

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

B182450111

FACILITY: Morton Salt, Inc.		SRN / ID: B1824
LOCATION: 180 6th Street, MANISTEE		DISTRICT: Cadillac
CITY: MANISTEE		COUNTY: MANISTEE
CONTACT: Courtney Schmidt , EHS & Security Manager		ACTIVITY DATE: 08/13/2019
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection of this major source.		
RESOLVED COMPLAINTS:		

Morton Salt, Inc. is located on the west shore of Manistee Lake in Manistee. The facility uses a coal crusher with a wet venturi scrubber for an 180,000 pounds (216 MMBtu) steam per hour Wickes spreader stoker coal and natural gas co-fired boiler and associated four module baghouse system. The boiler is used to generate electricity, steam, and heat for facility production of salt. A natural gas-fired boiler is also used at the facility as a back-up system for building heat. The process systems consist of mills, conveyors, bucket elevators, pellet presses, vibratory screens, and an enclosed crusher to recycle pellets.

The facility produces various grades of sodium chloride salt products, such as, granular salt, water softener pellets, pretzel salt, and salt blocks. Brine saturated with salt is extracted from wells and is processed through a series of temperature and pressure-controlled evaporators, wash tanks, and filters. The salt produced from this process is refined for packaging or is pressed into pellets or blocks.

This facility was inspected per the conditions of Renewable Operating Permit Number MI-ROP-B1824-2015a. Records required by this permit are kept electronically by the facility and were reviewed on site. Following are the findings of the inspection:

SOURCE-WIDE CONDITIONS

Emission Limits

HAP emissions from the facility are limited to 9.9 tpy for each individual HAP and 24.9 tpy of all HAPS (aggregate) both based on a 12-month rolling time period at the end of each calendar month. Records from the facility indicate the only HAP emitted from the facility is hydrogen chloride(HCl). Records reviewed at the facility indicate these emissions are tracked via coal analysis and usage. As of December 1, 2018, HCl emissions from the facility were 5.5 tons per year based on a 12-month rolling time period.

Material Limits

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

Process or Operational Restrictions

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

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

All required calculations shall be completed by the 15th day of the calendar month. All emissions records reviewed at the facility appeared complete and current.

Records from the facility indicate the only HAP emitted from the facility is hydrogen chloride. Records reviewed at the facility indicate these emissions are tracked via coal analysis for Chlorine and coal usage. As of December 1, 2018, HCl emissions from the facility were 5.5 tons per year based on a 12-month rolling time period.

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.

The facility was required to notify the agency of when the lime injection system for HCl control was installed and when it began operation. The facility installed a lime injection system in September of 2015. The facility tested for HCl in October of 2015. The results of this testing indicated that the facility was able to demonstrate they are a minor HAP source without the use of lime injection.

Stack/Vent Restrictions

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

Other Requirements

The facility is required to have an approved Fugitive Emissions Plan (FEP). The latest version of this plan found is from October of 2017. However, no approval for this or previous versions could be located. This plan will be reviewed and, if warranted, approved.

The facility is required to have an approved Malfunction Abatement Plan (MAP). The most recent version of this plan is dated November of 2016 and was approved in January of 2017. Updates to this plan were submitted recently with the facility's ROP renewal application and will be reviewed as part of the renewal process.

EUCOALCRUSHER

This unit includes coal crushing and handling equipment controlled by a venturi scrubber. Operation of this unit is intermittent and usually occurs on the afternoon shift.

Emission Limits

Particulate matter (PM) emissions are limited to 0.10 lb/1000 lbs exhaust gas. Demonstration of compliance with this limit is through optimal control equipment operation. This is indicated by compliant differential pressure and flow rate readings taken and recorded. A review of these records demonstrated compliance with this limit.

Material Limits

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

Process or Operational Restrictions

The compliant differential pressure range across the venturi scrubber shall be included in the AQD approved MAP. The compliant differential pressure range for the scrubber is 7-13 inches of water, gauge. At the time of the inspection, pressure drop across the scrubber was 8 inches of water, gauge.

The compliant minimum liquid flow rate through the venturi scrubber shall be included in the AQD approved MAP. The compliant liquid flow rate for the scrubber is greater than 25 gallons per minute. At the time of the inspection, flow through the scrubber was 37.2 gallons per minute.

Design or Equipment Parameters

A differential pressure gauge and a liquid flow rate indicator are required to be installed on the venturi scrubber. This equipment is installed and appears to be functioning correctly.

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

The differential pressure across and the scrubbing liquid flow rate the venturi scrubber is to be recorded once per day when EUOALCRUSHER is operating. A review of records indicates this is being performed.

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.

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.

EU#6BOILER

This unit includes a Wickes spreader stoker coal and natural gas co-fired boiler capable of producing 180,000 pounds of steam per hour (216 MMBTU/hr heat input) which is used for generating process steam, electricity and heat for facility production. Control is by a four-module baghouse system and dry scrubber. A Lime Injection System is installed, but testing has demonstrated it does not need to be operated.

Emission Limits

PM emissions are limited to 0.30 lb/1000 lbs exhaust gas. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated a result of 0.0017 lb/1000 lbs exhaust gas.

Sulfur Dioxide emissions are limited to 2.5 lbs/MMBtu. Demonstration of compliance with this limit is through coal content analysis and calculations. Coal is limited to 1.5% sulfur content by weight. This is performed on a per ship load received basis. The most recent analysis for this was on 6/4/19 and indicated a sulfur content of 0.44%. A random date of June 11, 2019 was selected and the calculated emissions for SO₂ were 0.75 #/MMBtu. Additionally, while not required, the facility performed stack testing for SO₂ in June of 2018. The results were 0.745 lbs/MMBtu.

Mercury emissions are limited to 2.2 E-05 lb/MMBTU. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated a result of 2.3 E-07 lb/MMBTU.

Carbon Monoxide emissions are limited to 420 ppm dry @ 3% oxygen. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated a result of 128 ppm dry @ 3% oxygen.

Visible emissions are limited to 10% opacity. Demonstration of compliance with this limit is through an opacity monitoring system. The facility is required to report excess emissions and excess monitoring system downtime on a quarterly basis. These records have been previously reviewed, documented, and found to be in compliance.

Pursuant to 40 CFR 63 Subpart JJJJJJ, the facility must demonstrate that it is not a major source of

HAPS (ie. Less than 10 tons per year emissions of each individual HAP, 25 tons of emissions for aggregate HAPS). The HAP of concern at the facility is hydrogen chloride (HCl) and compliance demonstrations are through coal analysis and calculations based on coal usage. In June of 2018, the facility performed a stack test for HCl. The results of this demonstrated a potential to emit of HCl of 1.6 tons per year, uncontrolled.

Material Limits

Coal is limited to 1.5% sulfur content by weight. This is performed on a per ship load received basis. The most recent analysis for this was on 6/4/19 and indicated a sulfur content of 0.44%.

Coal is limited to 1.9% chlorine content by weight. This is performed on a per ship load received basis. The most recent analysis for this was on 6/4/19 and indicated 13 ppm or 0.014% chlorine content by weight.

The design maximum heat input for firing natural gas, of the total heat input capacity for all fuels fired in EU#6BOILER, shall not exceed a maximum of 82 MMBTU per hour. This is the maximum capacity of the natural gas burners.

Process or Operational Restrictions

The baghouse must be in proper operation when the boiler is operating. At the time of the inspection, the baghouse was in operation. Opacity at the stack was 3.6%.

Periods of boiler startup and shutdown must be minimized. Compliance with this is through implementation of good engineering practices. Process issues associated with startup and shutdown are reported semi-annually as deviations. This reporting has been previously reviewed, documented, and found to be in compliance.

A device to monitor and record the natural gas usage from the boiler on a continuous basis is to be installed. The boiler is so equipped. Natural gas is typically only used for startup. Records for 6/17/19 indicated natural gas usage to be 2,162,461 cubic feet.

A differential pressure gauge to determine pressure across the baghouse must be installed. The baghouse is so equipped. The compliant range for this pressure drop is 0.1 – 9.5 inches of water, gauge. At the time of the inspection, pressure drop across the baghouse was 4.2 inches of water, gauge.

A Continuous Opacity Monitor (COM) to monitor and record the visible emissions from the boiler on a continuous basis must be installed and operating. This equipment is installed. At the time of the inspection, the baghouse was in operation. Opacity at the stack was 3.6%.

After the lime injection system is installed, devices to monitor and record the coal usage rate and hydrated lime injection rate to the boiler are to be installed. These devices are in place. However, it was determined through testing that the lime injection system is not necessary to maintain compliance with HCl emissions limits.

Upon installation of the lime injection system, an oxygen analyzer system must also be installed. This system is installed on the boiler. This system must operate at or above the minimum oxygen level that is established as the operating limit when firing the fuel utilized during the most recent CO performance test. Testing in June of 2018 established a minimum oxygen level of 8.2%. At the time of the inspection, oxygen levels at the boiler were 9.3%. Any deviations below this are reported and reviewed by AQD staff.

A one-time energy assessment by the time the lime injection system is installed is to be completed. This assessment was performed in November of 2009.

Design or Equipment Parameters

The COMS must be installed according to Performance Specification 1 of 40 CFR part 60, Appendix B. This system is installed per this criterion.

The design heat input rate for the boiler shall not exceed 216 MMBTU/hr. The nameplate heat input maximum to the boiler is 216 MMBTU/hr .

Testing and Sampling Requirements

The facility has the option to burn a new mixture of fuel but must complete new testing for mercury. The facility has made no changes recently to their fuel mixture.

An analysis of the coal, to determine the sulfur content, chlorine content and higher heating value must be completed on a per shipment basis. The most recent analysis was completed on 6/14/19. It indicated a sulfur content of 0.44% dry, a chlorine content of 13 ppm dry, and a higher heating value of 12981 BTU per pound.

Testing for PM must be performed. This testing was last performed in June of 2018 and demonstrated a result of 0.0017 lb/1000 lbs exhaust gas. This testing report has been previously reviewed, documented, and found to be in compliance.

Testing for hydrogen chloride (HCl), mercury (Hg) and carbon monoxide (CO) emission rates from the boiler when burning coal was last performed in In June of 2018. The results of this testing demonstrated compliance with applicable emissions limits. This testing report has been previously reviewed, documented, and found to be in compliance.

Within 180 days after installation of the lime injection system, the facility shall conduct a performance evaluation of the oxygen analyzer system in accordance with the site-specific monitoring plan. Calibration of the system is performed quarterly. The site-specific monitoring plan was originally issued in December of 2015 and revised in March of 2016.

An annual audit of the COMS must be performed according to the requirements in 40 CFR 63.8 and according to Performance Specification 1 of 40 CFR Part 60, Appendix B and using the procedures set forth in USEPA Publication No. 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to the AQD. This audit was last performed in June of 2019 and demonstrated compliance.

Monitoring and/or Recordkeeping Requirements

Monitoring of the differential pressure across the baghouse shall be continuous. This value is being monitored continuously and recorded once per shift. At the time of the inspection, pressure drop across the baghouse was 4.2 inches of water, gauge.

Monitoring and recording of visible emissions from EU#6BOILER must be continuous. COMS equipment is installed on this equipment. Reporting on excess emissions and excess monitoring system downtime is reported quarterly. This reporting has been previously reviewed, documented, and found to be in compliance.

Records of start-up and shutdown periods of EU#6BOILER are to be kept. These incidents are tracked through steam production records. These records were available for review.

The COMS is to be used as an indicator of the proper functioning of the baghouse. The appropriate range of opacity defining the proper functioning of the baghouse is 0-15% opacity. The COMS was operating at the time of the inspection. The facility uses the data from this system to comply with CAM. Any excursions from this range are recorded and reported semi-annually. This reporting has been previously reviewed, documented, and found to be in compliance.

The COMS data is to be used to assure compliance with the PM limit. Data collected from the COMS is used to comply with the facility PM limit.

The COMS must be in operations during all periods that the emission unit is operating. The facility operates the COMS continuously.

In the event of an excursion of more than 15% opacity, operation of EU#6BOILER (including the control

device and associated capture system) shall be restored to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. Any excursions from this range are recorded and reported semi-annually. This reporting has been previously reviewed, documented, and found to be in compliance.

Records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions must be maintained. This information is included in semi-annual CAM reporting. This reporting has been previously reviewed, documented, and found to be in compliance.

The monitoring system must be maintained including keeping necessary parts for routine repair of the monitoring equipment. The facility maintains a stock of replacement parts as recommended by the manufacturer.

All required calculations shall be completed by the 15th day of the calendar month. All required records for the facility are kept in a timely manner.

The following records for each calendar day that EU#6BOILER is operated are to be kept:

Identification, type and the amounts (in tons of coal and cubic feet of natural gas) of all fuels combusted. The facility only burns natural gas during startup of the unit. Coal is the main fuel.

Sulfur content and higher heating value (BTU/lb) of coal being combusted. This is tracked on a per shipment basis. Coal is limited to 1.5% sulfur content by weight. This is performed on a per ship load received basis. The most recent analysis for this was on 6/4/19 and indicated a sulfur content of 0.44%.

After providing notice of the installation of the lime injection system, daily records regarding the system are to be kept. However, Records of lime injection are not kept as it was determined through testing that HCl limits could be met without lime injection.

Records of the time and duration of each EU#6BOILER baghouse maintenance period (operation of only three out of four baghouse modules) are to be kept. These records were available for review. The most recent period of this occurred on 12/11/18 and had a duration of 13 hours.

After providing notice of the installation of the lime injection system, the facility shall operate the COMS in compliance with the procedures detailed in the MACT. These procedures mirror those required of any required COMS and are being followed.

The 30-day rolling average oxygen level is to be maintained at or above the lowest hourly average oxygen level measured during the most recent performance test. The oxygen monitor system monitors continuously. The data acquisition system for it compiles the data required. A review of records indicates they maintain the proper average (9-9.5%).

The oxygen analyzer system must complete a minimum of one cycle of operation every 15 minutes. The oxygen monitor system monitors and records continuously.

An energy assessment report is to be kept on file and made the report available to the Department upon request. This assessment was performed November of 2009.

Reporting

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

The district is to be notified within 30 days of installation of the lime injection system. This notification was received in September of 2015 in a timely manner.

A Notification of Compliance Status is to be submitted no later than 120 days after installation of the

lime injection system. This notification was received in October of 2015 in a timely manner.

Stack testing procedures and reporting were handled through the testing protocol process and were performed correctly.

An EER and summary report shall be submitted within 30 days following the end of each calendar quarter. This reporting has been previously reviewed and documented by AQD staff. These reports have been submitted in a timely manner.

Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. This reporting has been previously reviewed and documented by AQD staff.

A site-specific monitoring plan is to be submitted to the AQD district supervisor at least 60 days before the initial performance evaluation of the oxygen analyzer system. This report was submitted in December of 2015 in a timely manner.

A signed statement in the Notification of Compliance Status report that indicates startups and shutdowns were conducted according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available is to be submitted. This report was submitted in October of 2015 in a timely manner.

Stack/Vent Restrictions

There is one stack associated with the boiler. This stack is limited to a maximum diameter of 78 inches and a minimum height of 160 feet. The stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

Other Requirements

Notification shall be made to the AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate. The CAM plan has not been modified and appears adequate.

All applicable requirements of 40 CFR, Part 64 are to be followed. By complying with the CAM specific conditions of this section, the facility is in compliance with 40 CFR 64.

All applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart JJJJJJ for Industrial, Commercial, and Institutional Boilers Area Sources are to be followed. By complying with the conditions in this section, the facility is in compliance with all applicable parts of 40 CFR Part 63, Subpart A and Subpart JJJJJJ.

A site-specific monitoring plan for the oxygen analyzer system is to be developed. This monitoring system plan was submitted in December of 2015.

EUMILLTRANSFER

Equipment included a salt transfer system consisting of mills, conveyors, bucket elevators, screens, feed tanks, salt bagging equipment, and salt bulk loading equipment. Particulate control is through two wet scrubbers.

Emission Limits

PM emissions are limited to 0.10 lb/1000 lbs exhaust gas. Demonstration of compliance with this limit is through optimal control equipment operation. This is indicated by compliant differential pressure and flow rate readings taken and recorded. A review of these records demonstrated compliance with this limit.

Material Limits

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

Process or Operational Restrictions

The compliant minimum liquid flow rate through the venturi scrubbers shall be included in the AQD approved MAP. The minimum flow rates are five gallons per minute each for the northwest and northeast scrubbers. At the time of the inspection, the northeast scrubber flow was 9.2 gpm and the northwest scrubber was 13 gpm. The facility operates the control equipment within ranges established in the MAP. If the equipment goes out of range, the facility reports it as part of their deviation reporting.

Differential pressure gauges to determine pressure drop across each wet scrubber must be operated and maintained. The pressure drop range for the northwest and northeast scrubbers is 1-8 inches of water, gauge. At the time of the inspection, the northeast scrubber pressure drop was 1.6 inches of water, gauge and the northwest scrubber was 1.5 inches of water, gauge. The facility operates the control equipment within ranges established in the MAP. If the equipment goes out of range, the facility reports it as part of their deviation reporting.

The wet scrubbers are to be in operation when the unit is operating. They are installed and were operating at the time of the inspection.

Design or Equipment Parameters

A differential pressure gauge and liquid flow rate indicator must be installed and operating on each wet scrubber. These instruments are installed and operational.

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

The pressure drop and liquid flow rate for each scrubber are to be measured daily whenever the unit is operating. A review of records indicates this is being performed.

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.

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.

EUPELLETCOOLING

This unit includes a water softener pellet product cooling system controlled by a venturi scrubber.

Emission Limits

PM emissions are limited to 0.032 lb/1000 lbs exhaust gas. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated particulate emissions of 0.012 lb/1000 lbs exhaust gas.

Visible emissions are limited to 10% opacity. Demonstration of compliance with this limit is through visible emissions testing every five years. This testing was last performed in December of 2014 and

demonstrated compliance.

Material Limits

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

Process or Operational Restrictions

The wet scrubber is to be operating properly when the process is operating. At the time of the inspection, the scrubber was in operation. Proper operation includes compliant pressure drop and liquid flow values. The compliant pressure drop range for the scrubber is 2.7 – 6.0 inches of water, gauge and the compliant minimum scrubber liquid flow rate is 20 gallons per minute. A random date of 6/14/19 was selected and on that date, the pressure drop reading taken was 5.3 inches of water, gauge and the scrubber liquid flow rate was 40 gallons per minute.

Design or Equipment Parameters

The liquid flow rate indicator and differential pressure gauge are to be installed when the process is operating. This equipment was installed and operating at the time of the inspection.

Testing and Sampling Requirements

Testing for particulate matter (PM) is to be completed at least once every five years. This testing was last performed in June of 2018.

Liquid flow rate and differential pressure levels are to be established during performance testing. This testing was last performed in June of 2018. The compliant pressure drop range for the scrubber is 2.7 – 6.0 inches of water, gauge and the compliant minimum scrubber liquid flow rate is 20 gallons per minute.

Visible emissions from the building housing is determined by testing once every five years. This testing was last performed in October of 2014.

Monitoring and/or Recordkeeping Requirements

Documentation of the accuracy of the differential pressure gauge from the manufacturer must be kept. The accuracy of the unit is stamped on the side of it.

Documentation of the accuracy of the scrubbing liquid flow rate indicator from the manufacturer is to be recorded. The accuracy of the unit is stamped on the side of it.

The differential pressure across the wet scrubber is to be recorded on a daily basis. A review of facility records indicates this is being performed.

The scrubbing liquid flow rate through the wet scrubber is to be recorded on a daily basis. A review of facility records indicates this is being performed.

Reporting

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

On a semi-annual basis, all occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than $\pm 30\%$ from the average determined during the most recent performance test shall be reported. This reporting has been previously reviewed and documented by AQD staff.

Stack testing procedures and reporting were handled through the testing protocol process and were performed correctly. This reporting has been previously reviewed and documented by AQD staff.

Stack/Vent Restrictions

There is one stack associated with this EU. The maximum stack diameter is 21 inches and the minimum stack height is 90 feet. The stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

Other Requirements

The facility is in compliance with all applicable requirements of 40 CFR Part 60, Subpart OOO.

EUTM/BLOCK

This unit includes salt product process and packaging machinery for the production of salt and trace mineral blocks. Control of particulate emissions is through a baghouse.

Emission Limits

PM emissions are limited to 0.10 lb/1000 lbs exhaust gas. Demonstration of compliance with this limit is through optimal control equipment operation. This is indicated by differential pressure readings across the baghouse taken and recorded. Compliant range for this pressure drop is 0.5 to 10.0 inches of water, gauge. A random date of 6/14/19 was selected and the reading taken that day was 2.3 inches of water, gauge. A review of records demonstrated compliance with this limit.

Material Limits

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

Process or Operational Restrictions

The compliant differential pressure range across the baghouse shall be included in the AQD approved MAP. The facility operates the control equipment within ranges established in the MAP. If the equipment goes out of range, the facility reports it as part of their deviation reporting. This reporting has been previously reviewed and documented by AQD staff.

The baghouse is to be installed and operating properly when the process is operating. At the time of the inspection, the baghouse was in operation.

Design or Equipment Parameters

A differential pressure gauge must be installed on the baghouse. The baghouse 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

Differential pressure across the baghouse is to be monitored and recorded on a daily basis. These records are being kept. A review of records indicated this is being performed.

Reporting

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

FGPELLPRETZEL

This group includes a totally enclosed pretzel salt production system which includes a main crusher, a pellet press, an screw conveyor, a recycle crusher, a bucket elevator, a sizing screener; and a water softener pellet production system which includes pellet briquetting machines, a vibratory screen, belt conveyors, bucket elevators, and an enclosed crusher to recycle pellets. Emission units include EUPPELLPROD and EUPRETZELSALT. Control of particulate matter is through a baghouse.

Emission Limits

PM emissions are limited to 0.014 gr/dscf. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated emissions of 0.00077 gr/dscf.

PM-10 emissions are limited to 3.96 lbs/hr. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated emissions of 0.14 lbs/hr.

PM-2.5 emissions are limited to 3.96 lbs/hr. Demonstration of compliance with this limit is through stack testing. This testing was last performed in June of 2018 and demonstrated emissions of 0.14 lbs/hr.

Visible emissions are limited to 7% opacity on buildings housing this EU. Demonstration of compliance with this limit is through testing. This testing was last performed in October of 2014 and demonstrated compliance.

Material Limits

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

Process or Operational Restrictions

The baghouse must be in operation when the process is in operation. At the time of the inspection, the baghouse was in operation.

Salt that is collected in and recovered from the baghouse shall be handled in a manner that minimizes the introduction of air contaminants to the outer air. Salt collected is re-entrained into the process.

The baghouse must be equipped with a differential pressure gauge. The baghouse is so equipped.

The compliant differential pressure range across the baghouse shall be included in the AQD approved MAP. This range, included in the MAP, is 1 – 5 inches of water, gauge.

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

Compliance with PM, PM 10 and PM 2.5 emission rates from this process are demonstrated through stack testing. This testing was last performed in June of 2018 and demonstrated compliance.

Compliance with visible emissions from the building housing is demonstrated through testing. This testing was last performed in October of 2014 and demonstrated compliance.

Monitoring and/or Recordkeeping Requirements

Pressure drop across the baghouse is to be monitored and recorded on a daily basis. These readings are being recorded. A pressure drop reading taken during the inspection was 2.25 inches of water, gauge. A review of records indicates compliant readings within the prescribed range.

Visible emission observation from the stack, including the date and any corrective actions taken, are to be kept in a written or electronic logbook. These readings are being recorded.

Reporting

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

Stack testing procedures and reporting were handled through the testing protocol process and were performed correctly.

Stack/Vent Restrictions

There is one stack associated with this equipment. The maximum dimensions for this stack is 32 X 32 inches and the minimum height is 51 feet. The stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

Other Requirements

The facility is in compliance with all applicable requirements of 40 CFR Part 60, Subpart OOO.

EUBINTRANSFER

Equipment in this group includes material handling system consisting of conveyors and bucket elevators used to transfer salt to other processes within the facility. Control of particulate matter is through a wet impingement scrubber.

Emission Limits

PM emissions are limited to 0.027 lbs/1,000 lbs of exhaust gases. Demonstration of compliance with this limit is through optimal control equipment operation. This is indicated by differential pressure and liquid flow rate readings taken and recorded. Compliant ranges for the scrubber are 3 -10 inches of water, gauge for the pressure drop and a minimum of 5 gallons per minute of liquid flow. Readings taken at the time of the inspection were 5.3 inches of water, gauge and 33 gallons per minute. A review of these records demonstrated compliance compliant readings for this control equipment.

Material Limits

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

Process or Operational Restrictions

The wet impingement scrubber is to be installed and operating properly when the process is operating. The scrubber was operating at the time of the inspection.

The scrubber must have a differential pressure gauge and liquid flow rate gauge operating when the process is operating. These were in operation at the time of the inspection.

Design or Equipment Parameters

The scrubbers are to be equipped with a differential pressure gauge to determine pressure drop and a liquid flow rate gauge to determine the amount of liquid flow through the wet scrubber. The scrubber 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

The differential pressure across and the liquid flow rate through the scrubber is to be monitored and recorded on a daily basis. These readings are being recorded. Readings taken at the time of the inspection were 5.3 inches of water, gauge and 33 gallons per minute. A review of these records demonstrated compliance compliant readings for this control equipment.

Reporting

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

FGRULE 287(c)

This group currently consists of one small coating booth with dry fabric filter control. It has not been in operation in the last 12 months.

FGCOLDCLEANERS

This group consists of two cold cleaners. Each is serviced by the facility with disposal of spent solvents to an approved waste hauler. Each was properly signed, appeared in good condition, and was closed when not in use.

At the time of the inspection, this facility was in compliance with their air permitting.

NAME 

DATE 9/10/19

SUPERVISOR 