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

B369240086

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:** 04/11/2017
STAFF: Rob Dickman	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled inspection of this major source.		
RESOLVED COMPLAINTS:		

The PCA Filer City Mill is a semi-chemical mill that produces 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 which pass through scalping screens and are transferred to storage piles or storage silos. Purchased chips are also used along with recycled cardboard. Particulate emissions from processing, conveying and transfer of the chips are controlled by cyclone dust collection systems. The chips are softened in digesters by cooking under high pressure using sodium carbonate solution (white liquor) and mechanical action is used to separate the wood fibers. The fibers are then washed, mixed with various additives in the stock chests and processed on the paper machines into corrugated medium. Non condensable gasses (NCGs) from the pulping process are collected by the Low Volume High Concentration (LVHC) system which routes the NCGs to the Mill's No. 1 and 2 boilers where they are thermally oxidized. The resulting solution after the fibers have been removed is referred to as black liquor. The black liquor is burned through a fluidized bed reactor (Copeland reactor) to produce sodium carbonate that is used again to produce white liquor in the process. Exhaust gasses from the Copeland reactor are controlled by cyclones, a venturi scrubber, and a Regenerative Thermal Oxidizer. A wet electrostatic precipitator (WESP) is located following the venturi scrubber and demister that control the PM emissions from the Copeland reactor. The WESP is located prior to the regenerative thermal oxidizer but only serves to protect the operation of this unit and not to demonstrate compliance with any emission limits. Polished whitewater from the paper machines, black liquor and other process waste streams can be digested in the biogas system by anaerobic microorganisms. A product of this biological digestion is the generation of methane-rich biogas that is scrubbed and then fired as fuel in Boiler No. 1, Boiler No. 2, and/or Boiler No. 4A. The No. 1 and No. 2 boilers also have the capability to be fired on coal, oil, or natural gas and are controlled by a shared baghouse when burning coal. The No. 4A boiler burns natural gas and biogas and is equipped with low NOx burners.

Inspected this facility per Renewable Operating Permit (ROP)Number MI-ROP-B3692-2015. It should be noted that the facility has not combusted coal or fuel oil in any boiler since 2014. Following are the findings of this inspection:

SOURCE-WIDE CONDITIONS

1. **EMISSION LIMIT(S) - There are no source-wide emission limits associated with this facility; therefore, this section is not applicable.**

2. **MATERIAL LIMIT(S) - There are no source-wide material limits associated with this facility; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to implement and maintain a Source-wide Malfunction Abatement Plan (MAP) and a Fugitive Emissions Plan (FEP). The latest version of the MAP was received in April of 2015, and the latest version of the FEP was received in January of 2012. Each plan requires approval but none could be located. They will be reviewed and, if warranted, approved.**

4. **DESIGN/EQUIPMENT PARAMETER(S) - There are no source-wide design or equipment parameters associated with this facility; therefore, this section is not applicable.**

5. **TESTING/SAMPLING - There are no source-wide 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 semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by Air Quality Division (AQD) staff.

8. STACK/VENT RESTRICTION(S) - There are no source-wide stack or vent restrictions associated with this facility; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - There are no source-wide other requirements associated with this facility; therefore, this section is not applicable.

EUCOALHANDLING - All coal handling equipment consisting of conveyors and coal storage bin to bring coal to the boilers. Control of particulate emissions is by three fabric filters. This facility has not burned coal since January of 2014; therefore, none of the conditions in this section are currently applicable.

EUBOILER1 - 240 MMBtu/hr boiler capable of firing coal, natural gas, biogas, and No. 6 fuel oil. Control of emissions when firing coal is through a baghouse. This facility has not burned coal since January of 2014; therefore, none of the conditions in this section are currently applicable.

EUBOILER2 - 186 MMBtu/hr boiler capable of firing coal, natural gas, biogas, and No. 6 fuel oil. Baghouse (when firing coal)

This facility has not burned coal since January of 2014; therefore, none of the conditions for the burning of coal were evaluated. The following finding apply to the boiler when consuming natural gas and biogas

1. EMISSION LIMIT(S) – Nitrogen oxide (NOx) emissions from EUBOILER2 are not to exceed 0.20 pounds per million BTU heat input based upon a 30 day rolling average basis, when firing natural gas. NOx emissions are monitored continuously with a Continuous Emissions Monitoring System (CEMS) or Parametric Emissions Monitoring System (PEMS). Any excess emissions or monitoring system downtime are reported quarterly. Information regarding this has been received and reviewed by AQD staff.

2. MATERIAL LIMITS – There are no applicable material limits associated with this emission unit; therefore, this section is not applicable.

3. PROCESS/OPERATIONAL RESTRICTIONS - There are no applicable process or operational restrictions associated with this emission unit; therefore, this section is not applicable.

4. DESIGN/EQUIPMENT PARAMETER(S) - The facility must monitor and record NOx oxygen (O2) percentage emissions from EUBOILER2 on a continuous basis. A CEMS has been installed and is currently being operated in an acceptable manner. Information regarding this has been received and reviewed by AQD staff. A PEMS has not been installed and is not expected to be.

   The span value of the NOx CEMS is required to be 500 ppm, or is required to be determined according to section 2.1.2 in appendix A to 40 CFR Part 75. The current CEMS is configured properly. The procedures under 40 CFR 60.13 and Performance Specification 2 of Appendix B to 40 CFR Part 60 are required to be followed for installation, evaluation, and operation of the NOx CEMS. These procedures were and are being used for this CEMS.

   The procedures under 40 CFR 60.13 and Performance Specification 3 of Appendix B to 40 CFR Part 60 are required to be followed for installation, evaluation, and operation of the O2 CEMS. These procedures were and are being used for this CEMS.

   The procedures under 40 CFR 60.13 and Performance Specification 16 of Appendix B to 40 CFR Part 60 are required to be followed for installation, evaluation, and operation of a NOx and O2 PEMS. At the time of the inspection, a PEMS had not been installed and the facility has indicated that project has been abandoned.

5. TESTING/SAMPLING - The facility is required to perform the Quality Assurance Procedures of the

NOx CEMS as set forth in Appendix F to 40 CFR Part 60 each calendar quarter. The facility follows these procedures for CEMS. They consist of Cylinder Gas Audits (CGA) quarterly except for the quarter when the annual Relative Accuracy Test Audit (RATA) is performed. CGAs are included with Excess Emissions Report (EER) submissions. Information regarding this has been received and reviewed by AQD staff.

6. MONITORING/RECORDKEEPING - The facility must monitor and record the NOx emissions from EUBOILER2. The facility employs a CEMS for NOx emissions monitoring.

   The facility is required to properly maintain the monitoring systems, including keeping necessary parts for routine repair of the monitoring equipment. Common repair parts for the CEMS are kept on site.

   When NOx emission data is not obtained, emission data will be obtained by using standby monitoring systems; 40 CFR 60 Appendix A, Methods 7 or 7A; or other AQD approved reference methods to provide emission data for a minimum of 75% of the operating hours in each operating day, in at least 22 out of 30 successive operating days. The facility follows this data quality parameter.

   The facility is required to calculate the 30 day rolling average NOx emission rate. The CEMS data acquisition system calculates this rate in a correct manner. Information regarding this has been received and reviewed by AQD staff.

   The facility is required to record and maintain records of the amounts of each fuel combusted during each day, and calculate the annual capacity factor individually for coal, No. 6 fuel oil, and natural gas. The annual capacity factor is determined on a 12 month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. A sample of these records is attached to this report.

   The facility is required to maintain records of the following information for each day EUBOILER2 is operated:

   a. Calendar date;
   b. The average hourly NOx emission rate;
   c. The 30 day average NOx emission rate;
   d. Identification of the operating days when the calculated 30 day average NOx emission rate are in excess of the NOx emission limits;
   e. Identification of the operating days for which pollutant data have not been obtained;
   f. Identification of the time when emission data have been excluded from the calculation of average emission rates;
   g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
   h. Identification of the times when the pollutant concentration exceeded full span of the CEMS/PEMS;
   i. Description of any modifications to the CEMS/PEMS;
   j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

   Items a-j are collected by the facility daily. A sample of these records is attached to this report.

7. VII. REPORTING

   All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

   The facility is required to submit, on a quarterly basis, excess emission reports. These are submitted quarterly. Information regarding this has been received and reviewed by AQD staff.

   The facility is required to submit, on a quarterly basis, reports containing records of the amounts of each fuel combusted during each day, and calculations of the annual capacity factor individually for coal, No. 6 fuel oil, and natural gas. This reporting is included with the facility EERs which are

submitted no later than 30 days following the end of each calendar quarter. Information regarding this has been received and reviewed by AQD staff.

The facility is to follow AQD procedures regarding testing protocol and test report submittals. Testing at this facility was last performed in May of 2016 and the facility followed procedures for this testing.

The facility is required to submit the results of the Quality Assurance Procedures. QAP's are typically submitted with Excess Emissions Reporting and are done in a timely manner. Information regarding this has been received and reviewed by AQD staff.

No less than 30 days prior to installation of any new monitoring system, the facility is required to submit two copies of a Monitoring Plan. No PEMS has been installed at this facility and is not anticipated. No new CEMS that would require a monitoring plan has been installed in the last 12 months.

8. **STACK/VENT RESTRICTION(S) - Stack parameters do not appear to have been recently modified and appear correct.**

9. **OTHER REQUIREMENT(S) - The facility is required to comply with all applicable requirements of the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units as specified in 40 CFR Part 60, Subparts A and Db. By complying with the other conditions listed in this section, the facility is in compliance with these subparts.**

EUBOILER4A - Natural gas and/or biogas fired Babcock and Wilcox Model FM 120-97 boiler with a maximum rated heat capacity of 227 million BTU per hour. Low NOx burners

1. **EMISSION LIMIT(S) - NOx emissions from EUBOILER4A are not to exceed 0.17 pound per MMBtu heat input based on a 30 day rolling average. NOx emissions are monitored continuously. Any excess emissions or monitoring system downtime are reported quarterly. Information regarding this has been received and reviewed by AQD staff. CO emissions from EUBOILER4A are not to exceed 22.7 pounds per hour based upon a 24 hour average. Compliance with this limit is through stack testing. This testing was last performed in April of 2014 and demonstrated a rate of 5.2 pounds per hour. Information regarding this has been received and reviewed by AQD staff.**

2. **MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to burn only natural gas and/or biogas in EUBOILER4A. This boiler is equipped to only burn these materials.**

   The NOx and O2 CEMS are required to be operated, and data recorded during all periods of operation of EUBOILER4A except for CEMS breakdowns and repairs. CEMS monitoring at this facility is continuous. Any excess emissions or monitoring system downtime is recorded and reported by the facility quarterly. Information regarding this has been received and reviewed by AQD staff.

4. **DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to install, calibrate and maintain a CEMS or PEMS to monitor and record NOx emissions and O2 percentage from EUBOILER4A on a continuous basis. A CEMS has been installed and is currently being operated in an acceptable manner. Information regarding this has been received and reviewed by AQD staff. A PEMS has not been installed and is not expected to be.**

   The span value of the NOx CEMS is required to be 500 ppm or is required to be determined according to section 2.1.2 in appendix A to 40 CFR Part 75. The current CEMS is configured properly. The procedures under 40 CFR 60.13 and Performance Specification 2 of Appendix B to 40 CFR Part 60 is required to be followed for installation, evaluation, and operation of the NOx CEMS. This CEMS has been installed, evaluated, and operated per this specification.

   The procedures under 40 CFR 60.13 and Performance Specification 3 of Appendix B to 40 CFR Part 60 is required to be followed for installation, evaluation, and operation of the O2 CEMS. This CEMS

has been installed, evaluated, and operated per this specification.

The procedures under 40 CFR 60.13 and Performance Specification 16 of Appendix B to 40 CFR Part 60 is required to be followed for installation, evaluation, and operation of the NOx and O2 PEMS. A PEMS has not been installed and is not expected to be.

5. TESTING/SAMPLING - The facility is required to conduct performance tests while firing only natural gas for verification of the CO emission rates. This testing was last performed in April of 2014 and demonstrated a rate of 5.2 pounds per hour. Information regarding this has been received and reviewed by AQD staff.

   The facility is required to perform the Quality Assurance Procedures of the NOx CEMS/PEMS as set forth in Appendix F to 40 CFR Part 60 each calendar quarter. The facility follows these procedures for CEMS. They consist of CGAs quarterly except for the quarter when the annual RATA is performed. CGAs are included with EER submission. Information regarding this has been received and reviewed by AQD staff.

6. MONITORING/RECORDKEEPING - The facility is required to monitor and record the NOx emissions from EUBOILER4A on a continuous basis. The facility employs a CEMS for NOx emissions monitoring. The facility is required to calculate the 30 day rolling average NOx emission rate. The data acquisition system for the CEMS calculates this rate. When NOx emission data are not obtained, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other AQD approved reference methods to provide emission data for a minimum of 75% of the operating hours in each operating day, in at least 22 out of 30 successive operating days. The facility follows this data quality parameter.

   The facility is required to record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and biogas. A sample of these records is attached to this report. See Page 3.

   The facility is required to maintain records of the following information for each day EUBOILER4A is operated.

   a. Calendar date;
   b. The 24 hour average CO emission rate;
   c. The average hourly NOx emission rate;
   d. The 30 day average NOx emission rate;
   e. Identification of the operating days when the calculated 30 day average NOx emission rate are in excess of the NOx emission limits;
   f. Identification of the operating days for which NOx emission data have not been obtained;
   g. Identification of the time when emission data have been excluded from the calculation of average NOx emission rates;
   h. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
   i. Identification of the times when the NOx emission concentration exceeded full span of the CEMS/PEMS;
   j. Description of any modifications to the CEMS/PEMS;
   k. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

   Items a-j are collected by the facility daily. A sample of these records is attached to this report.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

   The facility is to follow AQD procedures regarding testing protocol and test report submittals. Testing on this unit has not been performed in the last 12 months.

   The facility is required to submit, on a quarterly basis, excess emission reports for any NOx excess emission which occurred during the reporting period. These are submitted quarterly. Information regarding this has been received and reviewed by AQD staff.

The facility is required to submit, on a quarterly basis, reports containing the information in SC VI.5. This reporting is included with the facility EERs which are submitted no later than 30 days following the end of each calendar quarter. Information regarding this has been received and reviewed by AQD staff.

The facility is required to submit the results of the Quality Assurance Procedures of the NOx CEMS/PEMS to the AQD Technical Programs Unit. QAP's are typically submitted with Excess Emissions Reporting and are done in a timely manner. Information regarding this has been received and reviewed by AQD staff.

No less than 30 days prior to installation of any new monitoring system, the facility is required to submit two copies of a Monitoring Plan to the AQD. No PEMS has been installed at this facility and is not anticipated. No new CEMS that would require a monitoring plan has been installed in the last 12 months.

8. STACK/VENT RESTRICTION(S) - Stack parameters do not appear to have been recently modified and appear correct.

9. OTHER REQUIREMENT(S) - The facility is required to comply with all applicable provisions of 40 CFR 60 Subparts A and Db. By complying with the other conditions listed in this section, the facility is in compliance with these subparts.

   The facility is required to comply with the applicable requirements of 40 CFR 63 Subpart DDDDD. By complying with the other conditions listed in this section, the facility is in compliance with this subpart.

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

1. EMISSION LIMIT(S) - PM emissions from EUWOODCHIPTRAN are not to exceed 0.10 pounds per 1,000 pounds of exhaust gases. Compliance with this limit is through non-certified visible emissions readings. A sample of these records is attached.

2. MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.

3. PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to not operate EUWOODCHIPTRAN unless the cyclones are installed and operating properly. At the time of the inspection, the cyclones were operating. The cyclones are inspected daily. A sample of these records is attached.

4. DESIGN/EQUIPMENT PARAMETER(S) - There is no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.

5. TESTING/SAMPLING - The facility is required to perform and document a non-certified visible emission observation once per week from each exhaust point while the equipment is operating. According to records, this is being performed. A sample of these records is attached.

6. MONITORING/RECORDKEEPING - Records of the non-certified visible emissions observations is required to be kept on file. A sample of these records is attached.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

8. STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

EUCOPELAND+DISTANK - A fluidized bed reactor (Copeland Reactor) used to recover sodium carbonate from spent pulping liquor (black liquor). Two cyclones, venturi scrubber, mist eliminator, wet electrostatic precipitator (ESP), and regenerative thermal oxidizer (RTO)

1. **EMISSION LIMIT(S) - PM emissions from EUCOPELAND+DISTANK are not to exceed 0.20 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air. Compliance with this limit is through stack testing. This testing was last performed in September of 2015 and demonstrated compliance with a result of 0.03 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air. Information regarding this has been received and reviewed by AQD staff.**

   Gaseous organic HAPs emissions as measured by total hydrocarbons reported as carbon are not to exceed ≤ 2.97 pounds per ton of black liquor solids fired
   OR 90% reduction (prior to discharge of the gases to the atmosphere). Compliance with this limit is through stack testing. This testing was last performed in April of 2015 and demonstrated compliance with a result of 1.30 pounds per ton of black liquor solids fired. Information regarding this has been received and reviewed by AQD staff.

2. **MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to not operate EUCOPELAND+DISTANK unless the cyclones, venturi scrubber, mist eliminator, and RTO are installed and operating properly. The EU is so equipped and was in operation at the time of the inspection.**

   The facility is required to not operate EUCOPELAND+DISTANK unless the differential pressure across the venturi scrubber is equal to or greater than 38 inches of water, gauge. At the time of the inspection, this differential pressure was 56.1 inches of water, gauge. Any deviations from this are recorded by the facility.

   The facility is required to not operate EUCOPELAND+DISTANK unless the RTO temperature, is greater than or equal to the temperature established during the most recent performance test. The most recent tested temperature was greater than or equal to1703 degrees Fahrenheit. At the time of the inspection, this temperature was 1797 degrees Fahrenheit. Any deviations from this are recorded by the facility.

4. **DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to install and maintain a device to measure the differential pressure across the throat of the venturi scrubber. The control equipment is so equipped.**

   The facility is required to install and maintain a device to measure the RTO temperature using a temperature monitor accurate to within ±1% of the temperature being measured. The control equipment is so equipped.

5. **TESTING/SAMPLING - The facility is required to conduct performance tests once every five years, for verification of the PM emission rates. This testing was last performed in September of 2015 and demonstrated compliance with a result of 0.03 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air. Information regarding this has been received and reviewed by AQD staff.**

   The facility is required to conduct performance tests once every five years for verification of the gaseous organic HAP emission rates or the percentage reduction in gaseous organic HAPs. This testing was last performed in April of 2015 and demonstrated compliance with a result of 1.30 pounds per ton of black liquor solids fired. Information regarding this has been received and reviewed by AQD staff.

   HAP performance testing is required to include establishing RTO temperature operating ranges. This testing was last performed in April of 2015 and demonstrated a result minimum temperature of 1703 degrees Fahrenheit. Information regarding this has been received and reviewed by AQD staff.

6. **MONITORING/RECORDKEEPING - The facility is required to monitor, and record the operating**

temperature of the RTO at least once every successive 15 minute period. This reading is being taken. A sample of these records is attached.

The facility is required to implement corrective actions, if any one hour average RTO temperature falls below the temperature established during the most recent performance test. Corrective actions reported in the RTO quarterly report. Information regarding this has been received and reviewed by AQD staff.

The facility is in violation of the limit, if any three hour average RTO temperature falls below the temperature established during the most recent performance test. Violations of this are reported verbally within 24 hours and in writing within 15 days. Information regarding this has been received and reviewed by AQD staff.
The facility is required to maintain records of any occurrence when corrective action is required. This information, as applicable, is contained within the quarterly RTO reporting. Information regarding this has been received and reviewed by AQD staff.

The facility is required to maintain records of the following information:
a. Records of the black liquor solids firing rate, in tons per day
b. Records of parameter monitoring data including any period when the operating parameter levels were inconsistent with the levels established during the most recent performance test.
c. Records of supporting calculations
d. Records of monitoring parameter ranges established for EUCOPELAND+DISTANK.

These records are being kept. A sample of these is attached to this report.

At a minimum, the facility is required to monitor, and record the differential pressure across the venturi scrubber once every 15 minutes. These records are being kept. A sample of these is attached to this report.

The facility is required to use the differential pressure across the venturi scrubber as an indicator of proper functioning of the scrubber. Any excursions are reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

In response to an excursion, is required to restore operation of the pollutant-specific emissions unit to its normal operation as expeditiously as practicable. Any excursions are reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

The facility is required to properly maintain the monitoring systems, including keeping necessary parts for routine repair of the monitoring equipment. Spare parts are kept on site.

The owner or operator is required to conduct all venturi scrubber differential pressure monitoring in continuous operation at all times that the EUCOPELAND+DISTANK is operating. Any excursions are reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

The facility is required to maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan (QIP). No QIP has been developed and is not recommended at this time.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

The facility is required to follow AQD procedures regarding submission of stack testing protocols and report. The facility has followed these procedures for any stack testing performed.

The facility is required to submit quarterly reports of any RTO temperature excursions. This information, as applicable, is contained within the quarterly RTO reporting. Information regarding this has been received and reviewed by AQD staff.

Within 15 days after startup where the duration of the prior EUCOPELAND+DISTANK shutdown exceeds six months the facility is required to notify the AQD District Supervisor, in writing, of the

startup date. This shutdown has not occurred.

Each semiannual report of monitoring and deviations is required to include summary information on the number, duration and cause of excursions and the corrective actions taken. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

Each semiannual report of monitoring and deviations is required to include summary information on monitor downtime. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

8. **STACK/VENT RESTRICTION(S) - Stack parameters do not appear to have been recently modified and appear correct.**

9. **OTHER REQUIREMENT(S) - The facility is required to develop a written Startup, Shutdown, and Malfunction Plan. This plan was received in January of 2003**

   The facility is required to modify CAM if it is found to be inadequate. The CAM for this EU is adequate. The facility is required to comply with all applicable requirements of 40 CFR Part 64. By complying with the other conditions listed in this section, the facility is in compliance with CAM.

   The facility is required to comply with all applicable requirements of 40 CFR Part 63, Subparts A and MM. By complying with the other conditions listed in this section, the facility is in compliance with these subparts.

EUWASHERS - Two vacuum drum rotary pulp washers operated in series. Low Volume Hydrocarbon (LVHC) Collection System, EUBOILER1, EUBOILER2

1. **EMISSION LIMIT(S) - VOC emissions from EUWASHERS are not to exceed 0.37 pounds per hour with LVHC system operating, 18.57 pounds per hour with LVHC system not operating, and 2.42 tons per year based on a 12 month rolling time period. Compliance with these limits is through operation of the LVHC system. This system was in operation at the time of the inspection. Calculations provided by the facility indicate and average of 0.30 pounds per hour in March of 2017. Records also indicate no time when VOC emissions were uncontrolled.**

2. **MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) - There is no process or operational restrictions associated with this emission unit; therefore, this section is not applicable.**

4. **DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to install and maintain a LVHC Collection System. This system was in operation at the time of the inspection.**

5. **TESTING/SAMPLING - There is no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.**

6. **MONITORING/RECORDKEEPING - The facility is required to keep, in a manner satisfactory to the AQD, records of the following information:**

   a. **Amount of oven dried pulp processed on a monthly basis;**
   b. **Operating hours of EUWASHERS on a monthly basis;**
   c. **Total time that the LVHC Collection System was unavailable or was being bypassed during operation of EUWASHERS on a monthly basis;**
   d. **Annual VOC emissions, based upon a 12 month rolling time period, as determined at the end of each calendar month;**
   e. **Hourly VOC emissions with and without the LVHC collection system operating, calculated on a monthly basis.**

   These records are being kept and a sample of them is attached.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

8. STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

EUSODA-ASH - Soda Ash Silo. Baghouse

1. EMISSION LIMIT(S) - PM emissions from EUSODA-ASH are not to exceed 0.10 pound per 1,000 pounds of exhaust gases. Compliance with this is through proper operation of the associated baghouse including monitoring of the differential pressure across it. The acceptable differential pressure across the baghouse is 0-15 inches of water, gauge. At the time of the inspection, this differential pressure was 3.8 inches of water, gauge. Records indicate this baghouse typically operates at about 3-6 inches of water, gauge.

2. MATERIAL LIMIT(S) - NA

3. PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to maintain the differential pressure across the baghouse within the normal operating ranges identified in the Source-Wide MAP. Records indicate this is being performed.

   The facility is required to not operate EUSODA-ASH unless the baghouse is installed and operating properly. This baghouse was in operation at the time of the inspection. The acceptable differential pressure across the baghouse is 0-15 inches of water, gauge. At the time of the inspection, this differential pressure was 3.8 inches of water, gauge. Records indicate this baghouse typically operates at about 3-6 inches of water, gauge.

4. DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to install and maintain a device to measure the differential pressure across the baghouse. The control equipment is so equipped.

5. TESTING/SAMPLING - There is no material limits associated with this emission unit; therefore, this section is not applicable.

6. MONITORING/RECORDKEEPING - The facility is required to utilize baghouse differential pressure as an indicator of the proper functioning of the baghouse. The pressure drop is monitored properly. A sample of these records is attached.

   The facility is required to properly maintain the differential pressure monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. Spare parts are kept on site.

   The facility is required to use the differential pressure across the baghouse to assure compliance with the PM limit. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff. In response to an excursion the facility is required to restore operation of EUSODA-ASH to its normal or usual manner of operation as expeditiously as practicable. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff. CAM monitoring is required to be continuous. Monitoring system downtime is required to be recorded. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

   The facility is required to maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan (QIP). No QIP has been developed and is not recommended at this time.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

   Each semiannual report of CAM monitoring is required to include summary information on the

number, duration, and cause of excursions and/or exceedances and the corrective actions taken. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff. Each semiannual report of monitoring and deviations is required to include summary information on monitor downtime. This information is reported semi-annually as part of CAM reporting. Information regarding this has been received and reviewed by AQD staff.

8. STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - The facility is required to modify CAM if it is found to be inadequate. The CAM for this EU is adequate. The facility is required to comply with all applicable requirements of 40 CFR Part 64. By complying with the other conditions listed in this section, the facility is in compliance with CAM.

EUFLYASH - Fly Ash Silo. Baghouse

In the last 12 months, the facility has only used natural or bio gas as fuel. None of the conditions in this section, including CAM, apply when the facility is firing on natural or biogas.

EUPELLET - Sodium Carbonate Pellet Storage Silo. Baghouse

1. EMISSION LIMIT(S) - PM emissions from EUPELLET are not to exceed 0.10 pound per 1,000 pounds of exhaust gases. Compliance with this is through proper operation of the associated baghouse including monitoring of the differential pressure across it. The acceptable differential pressure across the baghouse is 0-6 inches of water, gauge. At the time of the inspection, this differential pressure was nearly zero inches of water, gauge. Records indicate this baghouse typically operates at less than 4 inches of water, gauge.

2. MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.

3. PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to not operate EUPELLET unless the baghouse is installed and operating properly. The baghouse was in operation at the time of the inspection. The facility is required to maintain the differential pressure across the baghouse within the normal operating ranges identified in the Source-Wide MAP. Records indicate this is being performed.

4. DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to equip and maintain a device to monitor the differential pressure across the baghouse. The control device is so equipped.

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

6. MONITORING/RECORDKEEPING - The differential pressure across the baghouse is required to be continuously monitored and recorded once per day. This is being performed. A sample of these records is attached.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

8. STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

FGMACT SUBPART S - For semi-chemical pulping processes using wood, the affected source is the total of all HAP emission points in the pulping system. Pulping system means all process equipment, beginning with the digester system, and up to and including the last piece of pulp conditioning equipment. Emission Units: EUDIGESTERS, EUEVAPLTV, EUEVAPFC EUBOILER1, EUBOILER2, LVHC

collection system

1. **EMISSION LIMIT(S) - There is no emission limits associated with this emission unit; therefore, this section is not applicable.**

2. **MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) - All regulated HAP-emitting sources is required to be enclosed and vented into a closed-vent system and routed to Boilers 1 and 2. The units are so equipped.**

   Each component of the closed-vent system is required to be operated with no detectable leaks as indicated by an instrument reading of less than 500 ppmv above background. Compliance with this is through testing. This testing was last performed in May of 2016 and demonstrated no leaks greater than 500 ppmv above background.

   Each bypass line in the closed-vent system is to be equipped with flow indicator. This unit is so equipped.

4. **DESIGN/EQUIPMENT PARAMETER(S) - The flow from the closed vent system is to go to Boilers 1 and 2 for combustion. The units is so equipped.**

5. **TESTING/SAMPLING - Leaks from the closed vent system is required to be measured annually This testing was last performed in May of 2016 and demonstrated no leaks greater than 500 ppmv above background.**

6. **MONITORING/RECORDKEEPING - Each enclosure and closed-vent system is required to comply with the following requirements:**

   a. **For each enclosure opening, a visual inspection of the closure mechanism is required to be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.**
   b. **Each closed-vent system is required to be visually inspected every 30 days.**
   c. **For positive pressure closed-vent systems no detectable leaks measured initially and annually.**
   d. **The valve or closure mechanism is required to be inspected at least once every 30 days.**

   This information is being recorded. A sample of these records is attached. Annual testing for leaks has been completed annually with the last test performed in May of 2016. These tests demonstrate compliance. Information regarding this has been received and reviewed by AQD staff.

   If an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, or if an instrument reading of 500 ppmv or greater above background is measured, or if enclosure openings are not maintained at negative pressure then corrective actions is required to be taken as soon as practicable. No issues have been found during inspections performed in this review period.

   For each applicable enclosure opening, closed-vent system, and closed collection system, the facility is required to prepare and maintain a site-specific inspection plan. This inspection plan was available for review.

   For each inspection performed, the facility is required to record the following information:
   a. **Date of inspection;**
   b. **The equipment type and identification;**
   c. **Results of negative pressure tests for enclosures;**
   d. **Results of leak detection tests;**
   e. **The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);**
   f. **The date the defect or leak was detected and the date of each attempt to repair the defect or leak;**
   g. **Repair methods applied in each attempt to repair the defect or leak;**
   h. **The reason for the delay if the defect or leak was not repaired within 15 days after discovery;**
   i. **The expected date of successful repair of the defect or leak if the repair is not completed within**

15 days;
j. The date of successful repair of the defect or leak;
k. The position and duration of opening of bypass line valves and the condition of any valve seals;
l. The duration of the use of bypass valves on computer controlled valves.

These records are being kept. A sample of these records is attached.

The facility is required to set the flow indicator on each bypass line to provide a record of the presence of gas flow in the bypass line at least once every 15 minutes. PCA continuously records the time a bypass valve is in the open position or rupture disc release. Flow is assumed at all times if the bypass valve is open or disc ruptures.

Records of malfunctions must be maintained. All malfunction periods are reported in the semiannual SSM report. This reporting has been received and reviewed by AQD staff.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

   Semiannual reporting of malfunctions must be submitted. All malfunction periods are reported in the semiannual SSM report.

8. STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - The facility is required to comply with all applicable portions of 40 CFR Part 63, Subpart S. By complying with the other conditions listed in this section, the facility is in compliance with the subpart.

FGBIOGASSYSTEM - Biogas generation system which produces fuel for the three boilers. In the event of boiler upsets or malfunctions, the gas is directed to EUBIOGASFLARE for destruction. EUBOILER1, EUBOILER2, EUBOILER4A, EUBIOGASSYSTEM, EUBIOGASFLARE

1. EMISSION LIMIT(S) - SO2 emissions from FGBIOGASSYSTEM are not to exceed 8.45 lb/hr and H2S emissions from FGBIOGASSYSTEM are not to exceed 0.0449 lb/hr. This testing was performed in May of 2016 and demonstrated compliance at 2.88 lb/hr SO2 and 0.015 lb/hr post combustion. Information regarding this has been received and reviewed by AQD staff.

   MATERIAL LIMIT(S) - The amount of biogas used is not exceed 50,400,000 cubic feet based on a 12 month rolling time period. Records of this usage are being kept. A sample of these records is attached. Information regarding this has been received and reviewed by AQD staff.

   H2S content of the biogas used in the boiler is not to exceed 4.49 lb/hr before combustion in a boiler or flare. Compliance with this limit is through testing of the gas. This testing was performed in May of 2016 and demonstrated compliance at 1.53 lb/hr pre-combustion. Information regarding this has been received and reviewed by AQD staff.

2. PROCESS/OPERATIONAL RESTRICTION(S) - The facility is required to not operate FGBIOGASSYSTEM unless EUBIOGASFLARE is installed and operating properly. This flare was in operation at the time of the inspection.

3. DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to vent emissions from the recycle/rapid mix tank to the biogas collection system. The system is so equipped. The facility is required to install and maintain a device for measuring and recording the amount of biogas combusted in EUBIOGASFLARE. The system is so equipped.

4. TESTING/SAMPLING - The facility is required to conduct performance tests for verification of the PM, CO, and VOC emission rates from EUBOILER4A when firing only biogas. This testing was last performed in April 2014 and demonstrated compliance. Information regarding this has been received and reviewed by AQD staff.

   The facility is required to annually verify the rate of H2S in pounds per hour supplied to the boilers

and flare. This testing was last performed in May of 2017. Reporting regarding it has not been received and is not due until July of 2017.

5. MONITORING/RECORDKEEPING - The facility is required to measure and record the heat content, in BTU per cubic foot of biogas, on an annual basis. This testing was performed in May of 2016 and demonstrated a higher heating value of 11,497 btu/cubic foot. Information regarding this has been received and reviewed by AQD staff.

   The facility is required to calculate and keep monthly records of the SO2, NOx, CO, VOC, PM, PM-10, lead, hydrogen fluoride, and sulfuric acid mist emissions from EUBOILER4A in tons per calendar year basis. These calculations are being performed. A sample of these records is attached.

   The facility is required to maintain a record of the following for EUBOILER1, EUBOILER2, EUBOILER4A, and EUBIOGASFLARE:
   a. Emission unit identification;
   b. The type(s) of fuel used in each emission unit;
   c. The quantity of fuel used in each emission unit on a calendar month basis;
   d. The emission factor used to calculate emissions;
   e. The source of the emission factor;
   f. The heat content of each fuel used.

   These records are being kept. A sample of these records is attached.

   The facility is required to measure and record, in cubic feet, the amount of biogas combusted in EUBIOGASFLARE on a monthly basis. These records are being kept. A sample of these records is attached.

6. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

   The facility is required to follow AQD procedures regarding submission of stack testing protocols and report. The facility has followed these procedures for any stack testing performed.

   Effective until January 2019, the facility is required to submit records of SO2, NOx, CO, VOC, PM, PM-10, lead, hydrogen fluoride, and sulfuric acid mist emissions from EUBOILER4A in tons per calendar year. The facility is currently not subject to this requirement.

7. STACK/VENT RESTRICTION(S) - Stack parameters do not appear to have been recently modified and appear correct.

8. OTHER REQUIREMENT(S) - There are no other requirements associated with this emission unit; therefore, this section is not applicable.

FG-RULE 290

The facility currently has no operating equipment subject to this rule on site and has not in the last 12 months.

FGRICE1 - One emergency (Caterpillar) - compression-ignition, 225 horsepower stationary reciprocating internal combustion engine and one fire pump (Cummins) – Emergency, compression-ignition, 208 horsepower stationary reciprocating internal combustion engine. EURICE 12994, EURICE 12974

1. EMISSION LIMIT(S) - There is no emission limits associated with this emission unit; therefore, this section is not applicable.

2. MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.

3. PROCESS/OPERATIONAL RESTRICTION(S) - The facility may operate EURICE 12994 and/or EURICE 12974 as necessary during emergencies with no time limit. The engines have run a total of 3.2 hours for testing.

The facility is required to minimize the time spent at idle and minimize startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. The engines have run a total of 3.2 hours for testing.

The facility must comply with the following operational requirements:
a. Change oil and filter every 500 hours of operation or annually.
b. Inspect air cleaner every 1,000 hours of operation or annually.
c. Inspect all hoses and belts every 500 hours or operation or annually.

This information is recorded. A sample of these records is attached.

The facility has the option of utilizing an oil analysis program in order to extend the specified oil change requirement. The facility has not selected this option.

The facility must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR Part 63, Subpart ZZZZ that apply to EURICE 12994 and EURICE 12974 at all times. Compliance with the conditions of this table indicate compliance with the subpart.

The facility at all times must operate and maintain EURICE 12994 and EURICE 12974 in a manner that minimizes emissions. A sample of maintenance records is attached.

The facility must operate and maintain EURICE 12994 and EURICE 12974 according to the manufacturer's emission-related written operation and maintenance instructions. A sample of maintenance records is attached.

The facility may operate EURICE 12994 and EURICE 12974 for the purpose of maintenance checks and readiness testing. The engines have run a total of 3.2 hours for testing.

The facility may operate EURICE 12994 and EURICE 12974 for up to 50 hours per engine per year in non-emergency situations. The engines have run a total of 3.2 hours for testing.

4. DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to equip EURICE 12994 and EURICE 12974 each with a non-resettable hour meter. The engines are so equipped.

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

6. MONITORING/RECORDKEEPING - The facility is required to keep the following records:
   a. A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart ZZZZ,
   b. Records of the occurrence and duration of each malfunction of operation
   c. Records of actions taken during period of malfunctions to minimize emissions in accordance with 40 CFR 63.6605(b);
   d. Records of the maintenance conducted on EURICE 12994 and EURICE 12974;
   e. Records of the hours of operation recorded through the non-resettable hour meters. ;
   f. Records to demonstrate continuous compliance with the operating limitations.

   Notifications for these engines is not required as they are for emergency use. The engines have operated a total of 3.2 hours for testing. Samples of associated records are attached.

   The facility is required to keep records of the parameters that are analyzed as part of the oil analysis program. The facility has not selected this option.

7. REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.

8. STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

9. OTHER REQUIREMENT(S) - The facility is required to comply with all applicable requirements of 40 CFR Part 63, Subparts A and ZZZZ. By complying with the other conditions listed in this section, the

facility is in compliance with the subpart.

FGPAPERMACH - Grandfathered paper machines numbers 1 thru 3 all installed prior to 1967. There have been no modifications to this equipment since they were installed.

1. **EMISSION LIMIT(S) - There is no emission limits associated with this emission unit; therefore, this section is not applicable.**

2. **MATERIAL LIMIT(S) - There is no material limits associated with this emission unit; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) - There is no process or operational restrictions associated with this emission unit; therefore, this section is not applicable.**

4. **DESIGN/EQUIPMENT PARAMETER(S) - There is no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.**

5. **TESTING/SAMPLING - There is no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.**

6. **MONITORING/RECORDKEEPING - There is no monitoring or recordkeeping requirements associated with this emission unit; therefore, this section is not applicable.**

7. **REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.**

8. **STACK/VENT RESTRICTION(S) - There is no monitoring or recordkeeping requirements associated with this emission unit; therefore, this section is not applicable.**

9. **OTHER REQUIREMENT(S) – There are no other requirements associated with this emission unit; therefore, this section is not applicable.**

At the time of the inspection and review of records, this facility was in compliance with their Renewable Operating Permit.

NAME _____ DATE 6/5/17 SUPERVISOR _____