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

A390026102

FACILITY: Martin Marietta Magnesia Specialties, LLC		**SRN / ID:** A3900
LOCATION: 1800 Eastlake Rd., MANISTEE		**DISTRICT:** Cadillac
CITY: MANISTEE		**COUNTY:** MANISTEE
CONTACT: Robert Gutowski , Manager of Engineering Services		**ACTIVITY DATE:** 07/16/2014
STAFF: Rob Dickman	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled inspection of this ROP source		
RESOLVED COMPLAINTS:		

Inspected this facility pursuant to their Renewable Operating Permit (ROP) number MI-ROP-A3900-2009. This facility manufactures magnesium oxide and magnesium hydroxide products for use in various industrial applications. No visible emissions were noted at any point at the facility prior to entry. Staff contact at the facility was Bob Gutowski, Environmental Manager, and accompanying me on the inspection was Jeremy Howe, AQD, Cadillac District Office.

At the time of the inspection, Rotary Kiln #2 had been taken permanently out of service. All other processes listed in the ROP have been operated, at least on a limited basis, in the last 12 months. These processes were inspected upon tour of the facility.

Records for all these processes were also reviewed. It is important to note that not all dust collectors at the facility were in operation at the time of the inspection. This is indicated by a "zero" in the pressure drop readings in the attached records. However, all collectors inspected have been operated at least recently and appeared in good repair. Required records for the facility are voluminous and kept electronically. To print them out would be in excess of a thousand pages. Therefore, a few random dates were reviewed at the time of the inspection and March 31, 2014 was selected at random to print and attach to this report. The data acquisition system for this source flags out any required readings that are out of compliance with the ROP and a recent sample of this report is also attached.

Following are the findings of this inspection by ROP condition:

SOURCE WIDE CONDITIONS

I. EMISSION LIMITS – No emissions limits

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Implement and maintain the program for continuous fugitive emission control for all plant roadways, the plant yard, all material storage piles, and all material handling operations. This plan is on file with the AQD and appears to have been implemented. Records regarding activity associated with this plan were available for review and appeared complete.

2,3. Implement an AQD approved Malfunction Abatement Plan (MAP) for equipment listed in this permit. The latest version of this plan was submitted in 2013 and appears to have been implemented. Any deviations from this plan would be included with ROP deviation reporting. See MACES for details.

4,5. Record all roadway sweeping events and applications of fugitive dust control materials for both the plant roadways and plant yards are to be kept. Review of these records indicated that the facility is following the fugitive emissions plan.

IV. DESIGN/EQUIPMENT PARAMETER(S) – No design or equipment restrictions

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

1. Permittee shall keep a record of any repairs conducted on any of the dust collectors. These records are being kept as part of operator logs.

2. Permittee shall keep records of when the bags are replaced in baghouses. These records are being kept as part of operator logs.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) – No other requirements

EULU-SYSTEM

DESCRIPTION Lime unloading system a material handling operation located in the Hydrate Area, consisting of four conveyors. Control is through baghouses.

I. EMISSION LIMIT(S) – Particulate emissions are limited to 0.0095 pounds per 1000 pounds exhaust gases. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the EULU-SYSTEM unless each baghouse is installed and operating properly. Baghouses controlling this equipment were installed on this process. Proper operation includes monitored pressure drop readings and this is being performed.

2. The disposal of collected air contaminants shall be performed in a manner that minimizes the introduction of air contaminants to the outer air. Collected air contaminants for this process are re-entrained in to the process.

3. Permittee shall maintain the differential pressures across each baghouse within the parameters listed in the table in Appendix 3. Review of records indicate these readings are being taken.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse. This equipment was installed on each collector.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

Permittee shall monitor and record the pressure drop across the baghouse, once per shift, when the equipment is operating. These records are being kept and demonstrate compliance with the ranges detailed in Appendix 3.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S)

1. The stacks appear in compliance with criteria listed in the ROP and do not appear to have been recently altered.

IX. OTHER REQUIREMENT(S)

1. Permittee shall not substitute any raw materials for those described in the permit application which would result in an appreciable change in the quality or any appreciable increase in the quantity of the emissions of an air contaminant. There is no indication this has happened.

EUHCLTANK

DESCRIPTION A storage tank of Hydrochloric acid, which is used to acidify the waste brine that is returned to disposal wells to prevent precipitation of any remaining magnesium hydroxide within the system. Control is through a fume scrubber.

I. EMISSION LIMIT(S) - Hydrochloric acid emissions are limited to 0.248 pounds per hour and 0.02 tons per year. Compliance with emissions limits is through monitoring of liquid flow rate and pressure drop across the scrubber.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the EUHCLTANK unless the fume scrubber is installed and operating properly. This equipment was installed and operating at the time of the inspection.

2. The liquid flow rate in the fume scrubber shall be maintained at a minimum of 1.5 gallons per minute. A reading taken at the time of the inspection was 2.0 gallons per minute. Records are also kept of these readings demonstrate compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain the fume scrubber with liquid flow indicator. The scrubber is so equipped.

2. Permittee shall equip and maintain the fume scrubber with gauge to measure pressure drop across the scrubber. The scrubber is so equipped.

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

1. Permittee shall monitor and record the liquid flow rate to the fume scrubber, once per shift, when the equipment is operating. Records review indicates these readings are being taken properly and demonstrate compliance.

2. Permittee shall monitor and record the pressure drop across the fume scrubber, once per shift, when the equipment is operating. Records review indicates these readings are being taken properly and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) - This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

EUANIMAG

DESCRIPTION Material handling operation consisting of the Animag loadout station. Control is through baghouses.

I. EMISSION LIMIT(S) – Particulate emissions are limited to 0.01 pounds per 1000 pounds exhaust gases. Visible emissions are limited to 10% opacity. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate EUANIMAG unless the baghouses are installed and operating properly. The baghouses were installed and were either operating or had operated recently.

2. Permittee shall immediately clean up and dispose of any product spillage that result from a malfunction in EUANIMAG. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

3. Permittee shall use one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

4. Permittee shall maintain the differential pressures across each baghouse within the parameters listed in the table in Appendix 3. Records indicate pressure drop readings are being taken at least once per shift and demonstrate compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across each baghouse. The baghouses are so equipped.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

Permittee shall monitor and record the pressure drop across the baghouses, once per shift, when EUANIMAG is operating. These records are being kept and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) – No other requirements

EUN2SMILL

DESCRIPTION Material handling operation consisting of one Raymond Mill. Control is through a baghouse.

I. EMISSION LIMIT(S) - Particulate emissions are limited to 0.1 pounds per 1000 pounds exhaust gases. Compliance with this limit is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate EUN2SMILL unless the baghouse is installed and operating properly. The baghouse is installed and was operating during the inspection.

2. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. All air contaminants collected are re-entrained in to the process.

3. Permittee shall maintain the differential pressures across each baghouse within the parameters listed in the table in Appendix 3. Records indicate pressure drop readings are being taken at least once per shift and demonstrate compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain the baghouse with a gauge to measure the differential pressure across the baghouse. The baghouse is equipped with a pressure drop gauge.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. The permittee shall monitor and record the pressure drop across the baghouse, once per shift, when EUN2SMILL is operating. Records indicate pressure drop readings are being taken at least once per shift and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) – No other requirements

FG-ROTARY-KILNS

DESCRIPTION Rotary Kiln No.2(EURK2) and Rotary Kiln No.3 (EURK3) are fired with petroleum coke, or coal and or natural gas. EURK3 is used to remove free and chemically bound water from magnesium hydroxide slurry. EURK3 has not operated over the last 12 months and has been removed from service.

I. EMISSION LIMIT(S) – Sulfur Dioxide emissions are limited to 2.4 pounds per MMBtu on coal and 1.7 pounds per MMBtu when firing on oil. Neither of these fuels have been used in the last 12 months. Particulate emissions are limited to 0.17 pounds per 1000 pounds for Kiln 2, which has not been in operation in the last 12 months and has been decommissioned. Particulate emissions from Kiln 3 are limited to 0.13 pounds per 1000 pounds. Compliance with this emissions limit is through stack testing and control equipment parameters.

II. MATERIAL LIMIT(S) – Coke fuel is limited to 5% sulfur by weight tested on a per shipment basis. The last load received by the facility was11/21/11 and had a sulfur content of 2.69%.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate FG-ROTARY-KILNS unless the electrostatic precipitators are installed and operating properly. Operating properly includes running the electrostatic precipitators with four fields at 50% power or three fields at 100% power. This equipment was installed and operating. Records of this are included in CAM excursion reporting. See MACES for details.

2. For EURK2 and EURK3 the permittee shall utilize sparking rates and voltage, number of operating fields and non-certified VE observations for each ESP while FG-ROTARY-KILNS are operating as indicators of the proper functioning of the electrostatic precipitators. Records of this are included in CAM excursion reporting. See MACES for details.

3. Permittee shall immediately clean up and dispose of any product spillage resulting from a malfunction in FG-ROTARY-KILNS. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

4. Permittee shall use one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

IV. DESIGN/EQUIPMENT PARAMETER(S) – No design or equipment restrictions

V. TESTING/SAMPLING

1. Permittee shall verify particulate and sulfur dioxide, emission rates from EURK3 by testing, during the year of 2013. This testing was performed on 12/4/2013 and demonstrated compliance. See MACES.

2. Permittee shall verify particulate and sulfur dioxide, emission rates from EURK2, during the year of 2010. This testing was performed on 11/30/2010 and demonstrated compliance. See MACES.

3. Once each shipment permittee shall analyze the coal and coke, fired in the FG-ROTARY-KILNS for sulfur content and also for BTU content for coal and coke. Coke fuel is limited to 5% sulfur by weight tested on a per shipment basis. The last load received by the facility was11/21/11 and had a sulfur content of 2.69%.

VI. MONITORING/RECORDKEEPING

1. When FG-ROTARY-KILNS are operating when firing with coal the permittee shall monitor and record the fuel usage rates in EURK2 and EURK3 daily. This facility has not used coal for fuel in the last 12 months.

2. When FG-ROTARY-KILNS are burning coal, permittee shall calculate and record, the SO2 emission rates from EURK2 and EURK3. This facility has not used coal for fuel in the last 12 months.

3. Permittee shall record the voltage and the sparking rate for each ESP while EURK2 and/or EURK3 are operating. The sparking rate for each ESP that is operating is measured continuously and recorded twice per shift. The normal operating range for spark rate is 0-60 sparks per minute. Voltage is measured continuously and recorded once each hour. The normal operating range for voltage is 100-480 volts for each ESP. These records are being kept and demonstrate compliance.

4. Permittee shall record the number of fields operating whenever the sparking rate is recorded for the appropriate ESP while EURK2 and/or EURK3 are operating. For EURK2 and EURK3 there shall be at least 3 of 4 fields operating in the automatic mode for the appropriate ESP or 3 fields operating at 100% power on manual mode while EURK2 and/or EURK3 are operating. If voltage is greater than 0 the precipitator section is operating. A voltage reading of 0 indicates the field is "OFF". These records are being kept and demonstrate compliance.

5. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

6. For EURK2 and EURK3 the permittee shall utilize the voltage and the sparking rate as indicators of the proper functioning of the electrostatic precipitator. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

7. An excursion for PM shall be, if the spark rate is above 60 sparks per minute or voltage is below 90 volts. Then the precipitator shall be inspected and any problems found shall be documented along with any corrections made and if necessary the process shall be shut down. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

8. Upon detecting an excursion, the permittee shall restore operation to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. The date, time, and duration of any excursion and corrective actions taken shall be recorded. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

9. The permittee shall record the voltage and the sparking rate data during all required periods when the EURK2 and/or EURK3 are operating. Data recorded during monitoring malfunctions, associated repair activities and QA/QC operations shall not be used for 40 CFR Part 64 compliance. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

10. The permittee shall properly maintain the monitoring system, including keeping the necessary parts for routine repair of the monitoring equipment. Repair and maintenance equipment were on site.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

4,5. All semi-annual reporting associated with CAM has been completed in a timely manner. Review of this reporting is documented in MACES.

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

VIII. STACK/VENT RESTRICTION(S)

1. The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S)

1. Permittee shall not substitute any fuels for those described in this permit without prior notification to and approval by the Air Quality Division. There is no indication of this.

2. The permittee shall promptly notify AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. There have been no such requests or modifications.

3. The permittee shall comply with all applicable requirements of 40 CFR Part 64. The facility is meeting this condition.

FGPERICLASEPLANT

DESCRIPTION FGPERICLASEPLNT is a combination of three Herreshoff furnaces and two Shaft Kilns with coolers. Control is through electrostatic precipitators and cyclones.

I. EMISSION LIMIT(S) – Particulate emissions limits vary depending on the equipment being used. Compliance with listed emissions limits for particulate is through stack testing and control equipment parameters. Testing has been completed in a timely manner, reviewed, determined to be in compliance and documented in MACES.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate EUHERRFUR1, EUHERRFUR2, or EUHERRFUR3 alone or with any of EUSHAFTKILN2 and EUSHAFTKILN3, when their exhaust gases are controlled by the appropriate

electrostatic precipitator unless the electrostatic precipitator is installed and operating properly. There are no indications of this happening.

2. Permittee shall operate each ESP in automatic mode. For any operation in manual mode, operator shall record the reason for operating in manual mode, the duration of the incident, and the corrective action taken to return to operating in automatic mode. Records regarding this are kept as part of CAM excursion and/or deviation reporting. No incidents were indicated. See MACES.

3. FGPERICLASEPLNT shall only be fired with natural gas. This group is configured to only fire on natural gas.

4. Operation of EUHERRFUR2 using the bypass stack shall be allowed only for the purpose of emergency release of emissions during shut-down of operations when adequate control of emissions is not maintained in accordance with requirements listed in III.1. Records indicate that there was no operation in bypass mode in the last 12 months.

5. Permittee shall maintain the differential pressures in each cyclone within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

6. Permittee shall not run production in EUHERRFUR3, during bypass of the HF-ESP3. Records indicate that there was no operation in bypass mode in the last 12 months.

7. Permittee shall immediately clean up and dispose of any product spillage resulting from a malfunction in the equipment. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. All collected air contaminants are re-entrained in to the process.

8. Permittee shall use one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The duct from EUHERRFUR3, exhaust to HF-ESP2, inside diameter shall not exceed a maximum of 24 inches. There is no easy way to measure current compliance with this condition, but, the EU does not appear to have been modified recently.

2. The permittee shall install and maintain a gauge to measure pressure drop across #2SHAFT KILN CYCLONE, and #3SHAFT KILN CYCLONE, on each of the shaft kilns. This equipment is installed.

V. TESTING/SAMPLING

1. Stack testing of particulate emissions from the EUHERRFUR1 and EUSHAFTKILN3 shall be performed during the year of 2010 when the exhaust gases, from EUHERRFUR1 and EUSHAFTKILN3 is diverted to the HF-ESP1. This testing was performed on 11/30/2010 and demonstrated compliance. Please see MACES.

2. Stack testing of particulate emissions from the EUHERRFUR2 and EUSHAFTKILN2 and EUSHAFTKILN3 shall be performed during the year of 2012, when the exhaust gases from EUHERRFUR2 and EUSHAFTKILN2 and EUSHAFTKILN3 are diverted to the HF-ESP2. This testing was performed on 11/1/2012 and demonstrated compliance. Please see MACES.

3. Stack testing of particulate emissions from the EUHERRFUR3, EUSHAFTKILN2 and EUSHAFTKILN3 shall be performed during the year of 2013 when the exhaust gases from EUHERRFUR3 and EUSHAFTKILN2 and EUSHAFTKILN3 are diverted to the HF-ESP3. This testing was performed on 12/4/2013 and demonstrated compliance. Please see MACES.

4. If production levels do not allow operation of the above equipment for the purposes of stack testing, during the appointed year, then the permittee shall perform the stack test within 60 days following the startup of that equipment. Testing was performed as scheduled.

VI. MONITORING/RECORDKEEPING

1. Whenever EUHERRFUR1 and/or EUSHAFTKILN2 or EUSHAFTKILN3 is operated and exhausted through HF-ESP1, the permittee shall monitor and record the visible emissions from the HF-ESP1 stack on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. An opacity monitor is in place and it's excess emissions readings, downtime, and quality assurance are all tracked by the AQD in MACES.

2. Whenever EUHERRFUR2 and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operated and exhausted through HF-ESP2, the permittee shall monitor and record the visible emissions from the HF-ESP2 stack on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division An opacity monitor is in place and it's excess emissions readings, downtime, and quality assurance are all tracked by the AQD in MACES.

3. The continuous opacity monitoring systems (COMs) on HF-ESP1 and HF-ESP2 shall be installed, calibrated, maintained and operated in accordance with the procedures set forth in 40 CFR 60.13 and applicable Performance Specifications. The monitoring systems on site meet this criteria.

4. The span value for the COMs shall be 2 times the lowest emission standard or as specified in the federal regulations. This is an incorrect condition. Span value for opacity monitors is 0-100%.

5. Permittee shall perform an annual audit of the COMs using the procedures set forth in US EPA publication No. 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", and all amendments thereto. This testing was performed on 12/4/2013 and demonstrated compliance. Please see MACES.

6. When EUHERRFUR1 and EUHERRFUR2 and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operating and being exhausted to HF-ESP1 and HF-ESP2 respectively the permittee shall continuously record opacity utilizing the COMs installed on the appropriate ESP. An opacity monitor is in place and it's excess emissions readings, downtime, and quality assurance are all tracked by the AQD in MACES.

7. The permittee shall use the COMs to assure compliance with the PM limit for EUHERRFUR2 while any of EUHERRFUR2 and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operating and being exhausted to HF-ESP2. An excursion for PM shall be 2 consecutive 1-hour block average opacity values greater than 11%. Reporting regarding any excursions of this indicator are sent to the AQD and tracked in MACES.

8. Permittee shall record the sparking rate for HF-ESP3 while any of EUHERRFUR3, and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operating and being exhausted to HF-ESP3. The sparking rate is measured continuously and recorded twice per shift. The normal operating range for spark rate is 0-60 sparks per minute. These records are being kept and demonstrate compliance. Reporting regarding any excursions of this indicator are sent to the AQD and tracked in MACES.

9. Permittee shall record the voltage for the HF-ESP3 while any of EUHERRFUR3, and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operating and being exhausted to HF-ESP3. Voltage is measured continuously and recorded twice per shift. The normal operating range for voltage is 100-480 volts for each ESP. These records are being kept and demonstrate compliance. Reporting regarding any excursions of this indicator are sent to the AQD and tracked in MACES.

10. Permittee shall record the number of fields operating whenever the sparking rate is recorded for HF-ESP3 while any of EUHERRFUR3, and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 operating and being exhausted to HF-ESP3. There shall be at least 4 of 6 fields operating in the automatic mode for HF-ESP3 or 4 fields operating at 100% power on manual mode for HF-ESP3 while EUHERRFUR3 is operating. If voltage is greater than 0 the precipitator section is operating. A voltage reading of 0 indicates the field is "OFF". These records are being kept and demonstrate compliance.

11. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

12. Whenever EUHERRFUR3 and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operated and exhausted through HF-ESP3, the permittee shall have the visible emissions from HF-ESP3 read by a certified reader using US EPA Method 9 at least once per month while these emission units are operating. This has not been necessary in the last 12 months.

13. An excursion for any of EUHERRFUR3, and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 that is operating and being exhausted to HF-ESP3 shall be, if the spark rate is above 60 sparks per minute or the voltage is below 90 volts. Then the precipitator shall be inspected and any problems found shall be documented along with corrections made and if necessary the process shall be shut down. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

14. For any of EUHERRFUR3, and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 operating and being exhausted to HF-ESP3 the permittee shall utilize the voltage, and the sparking rate as indicators of the proper functioning of the HF-ESP3 precipitator. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

15. Upon detecting an excursion, the permittee shall restore operation to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any and/or necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. The date, time, and duration of any excursion and corrective actions taken shall be recorded. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

16. The permittee shall record the voltage, and the spark rate data during all required periods when for any of EUHERRFUR3, and/or EUSHAFTKILN2 and/or EUSHAFTKILN3 is operating and being exhausted to HF-ESP3. Data recorded during monitoring malfunctions, associated repair activities and QA/QC operations shall not be used for 40 CFR Part 64 compliance. Records regarding this are being kept and are part of CAM excursion reporting. See MACES.

17. The permittee shall properly maintain the Continuous Opacity Monitoring (COM) systems, for HF-ESP1 and HF-ESP2 including keeping the necessary parts for routine repair of the monitoring equipment. Repair and maintenance equipment were on site. Records indicate system downtime to be minimal.

18. A record of shut-down and bypass operations from EUHERRFUR3 to HF-ESP2 will be maintained to indicate frequency and duration of each such episode. The Air Quality Division district office shall be notified, within one working day, of all such emergency uses of the bypass stack. Records indicate that there was no operation in bypass mode in the last 12 months.

19. Permittee shall record the duration of all shaft kiln exhaust bypassing whenever any of the shaft kiln exhausts are bypassed during periods of malfunction of HF-ESP3. Records indicate that there was no operation in bypass mode in the last 12 months.

20. Permittee shall monitor and record the pressure drop across the cyclones, once per shift, when EUSHAFTKILN2 or EUSHAFTKILN3 is operating. These records are being kept and demonstrate compliance.

21. Permittee shall check and record the number of fields operating, the sparking rate and voltage in each ESP twice each shift while EUHERRFUR1 or EUHERRFUR2 or EUHERRFUR3 or EUSHAFTKILN2 or EUSHAFTKILN3 is operating. These records are being kept and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

4-6. All semi-annual reporting associated with CAM has been completed in a timely manner. Review of this reporting is documented in MACES.

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

8. In accordance with 40 CFR Parts 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all COMs. This reporting has been received by the AQD and is tracked in MACES.
9. The results of the annual audits of all COMs shall be submitted to the AQD within 30 days of completion of the audit. This reporting has been received by the AQD and is tracked in MACES.

VIII. STACK/VENT RESTRICTION(S)

1. This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S)

1. Permittee shall not recycle the exhaust(s) of the shaft kiln(s) for more than two hours during equipment malfunction. There is no indication of this in the last 12 months.
2. HF-ESP1 shall only be used to control exhaust gases from EUHERRFUR1 and EUSHAFTKILN2. The equipment is configured in this manner only.
3. HF-ESP2 shall only be used to control exhaust gases from EUHERRFUR2 and any one, or both EUSHAFTKILN2 and/or EUSHAFTKILN3 plus it may be used to control EUHERRFUR3 but only during start-up.
4. HF-ESP3 shall only handle exhaust gases from EUHERRFUR3 and any one or both of the EUSHAFTKILN2 and/or EUSHAFTKILN3.
5. The permittee shall promptly notify AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. There has been no request or modification to the CAM plan.
6. The permittee shall comply with all applicable requirements of 40 CFR Part 64. The facility is meeting this criteria.

FGDRYER&MILL

DESCRIPTION An air swept dryer EUDRYMAGDRYER that has two natural gas burners with a maximum capacity of 9 MMBTU/hr each and a proprietary milling system EUDRYMAGMILL, Exhaust will be directed to EUDRYMAGDRYER. Control is through dry fabric filters.

I. EMISSION LIMIT(S) – Particulate emissions are limited to 0.01 pounds per 1000 pounds exhaust gases and 0.9 pounds per hour. Visible emissions are limited to 5%. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGDRYER&MILL unless the fabric filters are installed, maintained, and operated in a satisfactory manner. This equipment is installed and appeared to be operating properly.
2. Permittee shall maintain the differential pressures in each fabric filter within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain the fabric filters with a gauge to measure the differential pressure across the fabric filters. This equipment is installed.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. The fabric filter differential pressures shall be monitored and recorded once-per-shift when FGDRYER&MILL are operating. Records indicate this is being performed.

2. The permittee shall complete all applicable records in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month. Records are being completed in a timely manner and were available for review.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S)

1. The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

FG-GROUP-A

DESCRIPTION FG-GROUP-A is made up of material handling operations consisting of:
2 Crushers;
8 mills or grinders,
22 feed hoppers,
26 Conveyors (belt conveyors, vibrating conveyors),
10 screens,
2 pneumatic transfer systems,
24 elevators,
34 storage bins or silos,
6 loadouts, unloading equipment, and
3 baggers, packers

And is controlled by various baghouses and dust collection systems

I. EMISSION LIMIT(S) – Particulate emissions are limited to 0.0095 pounds per 1000 pounds exhaust gases and 0.9 pounds per hour per emission unit. Visible emissions are limited to 5% per emission unit. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate each emission unit in FG-GROUP-A unless the associated dust collector is installed and operating properly. These collectors were installed and and were either operating or had operated recently.

2. Permittee shall immediately clean up and dispose of any product spillage resulting from a malfunction in the equipment. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

3. Permittee shall use one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

4. Permittee shall maintain the differential pressures in each baghouse within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each dust collector with a gauge to measure the differential pressure across the dust collector. This equipment is installed and operating.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. Permittee shall monitor and record the pressure drop across each dust collector, once per shift, when the equipment is operating. These records are being kept and demonstrate compliance.

VII. REPORTING

1. 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S)

1. The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

FG2+3PACKHS

DESCRIPTION Consists of material handling equipment such as a gyradisc, screens, feed hoppers, belt conveyors, elevators, storage bins and silos, loading and unloading equipment. Control is through baghouses.

I. EMISSION LIMIT(S) - Particulate emissions are limited to 0.01 pounds per 1000 pounds exhaust gases and 0.054 pounds per hour. Visible emissions are limited to 0%. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the equipment unless each baghouse is installed and operating properly.This equipment was installed and operating.

2. Permittee shall maintain the differential pressures in each baghouse within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse. Each baghouse is so equipped.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. Permittee shall monitor and record the pressure drop across each baghouse, once per shift, when each emission unit in FG2+3PACKHS is operating, in a manner and with instrumentation acceptable to the Air Quality Division. These records are being kept and demonstrate compliance.

VII. REPORTING

1. 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) – No other requirements

FG-GROUP-B

DESCRIPTION FG-GROUP-B includes material handling equipment in the #2 and #3 Packhouse area and the #4 Packhouse area, consisting of 2 screens, 1 feed hopper, 5 conveyors, 6 storage bins and silos, and 1 load out spout. Control is through baghouses.

I. EMISSION LIMIT(S) - Particulate emissions are limited to 0.01 pounds per 1000 pounds exhaust gases per emission unit. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the equipment unless the fabric filter collectors are installed and operating properly. This equipment was installed and operating.

2. Permittee shall maintain the differential pressures in each baghouse within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

3. Permittee shall immediately clean up and dispose of any product spillage resulting from a malfunction in the equipment. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

4. Permittee shall use of one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse. This equipment is installed and operating.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. Permittee shall monitor and record the pressure drop across each baghouse, once per shift, when the equipment is operating. Records of readings are being kept and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) – No other requirements

FG-GROUP-C

DESCRIPTION FG-GROUP-C Material handling operations consisting of: 67 conveyors, 13 weigh belts, 11 elevators, 4 mills, 16 bins, 1 mixer, 2 bagger/sackers, 5 feed hoppers, 2 screens, 1 packer, and 13 chutes. Control is through baghouses.

I. EMISSION LIMIT(S) - Particulate emissions are limited to 0.01 pounds per 1000 pounds exhaust gases per emission unit. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the emission units in FG-GROUP-C unless each baghouse is installed and operating properly. This equipment was installed and operating.

2. Permittee shall maintain the differential pressures in each baghouse within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

3. Permittee shall immediately clean up and dispose of any product spillage resulting from a malfunction in the equipment. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

4. Permittee shall use of one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across each baghouse. This equipment is installed and operating.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. Permittee shall monitor and record the pressure drop across the baghouse, once per shift, when the equipment in each emission unit in FG-GROUP-C is operating. These records are being kept and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) – No other requirements

FG-GROUP-D

DESCRIPTION FG-GROUP-D consists of material handling equipment made up of: one bin and one loadout spout and the additive silos and a rail car unloading station. Control is through baghouses.

I. EMISSION LIMIT(S) - Particulate emissions are limited to 0.0095 pounds per 1000 pounds exhaust gase. Visible emissions are limited to 10%. Compliance with these limits is through non-certified visible emissions readings.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Input feed to each emission unit in FG-GROUP-D shall cease immediately consistent with safe operating procedures, upon initiation of baghouse bypass. Input feed to the emission unit shall not restart until the baghouse is back on line and functioning properly. There are no records of bypass for these processes.

2. Permittee shall maintain the differential pressures in each baghouse within the parameters listed in the table in Appendix 3. These records are being kept and demonstrate compliance.

3. Permittee shall not operate the emission units in FG-GROUP-D unless the baghouses are installed and operating properly. This equipment is installed and operating.

4. Permittee shall immediately clean up and dispose of any product spillage resulting from a malfunction in the equipment. The collection and disposal of collected air contaminants shall be performed in a manner which minimize introduction of air contaminants to the outer air. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

5. Permittee shall use one or more of the material handling methods listed in the ROP for the transport of collected air contaminants. The facility appears to be following their fugitive emissions plan. All air contaminants collected are re-entrained in to the process.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse. This equipment is installed and operating.

V. TESTING/SAMPLING

1. The facility is required to perform non-certified visible emissions readings on this equipment daily. Records indicate this is being performed.

VI. MONITORING/RECORDKEEPING

1. Permittee shall monitor and record the pressure drop across each baghouse, once per shift, when the equipment is operating. These records are being kept and demonstrate compliance.

VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) - The stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

FGRULE290

The following EU's are included in this group: EU#3COKESILOBVDC, EUDDAYBINDC, EUDMBAGGINGDC, EUDMNORTHDRYERBH, EUDMSOUTHMILLBH, EUDMSTURTEVANTMI, EULBBAGGERDC, EUSPECCALC-A, EUSPECCALC-B, EUSPECCALC-C, EUSPECMILL, EUSPECPKGDC, EUPOWDERBLENDERDC.

Each of these EU's has operated in the last 12 months. None have been modified or operated such that Rule 290 no longer applies

FGCOLDCLEANERS

A total of four standard parts cleaners are on site. They are:EUHYDRATE, EUMAINMAINTENANCE, EUPACKHOUSE, EUPERICLASE. All are serviced by an outside contractor and appear in good condition.

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

NAME _____ DATE 7/28/14 SUPERVISOR _____