DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

B369257839

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:** 04/27/2021
STAFF: Rob Dickman	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Walk through portion of a scheduled inspection for this ROP 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. A new solid fuel fluidized bed boiler, EUBOILER5, has been permitted (PTI 209-18A) and construction on it, and support equipment is nearly complete as of the date of this inspection. Trial operation of the boiler began on April 19, 2021 firing only natural gas. Trial with solid fuels should begin in early May. This boiler is included in the draft ROP renewal currently under review and will be a part of the next source inspection.

I performed a walk-through inspection of this facility per Renewable Operating Permit (ROP) Number MI-ROP-B3692-2015b. All required records for this facility have been previously received, reviewed and documented in a separate report prior to this walk-through inspection. 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

Emission Limits

There are no source wide emissions limits; therefore, this section is not applicable.

Material Limits

There are no source wide material limits; therefore, this section is not applicable.

Process or Operational Restrictions

The facility is required to implement and maintain a Source-wide Malfunction Abatement Plan (MAP) and a Fugitive Dust Plan (FDP). The latest version of the MAP and FEP were received in October of 2019 as part of the facility renewal ROP application. The MAP was dated 9/27/19 and the FDP was dated 5/1/18. Both plans were reviewed and approved on 4/13/21

Design or Equipment Parameters

There are no source wide design or equipment parameters; therefore, this section is not applicable.

Testing and Sampling Requirements

There are no source wide testing or sampling requirements; therefore, this section is not applicable.

Monitoring and/or Recordkeeping Requirements

There are no source wide monitoring or recordkeeping requirements therefore, this section is not applicable.

Reporting

All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been previously received and reviewed by Air Quality Division (AQD) staff.

Stack/Vent Restrictions

There are no source-wide stack or vent restrictions, therefore, this section is not applicable.

Other Requirements

There are no source-wide other requirements, therefore, this section is not applicable.

EUCOALHANDLING

This unit includes 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. All conditions in this section relate to the combustion of coal. This facility has not burned coal since January of 2014; therefore, none of the conditions in this section are currently applicable.

EUBOILER1

This unit includes a 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. The conditions of this section are applicable only when the facility is combusting coal or Number 6 fuel oil which they have not done since January of 2014; therefore, none of the conditions in this section are currently applicable. Under PTI Number 209-18A, this boiler is currently being converted to combust only natural gas and biogas. This project will be completed within the next few weeks.

EUBOILER2

This unit includes a 186 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 burned only natural gas and biogas since January of 2014; therefore, none of the conditions for the burning of coal or oil were evaluated. The following findings apply to the boiler when consuming natural gas and biogas. Under PTI Number 209-18A, this boiler is currently being converted to combust only natural gas and biogas. This project will be completed within the next few weeks.

Emission Limits

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). Any excess emissions or monitoring system downtime are reported quarterly. This reporting has been previously received, reviewed, and documented by AQD staff.

Material Limits

There are no material limits associated with this equipment when firing natural and biogas; therefore, this section is not applicable.

Process or Operational Restrictions

There are no process or operational restrictions associated with this equipment when firing natural and biogas; therefore, this section is not applicable.

Design or Equipment Parameters

NOx and Oxygen (O2) percentage emissions from EUBOILER2 must be monitored on a continuous basis. CEMS have been installed to monitor these parameters and are currently being operated in an acceptable manner. Excess emissions, monitoring system downtime, and quality assurance procedures associated with the CEMS has been previously reported, reviewed, and documented by AQD staff.

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 in this manner. 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 employed 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 employed 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 Parametric Emissions Monitoring System (PEMS). This PEMS is not required to be installed at the facility but rather is an alternative to CEMS. At the time of the inspection, a PEMS has not been installed.

Testing and Sampling Requirements

Quality Assurance Procedures of the NOx CEMS as set forth in Appendix F to 40 CFR Part 60 must be performed each calendar quarter. 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 previously received and reviewed by AQD staff. The last RATA was performed in May of 2020 and demonstrated compliance.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on -site inspection.

Reporting

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

On a quarterly basis, excess emission reports are to be submitted. This reporting has been previously received, reviewed, and documented by AQD staff.

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 are to be reported quarterly. This reporting is included with the facility EERs which are submitted no later than 30-days following the end of each calendar quarter. This reporting has been previously received, reviewed, and documented by AQD staff.

The facility is to follow AQD procedures regarding testing protocol and test report submittals. A complete testing event at this facility was last performed in August of 2020 and the facility followed required procedures for this testing. This reporting has been previously received, reviewed, and documented by AQD staff.

Quality Assurance Procedure (QAP) results are to be submitted quarterly as applicable. QAP results are typically submitted with Excess Emissions Reporting and are done in a timely manner. This reporting has been previously received, reviewed, and documented 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. No new CEMS that would require a monitoring plan has been installed in the last 12 months.

Stack/Vent Restrictions

The stack for this process is to have a maximum diameter of 144 inches and a minimum height above ground of 193 feet. Stack parameters do not appear to have been recently modified and appear correct. Under PTI Number 209-18A, the facility has moved exhaust from this unit to a new stack. The dimension requirements for this stack are similar to the ones listed in the ROP at a maximum diameter of 144 inches and a minimum height above ground of 199 feet.

Other Requirements

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

This unit includes a 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 are installed as control for NOx.

Emission Limits

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 utilizing a CEMS. Any excess emissions or monitoring system downtime are reported quarterly. This reporting has been previously 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 periodic stack testing. This testing was last performed in April of 2019 and demonstrated a rate of 5.1 pounds per hour. This reporting has been previously received and reviewed by AQD staff.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

Only natural gas and/or biogas are to be combusted 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. This reporting has been previously received and reviewed by AQD staff.

Design or Equipment Parameters

A CEMS or PEMS to monitor and record NOx emissions and O2 percentage from EUBOILER4A on a continuous basis is required to be installed, calibrated, and maintained. A CEMS has been installed and is currently being operated in an acceptable manner. Information regarding this has been previously received and reviewed by AQD staff. A PEMS has not been installed.

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.

Testing and Sampling Requirements

Performance tests while firing only natural gas for verification of the CO emission rates are required to be performed. This testing was last performed in April of 2019 and demonstrated a rate of 5.1 pounds per hour. This report was previously received and reviewed by AQD staff.

Quality Assurance Procedures of the NOx CEMS/PEMS as set forth in Appendix F to 40 CFR Part 60 must be performed 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. RATA testing was last performed in May of 2019 and demonstrated compliance. Associated reporting for these procedures has been previously received and reviewed by AQD staff.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on -site inspection.

Reporting

All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been previously 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.

Excess emission reports for any NOx excess emission which occurred during the reporting period are to be submitted quarterly. This reporting has been previously received, reviewed and documented AQD staff.

Reports containing the information in SC VI.5 are required to be submitted quarterly. This reporting is included with the facility EERs which are submitted no later than 30-days following the end of each calendar quarter. This reporting has been previously received, reviewed, and documented 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. This reporting has been previously 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. No new CEMS that would require a monitoring plan has been installed in the last 12 months.

Stack/Vent Restrictions

The stack for this equipment must have a maximum diameter of 69 inches and a minimum height above ground of 116 feet. Stack parameters do not appear to have been recently modified and appear correct.

Other Requirements

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

This unit includes wood chip transport equipment, wood chip storage bins, conveyors and bucket elevators, screw conveyors and pneumatic transfer equipment. Particulate control is through five cyclones.

Emission Limits

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. Records of this have been previously received, reviewed, and documented by AQD staff. During the inspection, emission points from this process were observed and demonstrated zero visible emissions.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

EUWOODCHIPTRAN is not to be operated unless the cyclones are installed and operating properly. At the time of the inspection, the cyclones were operating. The cyclones are inspected daily.

Design or Equipment Parameters

There are no design or equipment parameters associated with this equipment; therefore, this section is not applicable.

Testing and Sampling Requirements

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 previously reviewed records, this is being performed.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on -site inspection.

Reporting

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

Stack/Vent Restrictions

There are no stack or vent restrictions associated with this equipment, therefore, this section is not applicable.

Other Requirements

There are no other requirements associated with this equipment; therefore, this section is not applicable.

EUCOPELAND+DISTANK

This unit includes a fluidized bed reactor (Copeland Reactor) used to recover sodium carbonate from spent pulping liquor (black liquor). Control equipment includes two cyclones, venturi scrubber, mist eliminator, wet electrostatic precipitator (ESP), and regenerative thermal oxidizer (RTO)

Emission Limits

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 August of 2020 and demonstrated compliance with a result of 0.03 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air. This testing report has been previously 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 February of 2020 and demonstrated compliance with a result of 92.4 percent reduction prior to discharge. This testing report has been previously received and reviewed by AQD staff.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

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 58 inches of water, gauge. Any deviations from the limit 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 to 1693 degrees Fahrenheit. At the time of the inspection, this temperature was 1839 degrees Fahrenheit. Any deviations from this limit are recorded by the facility.

Design or Equipment Parameters

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.

Testing and Sampling Requirements

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 August of 2020 and demonstrated compliance with a result of 0.03 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air. This testing report has been previously 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 February of 2020 and demonstrated compliance. This testing report has been previously received and reviewed by AQD staff.

HAP performance testing is required to include establishing RTO temperature operating ranges. This testing was last performed in February of 2020 and demonstrated a result minimum temperature of 1693 degrees Fahrenheit. This testing report has been previously received and reviewed by AQD staff.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on -site inspection.

Reporting

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

Stack/Vent Restrictions

The stack for this equipment is to have a maximum exhaust diameter of 87 inches and minimum height above ground of 140 feet. Stack parameters do not appear to have been recently modified and appear correct.

Other Requirements

The facility is required to develop a written Startup, Shutdown, and Malfunction Plan. This plan was previously 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

Equipment for this unit includes two vacuum drum rotary pulp washers operated in series. Pollution control equipment includes a Low Volume Hydrocarbon (LVHC) Collection System, EUBOILER1, EUBOILER2.

Emission Limits

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 an average of 0.265 pounds per hour and 1.1 tons per year based on a 12-month rolling time period as of December of 2020.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

There are no process or operational restrictions associated with this equipment; therefore, this section is not applicable.

Design or Equipment Parameters

The facility is required to install and maintain a LVHC Collection System. This system was in operation at the time of the inspection.

Testing and Sampling Requirements

There are no testing or sampling requirements associated with this equipment; therefore, this section is not applicable.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on-site inspection.

Reporting

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

Stack/Vent Restrictions

There are no stack or vent restrictions associated with this equipment, therefore, this section is not applicable.

Other Requirements

There are no other requirements associated with this equipment; therefore, this section is not applicable.

EUSODA-ASH

Equipment in this unit includes the Soda Ash Silo. Pollution control equipment is a baghouse.

Emission Limits

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 equipment was not in operation. Records indicate this baghouse typically operates at about 3-6 inches of water, gauge.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

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 not 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 equipment was not in operation. Records indicate this baghouse typically operates at about 3-6 inches of water, gauge.

Design or Equipment Parameters

The facility is required to install and maintain a device to measure the differential pressure across the baghouse. The control equipment is so equipped.

Testing and Sampling Requirements

There are no testing or sampling requirements associated with this equipment; therefore, this section is not applicable.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on-site inspection.

Reporting

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

Stack/Vent Restrictions

There are no stack or vent restrictions associated with this equipment, therefore, this section is not applicable.

Other Requirements

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

Equipment in this unit includes the Fly Ash Silo. Pollution control equipment is a baghouse.

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

EUPELLET

Equipment in this unit includes the Sodium Carbonate Pellet Storage Silo. Pollution control equipment is a baghouse.

Emission Limits

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 equipment was not in operation. Records indicate this baghouse typically operates at less than 4 inches of water, gauge.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

The facility is required to not operate EUPELLET unless the baghouse is installed and operating properly. The process was not 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.

Design or Equipment Parameters

The facility is required to equip and maintain a device to monitor the differential pressure across the baghouse. The control device is so equipped.

Testing and Sampling Requirements

There are no testing or sampling requirements associated with this equipment; therefore, this section is not applicable.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on -site inspection.

Reporting

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

Stack/Vent Restrictions

There are no stack or vent restrictions associated with this equipment, therefore, this section is not applicable.

Other Requirements

There are no other requirements associated with this equipment; 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. Subject emission units include: EUDIGESTERS, EUEVAPLTV, EUEVAPFC EUBOILER1, EUBOILER2, LVHC collection system.

Emission Limits
There are no emission limits associated with this emission unit; therefore, this section is not applicable.

Material Limits

There are no material limits associated with this equipment; therefore, this section is not applicable.

Process or Operational Restrictions

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 annual testing. This testing was last performed in May of 2020 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.

Design or Equipment Parameters

The flow from the closed vent system is to go to Boilers 1 and 2 for combustion. The unit is so equipped.

Testing and Sampling Requirements

Leaks from the closed vent system are required to be measured annually. This testing was last performed in May of 2019 and demonstrated no leaks greater than 500 ppmv above background.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on -site inspection.

Reporting

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

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

Stack/Vent Restrictions

There are no stack or vent restrictions associated with this equipment, therefore, this section is not applicable.

Other Requirements

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

This group consists of a 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. Emission units included in this group are EUBOILER1, EUBOILER2, EUBOILER4A, EUBIOGASSYSTEM, EUBIOGASFLARE.

Emission Limits

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 2020 and demonstrated compliance at 2.60 lb/hr SO2 and 0.0138 lb/hr post combustion.

Material Limits

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. Biogas is only consumed in Boiler 4A and accounts for ~2% of the total heat input for this boiler. The highest amount of biogas used in the last 12 months occurred in June of 2020 at 11,693 cubic feet.

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 2020 and demonstrated compliance at 1.38 lb/hr pre-combustion. Information regarding this has been previously received and reviewed by AQD staff.

Process or Operational Restrictions

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.

Design or Equipment Parameters

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.

Testing and Sampling Requirements

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 previously 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 2020. Reporting regarding it has been previously received and reviewed by AQD staff.

Monitoring and/or Recordkeeping Requirements

Monitoring and Recordkeeping requirements for this emission unit were reviewed and documented separately just prior to the on-site inspection.

Reporting

All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been previously 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.

Stack/Vent Restrictions

Stack parameters do not appear to have been recently modified and appear correct.

Other Requirements

There are no other requirements associated with this equipment; therefore, this section is not applicable.

FG-RULE 290

The storage vessels listed in this section of the permit are still active and in place. Records regarding them have been previously reviewed and documented.

FGRICE1

Currently, the AQD does not have delegation of authority on 40 CFR 63, Subpart ZZZZ. Therefore, while the facility appears subject to these conditions, they were not evaluated as part of this inspection.

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. There are no compliance conditions associated with this equipment. This group will be removed from the facility ROP during renewal.

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

NAME _____ DATE _____ SUPERVISOR _____ 2021.10.27 06:56:14 -04'00'