

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

B369229183

| | | |
|---|--------------------------------------|----------------------------------|
| FACILITY: Packaging Corporation of America - Filer City Mill | | SRN / ID: B3692 |
| LOCATION: 2246 Udell St., FILER CITY | | DISTRICT: Cadillac |
| CITY: FILER CITY | | COUNTY: MANISTEE |
| CONTACT: Sara Kaltunas , Environmental Engineer | | ACTIVITY DATE: 04/16/2015 |
| STAFF: Shane Nixon | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MAJOR |
| SUBJECT: On site inspection and records review | | |
| RESOLVED COMPLAINTS: | | |

AQD staff traveled to Filer City to perform an inspection of the PCA facility. The purpose of the inspection was to determine the facility's compliance with Renewable Operating Permit (ROP) No. MI-ROP-B3692-2009. Mr. Cody Campbell and Mr. David Barzyk accompanied AQD staff during the inspection. Prior to the inspection, AQD staff provided Mr. Barzyk with a brochure titled "Environmental Inspections: Rights and Responsibilities" and reviewed the information contained in the brochure.

The PCA Filer City Mill is a semi-chemical mill producing corrugated medium which is used as the inner layer in corrugated cardboard. The plant produces the corrugated medium from whole logs, which are debarked and then processed into chips and passed through scalping screens and are transferred to storage piles or storage silos. Purchased chips are also used along with recycled cardboard. The chips are softened in digesters by cooking under high pressure using sodium carbonate (white liquor) and mechanical action is used to separate the wood fibers. The fibers are passed through drum washers and processed into corrugated medium on the paper machines. The resulting solution after the fibers are removed is referred to as black liquor. The black liquor is recycled through a fluidized bed reactor to regenerate black liquor into white liquor. The facility also has the ability to use microorganisms to digest the black liquor to produce biogas. The biogas is then used as fuel in the facility's three boilers from steam production. The boilers also have the ability to fire on coal, oil, or natural gas.

A. SOURCE-WIDE CONDITIONS

1. **Emission Limits** - There are no source-wide emission limits associated with this facility; therefore, this section is not applicable.
2. **Material Limits**- There are no source-wide material limits associated with this facility; therefore, this section is not applicable.
3. **Process/Operational Restrictions** - There are no source-wide process or operational restrictions associated with this facility; therefore, this section is not applicable.
4. **Design/Equipment Parameters** - There are no design or equipment parameters associated with this facility; therefore, this section is not applicable.
5. **Testing/Sampling** - There are no testing or sampling requirements associated with this facility; therefore, this section is not applicable.
6. **Monitoring/Recordkeeping** - There are no source-wide monitoring or recordkeeping requirements associated with this facility; therefore, this section is not applicable.
7. **Reporting** - All reports submitted pursuant to the requirements of the ROP were previously reviewed and documented.
8. **Stack/Vent Restrictions** - There are no source-wide stack or vent restrictions associated with this facility; therefore, this section is not applicable.
9. **Other Requirements** - The facility currently has an approved Malfunction Abatement Plan (MAP) and an AQD approved fugitive dust plan. The facility submitted an amended MAP on April 13, 2015 which includes the new RTO minimum operating temperature established by stack testing on February 18, 2015.

B. EUCOALHANDLING - All coal handling equipment consisting of conveyors and coal storage bins to transport coal to the boilers. Mr. Cody Campbell explained the facility has ceased burning coal in the boilers as of January 2014 and are firing solely on natural gas and biogas. Ms. Sara Kaltunas, PCA, provided records upon request which indicates the cease fire date of coal was January 5, 2014.

1. **Emission Limits** - Particulate matter emissions are limited to 0.1 pounds per 1,000 pounds of exhaust gases. PCA demonstrates compliance with the limit by performing non-certified visible emission observations on a weekly basis from the fabric filter exhaust points. Records indicate visible emissions were not present from the exhaust points.
2. **Material Limits** - There are no material limits associated with this emission unit; therefore, this section is not applicable.
3. **Process/Operational Restrictions** - The emission unit is not allowed to operate unless the three fabric filters on the enclosed conveyors are installed and operating properly. The emission unit was not operating at the time of the inspection and has no need to operate EUCOALHANDLING since January 2014 as coal is no longer fired in the boilers.
4. **Design/Equipment Parameters** - There are no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.
5. **Testing/Sampling** - Non-certified visible emission observations are required at least once per week when the equipment is operating and the observations are to be recorded. Records of non-operation of EUCOALHANDLING is maintained at the facility to demonstrate compliance with the testing requirement associated with the emission unit.
6. **Monitoring/Recordkeeping** - There are no monitoring or recordkeeping requirements associated with this emission unit; therefore, this section is not applicable.
7. **Reporting** - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented.
8. **Stack/Vent Restrictions** - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.
9. **Other Requirements** - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

C. EUBOILER1 - 240 MMBtu/hr boiler capable of firing coal, natural gas, biogas, and No. 6 fuel oil.

1. **Emission Limits** - Particulate matter emissions are limited to 0.10 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air when firing coal or No. 6 fuel oil. Stack testing is the method used to determine compliance with this emission limit. Based upon review of the facility files, the last stack test was performed in September 2011. Stack test results indicate emissions from the boiler are 0.04 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air.

SO₂ emissions are limited to 1.67 pounds per million Btu heat input when firing coal and 1.11 pounds per million Btu heat input when firing No. 6 fuel oil. Table 41 of Rule 336.1401 indicates these emission limits are equivalent to a sulfur content of 1.0% based upon a heating value of 12,000 Btu per pound of solid fuels and 18,000 Btu per pound for liquid fuels. As mentioned previously, the facility is only firing natural gas at this time and a facility in close proximity purchased PCA's last shipment of coal.

This emission unit is currently not subject to the NO_x emission limits contained in 40 CFR Part 60 Subpart Db since the installation date of the boiler was prior to the promulgation date of the regulation. Any future modifications to the boiler could make it subject to the federal regulation.

2. **Material Limits** - The maximum sulfur content of the coal allowed to be fired in the boiler is 1.0%. The most recent shipment of coal to the facility was 2012. That shipment was refused by PCA because the analysis provided by the fuel supplier indicated the sulfur content was 1.86%. Furthermore, the facility is not firing coal at this time.

3. **Process/Operational Restrictions** - The differential pressure across the baghouse is required to be within the range specified in the MAP when firing coal or a mixture of coal with any other approved fuel. The facility is currently bypassing the baghouse as the boiler is only firing on natural gas. Opacity from the boiler is measured using a COMS and the recorded opacity at the time of the inspection was 0%.

4. **Design/Equipment Parameters** - A differential pressure gauge is installed to monitor the differential pressure across the baghouse. As noted previously, the baghouse is bypassed while firing on natural gas.

5. **Testing/Sampling** - Particulate matter testing was performed in 2011 which demonstrated compliance with the particulate emission limit.

6. **Monitoring/Recordkeeping** - Records consisting of fuel sulfur content and higher heating value of the coal were available for review at the time of the inspection. Differential pressure records were not necessary or reviewed during the inspection since the boiler is firing natural gas only.

The COMS for the boiler is maintained, operated, and the annual audit is performed.

7. **Reporting** - All reporting submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.

8. **Stack/Vent Restrictions** - The stack appeared to be within the maximum diameter and minimum height parameters specified in the ROP during the inspection.

9. **Other Requirements** - There are currently no other requirements associated with this emission unit; therefore, this section is not applicable.

D. EUBOILER2 - 186 MMBtu/hr boiler capable of firing coal, natural gas, or No. 6 fuel oil.

1. **Emission Limits** - Particulate matter emissions are limited to 0.1 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air when firing coal or No. 6 fuel oil. Stack testing is the method used to determine compliance with this emission limit. Based upon review of the facility files, the last stack test was performed in September 2011. Stack test results indicate emissions from the boiler are 0.04 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air.

SO₂ emissions are limited to 1.67 pounds per million Btu heat input when firing coal and 1.11 pounds per million Btu heat input when firing No. 6 fuel oil. Table 41 of Rule 336.1401 indicates these emission limits are equivalent to a sulfur content of 1.0% based upon a heating value of 12,000 Btu per pound of solid fuels and 18,000 Btu per pound for liquid fuels. The facility is only firing natural gas at this time and a facility in close proximity purchased PCA's last shipment of coal.

Visible emissions are limited to 20% opacity as per conditions of the ROP. The opacity from the boiler is continuously monitored and recorded. At the time of the inspection, the visible emissions from the boiler were 0% opacity as a result of firing natural gas.

NO_x emissions are limited to 0.20 pounds per million Btu, based on a 31 day average, when firing natural gas. At the time of the inspection, NO_x emissions from the boiler was 0.118 pounds per million Btu. Quarterly excess emissions reports indicate no exceedances of the NO_x limit contained in the ROP.

2. **Material Limits** - The maximum sulfur content of the coal allowed to be fired in the boiler is 1.0%. The most recent shipment of coal to the facility was 2012. That shipment was refused by PCA because the analysis provided by the fuel supplier indicated the sulfur content was 1.86%.

3. **Process/Operation Restrictions** - The differential pressure across the baghouse is required to be within the range specified in the MAP when firing coal. The facility is currently bypassing the baghouse since the boiler is firing only natural gas and the facility is not required to operate the baghouse when firing natural gas.

The facility continuously monitors and records the opacity from the boiler despite that fact that it is firing only natural gas. The visible emissions at the time of the inspection was 0% opacity.

The NO_x and O₂ CEMS are required to be operated and data recorded during all periods of operation. CEM downtime is reported in quarterly excess emission reports and the Technical Programs Unit reviews the data to determine compliance with the monitor requirements.

4. **Design/Equipment Parameters** - A differential pressure gauge is installed on the baghouse. The differential pressure was not operating at the time of the inspection as the baghouse was bypassed due to the firing of natural gas only.
5. **Testing/Sampling** - Testing of particulate matter was performed in 2011 and demonstrated compliance with the emission limit.
6. **Monitoring/Recordkeeping** - The facility is required to maintain records of the amount of each fuel combusted. Records were available for AQD staff upon request and demonstrate that the boiler is currently fired on natural gas only.
7. **Reporting** - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.
8. **Stack/Vent Restrictions** - The stack appeared to be within the maximum diameter and minimum height parameters listed in the ROP during the inspection.
9. **Other Requirements** - There are currently no other requirements associated with this emission unit; therefore, this section is not applicable.

E. EUBOILER4A - Natural gas and/or biogas fired Babcock and Wilcox Model FM 120-97 boiler with a maximum rate heat capacity of 227 million Btu per hour.

1. **Emission Limits** - NO_x emissions from Boiler 4A are limited to 0.17 pounds per million Btu heat input based upon a 30 day rolling average. NO_x emissions at the time of the inspection were 0.090 pounds per million Btu heat input, based upon CEM data. Quarterly excess emission reports submitted for the past year indicate the emission limit was not exceeded.

CO emissions are limited to 22.7 pounds per hour, based on a 24 hour average. Stack testing performed in 2014 indicates the CO emissions were 5.2 pounds per hour.

2. **Material Limits** - There are no material limits associated with this emission unit; therefore, this section is not applicable.
3. **Process/Operational Restrictions** - The NO_x and CO CEMS are required to be operated and data recorded during all periods of operation. CEM downtime is reported in the quarterly excess emission reports and the Technical Programs Unit reviews the data to determine compliance with the monitoring requirements.
4. **Design/Equipment Parameters** - The NO_x and O₂ CEMS were installed and operating at the time of the inspection as per the requirements of the ROP.
5. **Testing/Sampling** - There are currently no testing requirements associated with this emission unit as CO testing was completed in 2014.
6. **Monitoring/Recordkeeping** - Natural gas and biogas usage records were available for AQD review upon request. Fuel usage is monitored and recorded electronically.
7. **Reporting** - All reports submitted pursuant to the conditions of the ROP were previously reviewed and documented by AQD staff.
8. **Stack/Vent Restrictions** - The stack appeared to be within the maximum diameter and minimum height parameters specified in the ROP at the time of the inspection.
9. **Other Requirements** - There are currently no other requirements associated with this emission unit; therefore, this section is not applicable.

F. EUWOODCHIPTRAN - Wood chip transport equipment, wood chip storage bins, conveyors and bucket elevators, screw conveyors and pneumatic transfer equipment.

- 1. Emission Limits - Particulate matter emissions are limited to 0.1 pounds per 1,000 pounds of exhaust gases. PCA demonstrates compliance with the limit by performing non-certified visible emission observations on a weekly basis from the fabric filter exhaust points. Records reviewed during the inspection indicate that visible emission weren't present during the observations.**
- 2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.**
- 3. Process/Operational Restrictions - The emission unit is not allowed to operate unless the cyclones are installed and operating properly. At the time of the inspection, AQD staff observed that the cyclones are installed but the emission unit was not operating.**
- 4. Design/Equipment Parameters - There are no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.**
- 6. Testing/Sampling - Non-certified visible emissions observations are required at least once per week when the equipment is operating and the observations are to be recorded. Records maintained at the facility indicate the observations are performed and no visible emissions were observed.**
- 7. Reporting - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.**
- 8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.**
- 9. Other Requirements - There are no other requirements associated with this emission unit; therefore, this section is not applicable.**

G. EUCOPELAND+DISTANK - A fluidized bed reactor used to recover sodium carbonate from spent pulping liquor. Pollution control equipment consists of two cyclones, venture scrubber, mist eliminator, wet electrostatic precipitator, and regenerative thermal oxidizer. This emission unit is subject to the requirements of 40 CFR Part 63 Subpart MM (National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-alone Semicheical Pulp Mills).

- 1. Emission Limits - Particulate matter (PM), total reduced sulfur (TRS), and gaseous organic HAP emissions are determined by stack testing. Results of stack testing performed in 2010 and 2015 demonstrate compliance with the limits. Emission rates during the testing are:**

2010 Testing

PM emissions = 0.02 pounds per 1,000 pounds exhaust gases; Limit = 0.20 pounds per 1,000 pounds exhaust gases

TRS = <1 ppmv (measured as H₂S); Limit = 4 ppmv

2015 Testing

Gaseous organic HAPs = 97% reduction; Limit = 90% reduction

- 2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.**
- 3. Process/Operational Restrictions - The emission unit is not allowed to operate unless the differential pressure across the venturi scrubber is equal to or greater than 38 inches W.G.. Records reviewed during the inspection indicated the differential pressure dropped below the minimum on March 21, 2015 and March 29, 2015.**

- 4. Design/Equipment Parameters - A device to measure the differential pressure across the venturi scrubber was installed and operating. AQD staff observed a differential pressure of 56.1 inches during the inspection.**
 - 5. Testing/Sampling - As mentioned previously, stack testing was performed in 2010 and 2015. PCA is in the process of having the TRS limit removed from the ROP as the process no longer uses sulfur compounds. Ms. Kaltunas noted in an e-mail that PCA intends to perform stack testing for PM once the Permit to Install is issued.**
 - 6. Monitoring/Recordkeeping - The operating temperature of the RTO is continuously monitored and recorded. These values are used to obtain an RTO temperature based on a one hour average. The one hour average temperature is not allowed to drop below the minimum established during the most recent performance test. Based on operational parameters provided in the 2009 stack test report, the minimum temperature established during testing was 1,746°F. Records maintained by the facility showed that the RTO temperature was less than 1,746°F on March 18, 2015. Previous reports submitted by PCA indicates there were 16 individual occurrences in which the RTO temperature dropped below the minimum. On April 13, 2015, PCA submitted a test report certified by the responsible official which reestablishes the minimum temperature to 1,703°F and updated the facility's MAP to reflect the new temperature.**
 - 7. Reporting - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.**
 - 8. Stack/Vent Restrictions - The stack appeared to be within the maximum diameter and minimum height parameters specified in the ROP during the inspection.**
 - 9. Other Requirements - There are no other requirements associated with this emission unit; therefore, this section is not applicable.**
- H. EUWASHERS - Two vacuum drum rotary pulp washers operated in series. Pollution control equipment consists of a low volume, high concentration (LVHC) collection system and the collected gases are burned in EUBOILER01 or EUBOILER02.**
- 1. Emission Limits - VOC emissions during normal operation are limited to 0.37 pounds per hour and 2.42 tons per 12 month rolling time period. Emission calculations provided by Ms. Kaltunas demonstrates compliance with the emission limits. Emissions the highest emissions in the previous 12 months were 0.30 pounds per hour and 0.11 tons per 12 month rolling time period in January 2015.**
 - 2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.**
 - 3. Process/Operational Restrictions - There are no specific process or operational requirements associated with this emission unit; therefore, this section is not applicable.**
 - 4. Design/Equipment Parameters - In order for the washers to operate, the LVHC system must be installed. AQD staff observed that the LVHC system was installed and operating during the inspection.**
 - 5. Testing/Sampling - There are no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.**
 - 6. Monitoring/Recordkeeping - Records of the amount of oven dried pulp, on a monthly basis, operating hours of EUWASHERS, total time that the LVHC system was bypassed, annual and hourly VOC emission calculations were available for AQD review upon request. Based upon the review, PCA has demonstrated compliance with the recordkeeping requirements pertaining to this emission unit.**
 - 7. Reporting - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.**
 - 8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.**

9. Other Requirements - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

I. EUSODA-ASH - Soda ash silo

1. Emission Limits - Particulate matter emissions are limited to 0.1 pounds per 1,000 pounds of exhaust gases. PCA demonstrates compliance with the limit by monitoring and recording the differential pressure across the baghouse.

2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions - As required by the ROP, a differential pressure gauge was installed and operating.

4. Design/Equipment Parameters - There are no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.

5. Testing/Sampling - There are no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.

6. Monitoring/Recordkeeping - Differential pressure records were available upon request. AQD review of the records demonstrates that the differential pressure across the baghouse has not exceeded the minimum or maximum pressures listed in the Malfunction Abatement Plan.

7. Reporting - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.

8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. Other Requirements - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

J. EUFLYASH - Fly ash silo. The facility is no longer burning coal and operation of the emission unit is not necessary. A determination of compliance was not made for the emission unit as it is currently not operated.

K. EUPELLET - Sodium carbonate storage silo

1. Emission limits - Particulate matter emissions are limited to 0.1 pounds per 1,000 pounds of exhaust gases. PCA demonstrates compliance with the limit by monitoring and recording the differential pressure across the baghouse.

2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions - As required by the ROP, a differential pressure gauge is installed.

4. Design/Equipment Parameters - There are no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.

5. Testing/Sampling - There are no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.

6. Monitoring/Recordkeeping - Records of the differential pressure across the baghouse were available for review upon request. AQD staff observed during the review that the differential pressure exceeded the maximum established in the Malfunction Abatement Plan by not more than 0.1" W.G.; however, the exceedance lasted for one to six seconds. AQD staff believes that corrective actions for the short durations were not necessary.

7. Reporting - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.

8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. Other Requirements - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

L. FGMACT_SUBPART_S - For semichemical processes using wood, the affected sources is the total of all HAP emission points in the pulping system. Pulping system means all process equipment, beginning with the digester system, up to and including the last piece of pulp conditioning equipment. This flexible group is comprised of: EUDIGESTERS, EUEVAPLTV, EUEVAPFC.

1. Emission Limits - There are no emission limits associated with this flexible group; therefore, this section is not applicable.

2. Material Limits - There are no material limits associated with this flexible group; therefore, this section is not applicable.

3. Process/Operational Restrictions - Similar to EUWASHERS, the equipment regulated by 40 CFR Part 63 Subpart S are controlled by the same LVHC system and routed to EUBOILER1 and/or EUBOILER2 and is operated under negative pressure.

Each bypass line located on the LVHC system is equipped with a flow indicator that is tied to the data acquisition system. If flow is present in the bypass lines, the data acquisition system records the amount of time that flow is present. This data is then used to determine the total percentage of operating time that the gases were not captured and transported to either of the boilers for destruction.

4. Design/Equipment Parameters - As required by Subpart S, the collected gases from the LVHC system are vented to either of the boilers for destruction.

5. Testing/Sampling - There are no testing or sampling requirements associated with this flexible group; therefore, this section is not applicable.

6. Monitoring/Recordkeeping - Records of visual inspections of the closed vent system were available for AQD review. Records maintained by the facility indicates no defects exist in the ductwork, piping, enclosures, or connections. Furthermore, leak testing conducted on a yearly basis demonstrate that no leaks were evident. Records were previously submitted to AQD staff for review.

7. Reporting - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.

8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.

9. Other Requirements - The facility is required to comply with all applicable portions of 40 CFR Part 63 Subpart S. All applicable portions of the regulation at the time the ROP was issued were incorporated into the ROP. AQD staff considers compliance with the requirements of the ROP for this flexible group demonstrates compliance with the federal regulation.

M. FGBIOGASSYSTEM - Biogas generation system which produces fuel for the boilers. In the event of boiler upsets or malfunctions, the gas is directed to EUBIOGASFLARE for destruction. This flexible group includes: EUBOILER1, EUBOILER2, EUBOILER4A, EUBIOGASFLARE, and EUBIOGASSYSTEM.

1. Emission Limits - There are no emission limits associated with this flexible group; therefore, this section is not applicable.

2. Material Limits - The amount of biogas routed to the biogas flare is limited to not more than 50,040,000 cubic feet per 12 month rolling time period. Records reviewed by AQD staff indicates the highest 12 month rolling time period amount of gas routed to the flare occurred in March 2014. At that time, 150,171 cubic feet was burned in the flare.

The hydrogen sulfide concentration of the biogas is limited to 50 ppmv. The most recent testing of the biogas resulted in a hydrogen sulfide testing of 0.397 ppmv.

3. **Process/Operational Restrictions** - As required by the ROP, the biogas is passed through the hydrogen sulfide scrubbing system prior to being burned in the boilers. AQD staff observed that the scrubber was operating at the time of the inspection.
 4. **Design/Equipment Parameters** - Emission from the recycle/rapid mix tank are routed to the hydrogen sulfide scrubbing system as required by the ROP.
 5. **Testing/Sampling** - CO, PM, and VOC emission testing from EUBOILER4A is required to be performed every five years when firing biogas only. At this time, the boiler is unable to fire solely on biogas. Biogas is currently used as a supplemental fuel source to the natural gas burned in the boiler.
 6. **Monitoring/Recordkeeping** - As required by the ROP, the heating value and hydrogen sulfide content is measured and recorded once per year. The most recent analysis conducted on May 20, 2014 of the biogas indicates the heating value is 690 Btu per standard cubic feet. The hydrogen sulfide concentration, based on a July 2014 analysis, is 0.397 ppm_v.
 7. **Reporting** - All reports submitted pursuant to conditions of the ROP were previously reviewed and documented by AQD staff.
 8. **Stack/Vent Restrictions** - The stack for the biogas flare appeared to be within the maximum diameter and minimum height requirements listed in the ROP at the time of the inspection.
 9. **Other Requirements** - There are no other requirements associated with this flexible group; therefore, this section is not applicable.
- N. **FGRULE290** - Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and Rule 290. The Rule 290 exempt equipment located at the facility are the pulp tanks, the black liquor tanks, and the two recycle paper pulping systems. Based upon an agreement between PCA and AQD, PCA is using a worse case scenario for each of the emission units demonstrating that at peak production, the emission limits listed in Rule 290 would never be exceeded. The demonstration is available in AQD files for review. As a result, AQD staff considers the emission units to be in compliance with the requirements listed in FGRULE 290.

Conclusion - Based upon the on-site inspection and review of records, AQD staff concludes that PCA is in compliance with Renewable Operating Permit No. MI-ROP-B3692-2009 and 40 CFR 63 Subpart S.

NAME Shane Noxon

DATE 5/12/15

SUPERVISOR 