

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

B287332345

FACILITY: Michigan Sugar Company - Sebewaing Factory		SRN / ID: B2873
LOCATION: 763 N Beck St, SEBEWAING		DISTRICT: Saginaw Bay
CITY: SEBEWAING		COUNTY: HURON
CONTACT: Steven Smock , Environmental Engineer		ACTIVITY DATE: 10/27/2015
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled compliance inspection for fiscal year 2016- sgl		
RESOLVED COMPLAINTS:		

Tuesday, October 27, 2015, AQD District Staff conducted a scheduled site inspection at The Michigan Sugar Company Facility (MSC) (SRN B2873) 763 North Beck Street, Sebewaing, Michigan. One Renewable Operating Permit (ROP) (MI-ROP-B2873-2012) is associated with the referenced facility and was issued November 7, 2012.

The facility was operating upon arrival, and AQD staff conducted site inspection activities with Kelly Scheffler (Factory Manager), Adam Gennrich (Factory Chemist) and Steve Smock (Environmental Engineer).

Split samples of anthracite coal (EULimekiln Grab) and bituminous coal (FGBoilers Grab) were collected as part of the site investigation activities to confirm reported laboratory analyticals. AQD samples were shipped to Merit Laboratories for analysis on October 29, 2015.

#### FACILITY DESCRIPTION

The MSC facility is comprised of an estimated 300 acres, and is located in a mixed commercial, agricultural and residential area in Sebewaing, Huron County Michigan. Located on the north side of West Pine/Pine Street, the MSC facility extends approximately 0.4-mile to the east and west of North Beck Street along West Pine/Pine Street. The facility extends to Saginaw Bay in the northwest corner of the facility with the water treatment ponds ultimately draining into the Bay.

Readily available information from the internet indicated that the factory was built in 1902, and is the only one of the 4 to have operated continuously since that date. The principal product for the facility is sucrose table sugars from sugar beets. Other MSC process products include molasses, which is used as a cattle feed supplement; beet pulp (pressed and pellitized) which is sold in bulk as animal feed; and spent sugar beet lime sold/used as a soil enhancement/supplement.

Operations at the MSC Facility are seasonal, with sugar beet processing conducted during "campaigns". Beet processing or the "beet campaign" normally runs from mid-late September through February or March. The beet campaign is followed by "juice campaigns" that normally continue through the end of March in which remaining unprocessed juice is processed into sugar. Operations during a campaign are reported to be 24/7 until both onsite and off-site stored sugar beets have been processed. Packaging activities are conducted independent of the beet processing and can/may be conducted throughout the year.

#### Compliance History --

The most recent Full Compliance Evaluation (FCE) for the facility was completed on November 19, 2013. The facility was found to be in general compliance with it's ROP at that time.

No complaints were received by the District for the facility since November 2011.

Annual emission reports under the MAERS reporting system are received in a timely manner. The most recent MAERS submittal was for the 2014 reporting year.

Processing Activities and Equipment - The sugar beet processing operations are comprised of several

steps, including cleaning, slicing, diffusion, juice purification using milk of lime, evaporation, crystallization and dried-pulp pelletization. The following process description was determined in part from PTI applications and reports available in District Files as well as prior discussions with facility staff. Lime (CaO) and SO<sub>2</sub> among other process additives are used to adjust pH in the various process stages to achieve the desired product.

Changes since the 2013 site inspection include replacement of the slicers in 2014, and installation of a Wet Electro Static Precipitator in 2015.

Primary process steam is provided by:

- Two coal-fired, stoker Wickes boilers (FGBOILERS a.k.a EUWICKESEASTBOILER and EUWICKESWESTBOILER), and
- One natural gas or fuel oil fired boiler (EUCEPACKAGEBOIL)

An exempt natural gas -fired boiler (Summer Boiler) is on stand-by for additional process steam. Heat and/or air conditioning are provided by the boilers and exempt gas heaters.

Sugar beets received by MSC are staged both on and off-site for processing during the campaign. The facility has implemented an internal heat monitoring system for the beet piles to help prevent product loss due to spoilage. External temperature monitoring is conducted on all of the beet piles periodically to monitor the condition of the rest of the beets.

At the time of processing sugar beets are unloaded into sugar beet receiving pit, and dropped into the beet flume. The beet flume is the wash system that is used to transport the beets into the plant and remove rocks, dirt and vegetation from the beets. From the beet flume, the beets move onto the beet pump, which transports the beets up to the upper story and an additional wash system. From here the beets go into the slicer, and the water associated with both the flume and washer goes to the various settling before being reused. The excess water is treated in more settling ponds and several aeration ponds. Residual vegetation and other organics are taken to an approved compost site for handling.

Sliced beets (cossettes) cross a weigh belt and are conveyed to the cossette mixer. The cossette mixer is followed by a counter-current tower diffuser. Cossettes are mixed with juice from the tower diffuser in the cossette mixer and pumped to the bottom of the tower. As the cossettes migrate to the top of the diffuser, hot water is added to the top, and travels down leaching sugars as well as other non-sugar compounds from the cossettes. Liquid/raw juice leaving the diffuser/cossette mixer is sent to the pre-limer for the start of juice purification.

Beet solids (aka beet pulp or wet pulp) from the diffuser is sent to the pulp presses. Liquids removed during the pressing are sent to the diffuser, and the pressed pulp is either sold or is sent to the pulp dryers. The pressed pulp is used by local farmers as animal feed, and is removed from the site within a few days after processing. The volume of pressed pulp sales directly impacts the volume of pulp sent on to be dried, and pellet production.

Pulp is dried in the emission units EUPULPDRYER#3 and/or FGPULPDRYERS (AKA EUDRYER#1 and #2) where it is heated by the combustion exhaust of the fuel.

In the pellet production area, dried pulp is transferred to pellet mills (FGRULE290, EUPULPDUSTCOLL), where the semi-dry pulp is pressed into pellets and cooled in a pellet cooler (FGRULE290, EUPELLETCOOLER). Pellets exiting the mills are cooled in a pellet cooler which uses a fan to draw ambient air through the moving bed of pellets. Cooled pellets are transferred by conveyors for storage onsite. The wet scrubber for this area (EUPULPWETSCRUB) had been reported disconnected since the November 2011 inspection, and has since the 2013 inspection been removed from site.

The lime kiln (EULIMEKILN) burns coke or anthracite to heat limestone rock producing calcium oxide (CaO) and carbon dioxide gas (referred to as calcining). The carbon dioxide gas is "purified"/quenched in the gas washer, and the gas is used for purification/processing of the limed raw juices. CaO is mixed

with sweet water in the lime slaking drum to produce calcium hydroxide [Ca(OH)<sub>2</sub>] or “milk of lime” that is used for the purification/processing raw juice.

The cooled raw juice from the cossette mixer/and diffusion towers goes into the pre-limer tank and the pH is increased by the addition of milk of lime.

The alkaline juice is pumped to the main liming tank and more milk of lime is added to the juice. After reacting with the milk of lime the juice is pumped to the first carbonation tank where it is treated with carbon dioxide gas. The milk of lime and carbon dioxide cause the formation of a precipitate which captures the impurities in the beet juice. The beet juice from this stage is known as “carb” juice.

Carb juice is pumped through another heater and is sent to a clarifier where the mud is allowed to settle, leaving a clear juice. A portion of settled solid is recycled to the pre-limer and the rest solidify with a vacuum. The filtrate from the vacuum filter is known as “sweet water” is sent to the lime slaker where it is added to CaO to produce the milk of lime. The filter cake which consists of calcium carbonate, beet non-sugar impurities and insoluble materials such as filter aid and sand is sent to the spent lime storage area for additional drying before being sold.

Clarified juice is heated and pumped into the second carbonation tank for further purification with carbon dioxide. The carbonated juice is sent thru pressure leaf filters to remove precipitate. The resulting filtered juice is light yellow in color and is referred to as “thin” juice. The precipitate cake is recycled to the pre-limer.

The thin juice produced in the second carbonation tank is treated with SO<sub>2</sub> (sulfitation process) to control juice color. After the sulfitation process the juice is heated and concentrated in quadruple-effect evaporators creating “thick” juice. During evaporation stages the dry substance concentration of the juice increases and the juice becomes dark yellow to light brown in color.

The Thick Juice passes through a three stage crystallization process. All of the white sugar is produced from the first crystallization in what are known as white pans. The crystals produced from the second and third crystallizations are added to the Thick Juice to produce Standard Liquor. The after the first crystallization the separated solution from the white sugar is known as High Green and is processed in the High Raw pans to produce High Raw Sugar. The juice separated from the High Raw Sugar is known as Low Green. The Low Green is processed in the Low Raw pans to produce Low Raw Sugar. The solution separated from the Low Raw Sugar is molasses. The molasses is either sold or shipped to the Bay City factory for further processing.

Also noteworthy is that the two Wickes boilers make use of a flume system that flushes the bottom ash/fly ash into cinder pond(s) where the ash is allowed to settle out, and the water is recycled back into the system. Ash is scooped from the pond, dried and shipped to a landfill for disposal.

**Rule 285(DD) Exempt Equipment --** In addition to the above process equipment, the facility has a number of pieces of equipment that were determined meet the referenced rule exemption at or before the time of the ROP issuance. These pieces include equipment for and associated with sugar production and packaging activities:

- EGGRANULATOR,
- EGPOWDERMILL,
- EGSUGARCOOLER, and
- EGSUGDUSTCOLLECTOR.

Exhaust for the referenced units are reported to be controlled by bag houses. MSC staff report that the pressure drops and VE checks are conducted and recorded on a log once per shift to confirm that the equipment is operating properly. Relocation of the bag houses for the Rule 285(DD) exempt equipment

has been discussed with District Staff in the past, but has not been completed to date.

Sugar packaging activities are reported to be conducted both within and outside the Facility "campaigns".

### COMPLIANCE EVALUATION

The majority of the emission units onsite have recordkeeping requirements for maintenance and repair activities. In general routine maintenance and repairs are conducted as part of the interim between campaigns to minimize downtime during the campaign, when a shutdown results in decreased production. It should be noted that repair and maintenance records for the facility in general consist of either and/or a maintenance manual of activities, purchase orders, supervisor logs, maintenance schedules and or maintenance log forms. These records appear to meet the requirements.

Operational Status – During the onsite inspection, the facility was in operation though none of the pulp dryers (EUDRYER#1, #2 and #3) and exempt units EUPELLETCOOLER, EUPULPDUSTCOLL and EUWETPULPSCRUB were operating.

Once a campaign is initiated, MSC staff report that all three boilers are operated 24/7 with varying production rates until the end of the campaign to achieve the most efficient output. Recent campaign lengths have been reported to range from 157 days (2009-10) to 213 days (2012-13). The 2014-2015 campaign was reported to have lasted 2015 days. Beet slice campaigns are normally followed by an approximately 30-day juice campaign.

Two coal-fired, stoker, Wickes boilers (FGBOILERS a.k.a EUWICKESEASTBOILER and EUWICKESWESTBOILER) and one natural gas or fuel oil fired boiler with an economizer (EUCEPACKAGEBOIL, Boiler No. 4) provide both steam and heat for the facility. MSC staff report that the boilers are primarily operated during the campaigns. EUCEPACKAGEBOIL is presently operating on natural gas, and was reported to have also operated on natural gas since at least the 2010-2011 campaign. Operational conditions for the referenced equipment are limited to installation, maintenance and operation of the multiclone collectors for FGBOILERS. The WESPs installed in summer 2015 are not incorporated into the exiting ROP at this time. No apparent compliance issues were noted during the site inspection.

In addition, the facility has one additional boiler referred to as the summer boiler (aka boiler #1 in some permits). This exempt boiler may be fired by either oil or natural gas, and is operated after the campaign, dependent on temperatures. The unit was not operating during the site inspection.

At the time of inspection none of the three natural gas or fuel-oil fired pulp dryers [FGPULPDRYERS (EUDRYER#1 and #2) and EUDRYER#3] were operating. EUDRYER#3 has the highest capacity, with EUDRYER#1 and #2 reported to be smaller capacity. Which pulp dryers are operated is dependent on their capacity and the demand for pressed pulp to achieve the most efficient drying. Proper operation of pollution control devices associated with the emission units could not be confirmed as a part of this site inspection, though facility logs appear to be complete and indicated general compliance.

Material Usage Rates – A wide variety of materials are associated with MSC facility operation and production processes. Most notable are natural gas, fuel oil and coal used to fuel the three steam generating boilers; the raw sugar beets processed onsite; as well as the coke/anthracite and limestone associated with the lime kiln. It should be noted that the facility is constantly working to increase efficiency and lower the material use volumes.

### **EUCEPACKAGEBOIL and FGBOILERS**

Two coal-fired, Wickes boilers (FGBOILERS a.k.a EUWICKESEASTBOILER and EUWICKESWESTBOILER) and one natural gas or fuel oil fired boiler with an economizer (EUCEPACKAGEBOIL) provide both steam and heat for the facility. EUCEPACKAGEBOIL has been fired by natural gas and has for at least the past four campaigns. Each of the CE boilers and the pulp dryers have their own Natural Gas meter. No material use limits are associated with EUCEPACKAGEBOIL.

Fuel usage for the two coal fired boilers (FGBOILERS a.k.a EUWICKESEASTBOILER and EUWICKESWESTBOILER) is reported to be based on gross total via truck scale, with actual usage by each boiler is back calculated by the steam head. Coal is delivered daily from a coal supply delivered by barge to the Carrolton area. No material usage limits are associated with FGBOILERS.

### **EUDRYER#3**

Limits associated with EUDRYER#3 include limits for total fuel oil use of 2.12 million gallons per campaign year limit. MSC staff reported that the equipment when operating has been operated on natural gas. Therefore the referenced limit is not applicable under the present operation.

### **FGPULPDRYERS**

This flexible group consists of EUDRYER#1 and #2. No limits for the campaign are specified for this flexible group in the ROP. MSC staff reported that with the exception of the October 13, 2011 stack testing event, that no fuel oil has been used to fire the referenced emission units since before the 2010-2011 campaign.

### **EULIMEKILN**

Material use limits for the referenced emission units are limited to 5,000-tons of coke and anthracite coal for a 12-month rolling time period, as well as a maximum 0.7 percent sulfur by weight. During a previous site inspection, MSC staff reported that the lime kiln operates with a set ratio of coke to stone. Data provided indicated that total use was well below the 5,000-ton limit, and verification lab data as well as vendor data indicates that percent sulfur content is well below the permit limits when adjusted per BTU/lb (Appendix 7 of ROP).

### Operational Parameters –

With the exception of installation and proper maintenance/operation of pollution control equipment for the emission units addressed, no operational limits are presented in the existing ROP for the facility. Monitoring of the boilers, limekiln, pulp dryers and other process equipment is continuous, and with the exception of the limekiln, makes use of electronic components. Operators monitor the equipment using both gauges (where applicable) and screen displays which summarize operational parameters. Operational parameters required under the ROP are recorded manually by the operators, and the records are kept onsite for the first 5 years. Records reviewed indicated that records are in general compliance with ROP requirements.

### **FGBOILERS (EUWICKESEASTBOILER and EUWICKESWESTBOILER)**

Though no specific operational parameters are outlined in the ROP for these emission units, the facility is required to maintain and implement a malfunction abatement plan for the emission units and associated pollution control devices (multiclones and WESP). The facility reports that general maintenance and preventative maintenance activities are conducted between campaigns. Repair records are maintained for the referenced emission units and their associated pollution control devices.

### **EUDRYER#3**

Operational limits associated with EUDRYER#3 include 1032 hours (forty-three 24-hour days) in each ozone control period (May 1 through September 30<sup>th</sup>). In addition, the referenced emission unit is restricted to no more than 6,240 hours (260 24-hour days or >8.5 months) of operation. Records reviewed indicated that operation of EUDRYER#3 for the last two campaigns was below the referenced operational limits.

FGPULPDRYERS has no operational limits above their respective pollution control devices.

The ROP for the MSC Sebewaing Facility requires the implementation of a Malfunction Abatement Plan

for EUDRYER#3. In addition, the permittee shall perform the routine preventative maintenance indicated in the malfunction abatement plan when the multiclone collector is outside of set operating parameters or when abnormal visible emissions are observed. MSC staff reported that with the exceptions stated in the ROP, that general maintenance is conducted in the summer months, when the facility is not conducting beet processing activities. Records of repairs and maintenance activities are reported to be maintained for equipment associated with the facility and appear to be in general compliance with ROP requirements.

#### **FGPULPDRYERS**

This flexible group consists of EUDRYER#1 and #2. As is the case with EUDRYER#3, the ROP requires implementation of a Malfunction Abatement Plan for the emission units associated with this flexible group. At the time of the inspection, the units were not operating, and operation within referenced parameters was confirmed during records review.

MSC staff reported that with the exceptions stated in the ROP, that general maintenance is conducted in the summer months, when the facility is not conducting beet processing activities. Records of repairs and maintenance activities are maintained for equipment associated with the facility.

#### **EULIMEKILN**

Operational conditions included in the ROP for EULIMEKILN requires that the limekiln will not be operated unless the carbonation system is operating and receiving combustion gases from the lime kiln. The only allowed exceptions are process startup, shutdown or malfunction. MSC staff report that the limekiln is started up a couple days before campaign to attain the proper operating temperature, which is the only exception and meets permit conditions.

#### **Emission Points –**

Per the ROP, visible emission surveys are conducted by onsite operators, and are documented on written log sheets. Written log sheets for the unit were inspected during the site inspection, and appeared to be complete and in general compliance with ROP requirements.

#### **EUCEPACKAGEBOIL**

The referenced emission unit has been operating with natural gas since before the 2009-2010 campaign. Emissions associated with this unit are from a single stack. Emission limits associated with this unit are limited to SO<sub>2</sub> emissions associated with Fuel Oil use. As no fuel oil has been used the emission limits are not applicable.

#### **FGBOILERS (EUWICKESEASTBOILER and EUWICKESWESTBOILER)**

The referenced emission units are coal-fired stoker boilers used to provide process steam and heat to the facility. Both boilers are reported to use multiclone and high efficiency venture scrubber for pollution control. In addition, the facility installed WESPs in summer 2015 to meet federal requirements. Emissions limits associated with the emission units are particulate and SO<sub>2</sub>. SO<sub>2</sub> emissions are determined by percent sulfur concentrations in the fuel. Sulfur concentrations for fuel provided by the vendor were determined to be in compliance with permit limits.

A review of laboratory analytical data for grab coal samples collected in conjunction with the site inspection activities confirmed that sulfur concentration were in compliance with the 2.50 pounds per million BTUs heat input limit.

VE were noted for FGBOILERS upon completion of the September 27, 2015, site inspection. Emissions that time appeared to be in general compliance with permit limits.

#### **EULIMEKILN**

The role of the lime kiln in the process is the production of CO<sub>2</sub> gas and CaO from limerock/limestone and coke/anthracite coal for purification and filtration of liquid sugars. Emission limits associated with this EU are limited to PM from two stacks (approximately 90 feet high) associated with the lime kiln. MSC staff report that there are two gates that seal the top of the kiln, and that fans evacuate fresh air from the kiln. Draft present is from the CO<sub>2</sub> pumps which draw CO<sub>2</sub> from the lime kiln and into the process equipment.

A material limit of 0.7 percent sulfur by weight is associated with this emission unit. Based on data provided by MSC, the sulfur content for anthracite received from the vendor and confirmatory samples collected indicate general compliance with the ROP based on calculations as outlined in Appendix 7 of the ROP.

#### **EUDRYER#3,**

Under the ROP this EU is identified as a source of PM, SO<sub>2</sub>, VOCs and CO. One stack is associated with the emission unit. VOC and CO limits for the emission unit are 245 tpy and 442 tpy, respectively based on a 12-month rolling time period. SO<sub>2</sub> limits are 1.67 pound per million BTUs heat input. A review of emissions data provided indicated totals well below the referenced permit limits for the emission unit.

#### **FGPULPDRYERS**

This flexible group consists of EUDRYER#1 and #2. These two dryers are backup dryers to process volumes of pulp in excess of what can be handled by EUDRYER#3. The units presently are operated using natural gas. Emission limits associated with these emission units are limited to particulate limits verified by testing and VE surveys conducted by the facility during daylight hours and recorded on written logs.

#### **FGRULE290**

Emission units associated with this flexible group include the pellet mills, pellet handling and pellet cooler. The referenced units are controlled by dust collectors/baghouses and are reported to be exempt under Rule 290. It should be noted that the equipment previously was reported to have been hooked up to a wet scrubber. Problems were reported with the system, and the wet scrubber was taken off line. The emission units are now duct worked together with the dust collectors. VE are monitored and recorded by the operator once per shift.

In response to a previous request for verification of exempt status for the referenced equipment, MSC staff indicated that based on ACFM and pollution control capacities that the emission units in the flexible group are at or below the 500 lb/month limit. MSC also indicated that the emission units at the 500 lb/month limit is/are rarely used for a full month, and so does not exceed the emission limit. This is consistent with observations that a significant portion of the pressed pulp is sold as animal feed, and does not get dried and pelletized.

#### **Monitoring and Testing –**

Per the ROP for the referenced facility, daily visible emission surveys are required for EUCEPACKAGEBOIL, EUDRYER#3, EULIMEKILN, FGBOILERS and FGPULPDRYERS. Data is manually reported by operators, and kept onsite for review. Reporting log sheets were reviewed during the most recent inspection and were found to be in general compliance with permit requirements.

Records of sulfur content for each fuel delivery of No. 6 Fuel Oil, Anthracite and Coal are required for the facility. In addition, the facility is required once per campaign to collect samples for verification of vendor reported levels. As previously noted split samples of fuels in use during the present campaign were collected for analysis by AQD and MSC staff during the November 27, 2015 site inspection.

#### **EUCEPACKAGEBOIL**

The referenced emission unit is required to maintain records of sulfur content for each delivery of fuel oil, and once a campaign is required to collect a verification sample for analysis according to their fuel sampling plan. As no fuel oil has been burned by EUCEPACKAGEBOIL since as far back as the 2010-2011 campaign, no fuel oil sample was collected for analysis.

The most recent evaluation of fuel oil for this emission unit was during the January 28, 2010, site visit MSC collected a split sample with the state. As previously reported, analytical results indicated that the sample collected and analyzed was in compliance with permit limits of 1.67 lb SO<sub>2</sub>/MMBTU.

#### **FGBOILERS (EUWICKESEASTBOILER and EUWICKESWESTBOILER)**

The referenced emission units consist of two coal-fired stoker boilers, which provide steam and heat for facility processes. A review of the ROP for the subject site identified the following testing requirements: confirmatory coal sampling/analysis to verify vendor data and verification of PM emissions by testing at the owner's expense. MSC staff collected and split coal grab samples as part of the November 27, 2015, site inspection activities results indicated the fuel sampled was in compliance with permit limits. Analytical results were reported in a separate report.

Copies of vendor analyticals for coal samples for the period 11/16/2014 – 1/28/2015 appear to be consistent with analytical requirements as outlined in the ROP. An evaluation of data provided and adjustments per the equation provided in Appendix 7 of the ROP indicated that sulfur content of the coal was in compliance with the ROP.

With respect to the PM emissions verification (V.2 condition for emission unit), the District files contain a copy of stack test dated February 8, 2008, which appears to meet the requirements as outlined in the previous ROP. Under the renewed ROP, the facility is required to conduct confirmatory sampling activities prior to May 7, 2017.

Monitoring and record keeping requirements associated with the emission units include continuous monitoring of the pressure drop across the multiclone with differential pressure instrumentation, as well as continuous monitoring of the pressure drop and liquid flow across the wet scrubber. The referenced data is presently monitored via computer terminal, and is recorded in logs by the operators. Gauges associated with the emission units and associated pollution control devices were still in place and operating at the time of the inspection. Data reported appears to be in general compliance with the facilities Malfunction and Abatement Plan (MAP). However, during the inspection it was noted that the MAP did not identify a normal operations range for the differential pressure drop across the multiclones.

It should be noted that the VE observations are not reported during scheduled ash pulling, soot blowing, startup and shutdown. MSC staff reported that during those activities the operators assigned to the respective areas are involved in the activities, and that there are not "spare" operators to do the VE at those times.

#### **EULIMEKILN**

Under the present ROP the permittee is required to keep daily records of the amount of coke and limestone used in the lime kiln, as well as to monitor and keep records of the sulfur content of the coke charged to the lime kiln on an intermittent basis. In addition the permittee is required to maintain a record of the coke analysis of all shipments. The records are to include the percent sulfur content by weight of the coke. Records provided indicated that the appropriate analysis of coke samples is being conducted, and that adequate records are being maintained by the facility.

MSC and AQD collected split coke samples during the November 27, 2015 site visit. Data from the sample analysis indicated compliance with the permit limits.

#### **EUDRYER#3 and FGPULPDRYERS**

Monitoring and Testing requirements associated with the pulp drying emission units include verification testing of fuels per the facilities Fuel Sampling Plan. As part of the November 27, 2015 site inspection

grab sample for a split sample analysis were collected. Analytical data indicated compliance with the permit limits.

ROP requirements include verification at the owner's expense of PM emission rates from process equipment EUDRYER#3 and FGPULPDRYERS on or before 6-months of the ROP expiration date. Stack testing activities under the previous ROP were conducted at the facility on October 13, 2011, with test results submitted to the District on December 2, 2011. Analytical results reported in the document indicated that the emissions did not exceed permit limits. Supplemental testing under the present ROP will be due on or before May 7, 2017.

District files contain copies of Stack Testing results for VOC and CO emissions for EUDRYER#3, dated October 21, 2008. The stack test results appear to have met the testing requirements for EUDRYER#3 under the previous ROP. Emissions reported did not exceed ROP limits for the emission unit and parameter. Supplemental sampling is not required under the present ROP.

#### Record Keeping and Reporting –

Required reporting data is submitted semi-annually and annually by the facility, copies of which are on file at the District Office). The most recent MAERS reporting at the time of report preparation was submitted for 2014. A review of reports received to date appears to indicate that the required reporting under the ROP is being conducted in a timely basis.

Stack test reports received by the District are summarized in the previous section. Logs and facility records documented within this report appeared to be complete, and in general compliance with ROP conditions. It should be noted that logs and facility records have historically been areas of non-compliance for the facility. Logs and facility records reviewed were available onsite or through Mr. S. Smock, MSC Environmental Engineer.

#### SUMMARY

A scheduled site inspection was conducted at the MSC Sebewaing Facility on November 27, 2015. Site inspection activities and data obtained as part of compliance evaluation activities indicated that the facility is in general compliance with conditions of the ROP.

It was noted that the existing MAP for FGBoilers did not indicate a parameter range for normal operation for the pressure drop across the multiclones (Condition VI.5). This was discussed during the site inspection, and an electronic request for an updated MAP for FGBOILERS has been sent.

NAME Maaron G. LeBlanc

DATE 12/21/15

SUPERVISOR C. Kane