilizing the figure from SC V.3 below, the calculation was made:

$$(660,000,000\text{Btu/hour limit}) / (4392\text{ BTU/pound wet wood refuse}) = 150,273\text{ pounds of wet wood refuse/hour limit}$$

$$(150,283\text{ pounds of wet wood refuse limit}) / (2000\text{ pounds/ton}) = 75.13\text{ tons wet wood refuse/hour limit}$$

Facility records for 3/9/16 show the facility using an average of 60.6731 tons/hour. This is below the 75.13 tons/hour

limit calculated above. The facility is in compliance with this requirement.

SC V.1 the facility annually conducts an independent analysis of the coal. The last test was done on 11/14/15 which showed .79% sulfur and 12,835 Btu/pound.

SC V.3 requires the facility to calculate a high heating value of the wet wood refuse on a monthly basis. This was last calculated at 4392 Btu/pound of wet wood refuse.

SC IX requires the facility to maintain the waste fuel boiler's ESP hoppers with level detection devices. A walk through of the plant at the end of the inspection was conducted and the operator for the waste fuel boiler showed the detection devices are displayed on the operator's monitor at their work station.

EU1121-S1 Package Boiler

It should be noted that this emission unit is labeled as a package boiler, however, it is not a portable unit. This unit is permanently at the site and is not movable or portable.

EU1125-S1 Coal Crushing/Unloading & Handling

SC VI.1 requires the facility to conduct weekly uncertified visible opacity observations. These are actually conducted on a daily basis as the operator conducts their rounds. A notation is made if any emissions were observed or not. Records were reviewed for 3/9/16 and it was observed there was no visible opacity observed.

SC VI.2 requires the facility to continuously measure the pressure drop on the dust collector and record daily. This is performed once per shift. Records were reviewed for 3/9/16 and it was observed the pressure drop was .01 " H₂O. A walk through of the plant at the end of the inspection was conducted. I met with Mr. Corey Wing, operations coordinator. He provided a document clarifying proper operations of wood yard emission units. The document appears to be very clear on instructing the operators of proper operation.

EU1127-S1 Fuel Hogging Operations

SC VI.1 requires the facility to conduct weekly uncertified visible opacity observations. These are actually conducted on a daily basis as the operator conducts their rounds. A notation is made if any emissions were observed or not. Records were reviewed for 3/9/16 and it was observed there was no visible opacity observed.

SC VI.2 requires the facility to continuously measure the pressure drop on the dust collector and record daily. This is performed once per shift. Records were reviewed for 3/9/16 and it was observed the pressure drop was .68 " H₂O.

EU1128-S1 Purchased Fuel Hogging Operations

SC VI.1 requires the facility to conduct weekly uncertified visible opacity observations. These are actually conducted on a daily basis as the operator conducts their rounds. A notation is made if any emissions were observed or not. Records were reviewed for 3/9/16 and it was observed there was no visible opacity observed.

SC VI.2 requires the facility to continuously measure the pressure drop on the dust collector and record daily. This is performed once per shift. Records were reviewed for 3/9/16 and it was observed the pressure drop was 4.2 " H₂O.

SC VI.4 requires the facility to keep records of the wet wood refuse processed. These records were observed and show the facility to have processed 426,573 short tons of wet wood refuse in 2015.

EU1137-S1 Hogged Fuel/Coal Transfer

SC VI.1 requires the facility to conduct weekly uncertified visible opacity observations. These are actually conducted on a daily basis as the operator conducts their rounds. A notation is made if any emissions were observed or not. Records were reviewed for 3/9/16 and it was observed there was no visible opacity observed.

SC VI.2 requires the facility to continuously measure the pressure drop on the dust collector and record daily. This is performed once per shift. Records were reviewed for 3/9/16.

EU1227-S1 Q41 Paper Machine

SC VI.1 requires the facility to monitor and record the daily paper machine production rate and coating application rate. Records were reviewed. On 3/9/16 the production rate was 1721.1 machine tons. The coater application rate averaged 218 gallons/hour for coater #1 and 211 gallons/hour for coater #2. Coater #1 applied 313,701 gallons for the day, Coater #1 applied 303,999 gallons for the day.

EU1228-S1 Finished Paper Trimming

SC VI.1 requires the facility to conduct weekly uncertified visible opacity observations. These are actually conducted on a daily basis as the operator conducts their rounds. A notation is made if any emissions were observed or not. Records were reviewed for 3/9/16 and it was observed there was no visible opacity observed.

EU1229-S1, EU1239-S1, EU1240-S1 Q41 Starch Handling

SC VI.1 requires the facility to conduct weekly uncertified visible opacity observations. These are actually conducted only when filling the starch silos. When the tanks are not being filled there would be no potential for visible emissions. This is language that should be addressed during the next ROP renewal.

EU2334-S1 CVG (LVHC) System

SC III.1 states the facility shall not operate the equipment associated with the CVG (concentrated vent gas) system unless the CVGs are incinerated in either the lime kiln or wood refuse boiler or if these sources are unavailable, scrubbed in the CVG scrubber. The only time the CVG scrubber is used is when the facility is switching from the lime kiln to the wood refuse boiler. However, the scrubber is run continuously. This is in the event a switch is needed they do not have to wait for the scrubber to come on line.

SC III.2 requires the facility to operate the scrubber as expeditiously as possible during all switchovers. As described under SC III.1 above the scrubber is run continuously so there is no downtime during switchovers. Proper operation of the scrubber requires the white liquor feed rate to be not less than 10 gallons per minute and the concentration of sodium hydroxide to be no less than 70 grams per liter.

SC VI.1 requires the facility to continuously monitor the white liquor flow rate. The records on 3/9/16 indicate the flow rate averaged 30 gallons per minute. This demonstrates compliance with the limit specified in SC III.2 above.

SC VI.2 requires the facility to monitor the concentration of sodium hydroxide. The records on 3/9/16 indicate the concentration was 90 grams per liter. This demonstrates compliance with the limit specified in SC III.2 above.

SC VI.3 requires the facility to inspect each closed-vent system once per month for defects. Records are kept of the monthly inspections.

EU2335-S1 DVG (HVLC) Systems

SC VI.2.b requires the facility to inspect each closed-vent system once per month for defects. Records are kept of the monthly inspections.

EU2336-S1 Condensate Source Group

SC III.6 requires the facility to ensure all collected condensate streams shall contain at least 11.1 pounds total HAPs per oven dried ton of pulp on a 15 day rolling average. Records were reviewed and on 3/9 they showed the values to be 23.05 pounds of methanol per oven dried ton of pulp.

SC VI.4 requires the facility to visually inspect the condensate collection system monthly. This is performed during the operators walk around inspections.

SC VI.5 requires the facility to visually inspect the unburied portion of the collection system. This is performed during the operators walk around inspections.

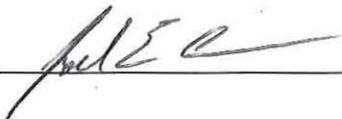
FGCIRICEMACT-S1

SC III.1 specifies the maintenance and operation requirements allowed under 40 CFR Part 63 Subpart ZZZZ. The fire pump was observed during a walk around the facility at the end of the inspection. The operator stated all maintenance is contracted out to NPower. The last maintenance was done in December 2015. To date, the unit has only been run for annual testing. The engine is operated every Monday for 30 minutes to ensure proper operation. Maintenance is scheduled to repair the block heater and the exhaust manifold.

SC IV.1 requires the emission unit to be equipped with a non-resettable hour meter. This was observed on the fire pump. It reads 6.6 hours. A note is on the unit stating the engine has an additional 111.4 hours. The control display was changed due to a faulty tachometer. The unit was run 111.4 hours on the old display.

No violations were found as a result of this inspection. The facility was found to be in compliance with their ROP (MI-ROP-B7192-2013) and the Air Pollution Control Rules.

NAME



DATE

3/18/16

SUPERVISOR

