B3518
March

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

B351825613

FACILITY: UNITED STATES GYPSUM CO		**SRN / ID:** B3518
LOCATION: 10090 W JEFFERSON AVE, RIVER ROUGE		**DISTRICT:** Detroit
CITY: RIVER ROUGE		**COUNTY:** WAYNE
CONTACT: John Kempton , Environmental Coordinator		**ACTIVITY DATE:** 04/11/2016
STAFF: Jonathan Lamb	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled inspection, FY 2016		
RESOLVED COMPLAINTS:		

INSPECTED BY: Jonathan Lamb, AQD-Detroit Office
PERSONNEL PRESENT: John Kempton, Quality Supervisor/Environmental Coordinator; Brian Geter, Environmental Coordinator
FACILITY PHONE NUMBER: 313-624-4278 (Mr. Kempton); 313-624-4231 (Mr. Geter)
FACILITY WEBSITE: www.usg.com
SAFETY EQUIPMENT: safety glasses, safety vest

FACILITY BACKGROUND:

United States Gypsum (USG) is a Chicago-based company with facilities nationwide specializing in the production and distribution of gypsum-based products and ceiling suspension systems which are used in the construction and remodeling industries. The River Rouge facility produces cement board, land plaster, stucco, and granular materials. This facility is located in a mostly industrial area and comprises approximately 21 acres along West Jefferson Ave. and the Rouge River, just south of the Great Lakes Water Authority – Detroit Wastewater Treatment Plant and U.S. Steel's operations on Zug Island.

The facility is considered a major source of particulate and is subject to the permitting requirements of the Title V program. The facility operates 24 hours per day, 5-6 days per week. There are approximately 83 employees at this facility.

COMPLAINT/COMPLIANCE HISTORY:

There have been no complaint or compliance issues in the past several years. The facility was issued a Violation Notice in February 2011 for failure to perform particulate and opacity testing on several emission units subject to 40 CFR Part 60 Subparts OOO and UUU. A schedule of compliance was added as Appendix 2-1 of Renewable Operating Permit (ROP) No. MI-ROP-B3518-2011, Sections 1 and 3, requiring the facility to perform testing. Testing has been performed on the active units subject to Subparts OOO and UUU; some units which are subject have been idled for several years and have yet to be tested. These units will be required to be tested if they are put back into use, but are currently reported as deviations on the annual and semi-annual ROP certification reports.

OUTSTANDING CONSENT ORDERS:

The facility operates under a Consent Order through State Implementation Plan (SIP) No. 33-1993, revised and reissued on October 12, 1994, which includes conditions for the control of fugitive dust. The conditions of SIP No. 33-1993 are included in the Source-Wide Conditions in ROP No. MI-ROP-B3518-2011, Sections 1, 2 and 3.

PROCESS DESCRIPTION AND EQUIPMENT:

There are currently two operations at the facility - the Mill Plant and the Cement Board Plant. A third operation, the Board Plant, used to produce gypsum wallboard but has been idled for several years, though the equipment is still on site.

Mill Plant
The Mill Plant currently operates about two days per week and produces stucco, land plaster, and granular. Gypsum rock from USG's gypsum mine in Alabaster, MI, is delivered via truck and is unloaded and stored outside in piles until it is moved inside using front-end loader, where it is stored in open "silos" (which are basically segregated bins) prior to crushing. The aggregate is moved by crane loaders to the rock crusher, where it is crushed down to 2 inches or smaller, then sent to the rock storage bin. The rock crusher can crush up to 100

tons per hour. The crushed aggregate in the storage bin is conveyed to a natural gas-fired rotary rock dryer to dry off free moisture from the aggregate.

After drying, the crushed aggregate is elevated via a screw conveyor to a cyclonic air separator and screening system; courser materials (greater than 15 mesh) go to the granular system while finer materials (smaller than 15 mesh) go to the land plaster system. The granular system consists of a crusher and granular feed bin, which feeds the material to a bagger after further screening – granular material is approximately the size of sand. The bagged material is then put on pallets, weighed, and labeled and sent to the warehouse for shipping for use in agricultural feedstock, soil conditioner, glass making, and pharmaceutical production. For the land plaster system, material must be 100 mesh or smaller to be land plaster grade (about talcum powder consistency). Screened material from the dryer which is already smaller than 100 mesh is sent directly to the land plaster bins, but material sized 15 to 100 mesh is sent to either of two 50-ton Raymond Mill feed bins and then fed into the Raymond Mill, which uses rollers to further crush the material to 100 mesh or less before sending to the land plaster bins. There are three land plaster bins, each with a capacity of 30 tons. Land plaster is considered both a final product which can be loaded into pneumatic trucks or into 12,000-pound bags and sold for use in other industries (primarily agriculture and cement industries) or a material used on site in other production. Land plaster used at this facility is sent from the land plaster bins to either the calcining kettles to produce stucco in the Mill Plant or sent to the HRA bin prior to use in the Cement Board Plant.

There are three natural gas-fired calcining kettles, though only Nos. 1 and 3 Calcining Kettles are currently operable; No. 2 Calcining Kettle is permanently idled. Using indirect heat, the kettles heat the land plaster to 250 F for approximately 90 minutes to remove 75% of the water molecules to produce stucco; this process is known as calcining. As the land plaster turns to stucco, it becomes lighter and overflows in the kettles and goes to the warehouse bins. There are two warehouse bins - No. 1 Warehouse Bin has a capacity of 180 tons and No. 2 Warehouse Bin has a capacity of 300 tons. Stucco in the warehouse bins can be loaded directly into bulk tankers and is sold as a material for use in other industries, including the production of fire suppressants and drywall.

Cement Board Plant

The Cement Board Plant operates about five days per week producing a moisture-resistant and mold-resistant cement board sold under the Durock brand.

Raw dry materials used in the cement board process include Portland cement, fly ash, perlite, and hadite (a lightweight expanded shale), in addition to land plaster from the Mill Plant and reclaimed cement board. Portland cement and fly ash are delivered via tanker or truck, while perlite is delivered via rail. Upon delivery, the Portland cement, fly ash, and perlite these materials are off- loaded into silos for storage and then conveyed to bulk storage bins inside the cement board plant. There are designated silos and bulk bins for the Portland cement, fly ash, and perlite. Hadite is delivered either via 40-yard truck or off-loaded from freighter. Hadite received from trucks is dumped directly from the truck into an enclosed building. Hadite received from freighter is off-loaded on the property of Detroit Bulk Dock, located adjacent to USG's property. The material is brought onto USG property using front-end loaders, which takes the hadite from the storage pile to the building where the trucks dump the hadite. The hadite aggregate pile on Detroit Bulk Dock's property is tarped when material is not being added or removed from the pile. From the enclosed hadite bulk storage area, the hadite is loaded on into a hopper using a front-end loader and then elevated to an aggregate storage bin inside the cement board plant.

To produce cement board, the dry materials are weight-fed from the indoor bulk storage bins into back end of the mixer; Portland cement, fly ash, perlite, and landplaster are conveyed from the indoor bulk storage binds to a process bin and then metered into the mixer, while material from the aggregate bin (hadite and reclaim material) are metered directly to the mixer. Wet additives (including water, MCM, trisodium phosphate, polyvinyl alcohol, and citric acid) are also added to the front end of the mixer along with the dry materials, creating a cement slurry.

To produce the cement board, the cement slurry is applied to a paper backing on a conveyor and another layer of paper then laid over the top of the slurry mix – this area is called the forming station. The uncured board on the conveyor then goes through a spreader/roller to flatten to the desired thickness (1/4" to 5/8") and width (32" to 48") before passing through a natural gas-fired oven set around 160 F to start the curing process. After passing through the oven, the cement is set enough so that is it able to be cut to length (usually 4'-8') and then loaded off the conveyor and stacked using an automated system. The conveyor line moves at a speed of 100 to 110 feet per minute and the entire process (from adding the slurry to the paper backing to being off-loaded from the conveyor) only takes three to four minutes, though it takes an additional 24 hours or so for the cement to cure. Any boards that do not meet specifications are sent to the Cement Board Waste Recycler, where it is ground up, added to the aggregate bin, and reused in the cement board process.

The following is a list of emission units at the facility, including air pollution control equipment, and Subpart OOO and Subpart UUU applicability:

Mill Plant

EU-5: Land Plaster System (Land Plaster Bin, Raymond Mill Feed Bin, Air Cyclone Separator, Screen). This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart OOO.

EU-6: Rock Dryer (including Rock Crusher and Rock Storage Bin). This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart OOO.

EU-9: Granular System. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the Granular System and reused. This unit is subject to Subpart OOO.

EU-10: No. 1 and No. 2 Warehouse Bins. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart OOO.

EU-23: Raymond Mill. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the Raymond Mill and reused. This unit is subject to Subpart OOO.

EU-34: North and South Stucco Bins. This unit is controlled by a baghouse which operates as a closed sytem. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bins and reused. This unit is subject to Subpart OOO but has been idled for several years.

EU-35: HRA Land Plaster Bin. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bin and reused. This unit is subject to Subpart OOO, but is exempt from the particulate emission rate testing requirements of Subpart OOO per 40 CFR 60.672(f).

EU-36: No. 1 Calcining Kettle. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart UUU.

EU-37: No. 2 Calcining Kettle. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart UUU but is permanently idled.

EU-38: No. 3 Calcining Kettle. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart UUU.

EU-48: Wallboard Waste System. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bin and reused. This unit is subject to Subpart OOO but has been idled for several years.

EU-60: No. 1 and No. 4 Warehouse Bins and Airveyor. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit is subject to Subpart OOO. The No. 1 Warehouse Bin is already covered as part of EU-10; No. 4 Warehouse Bin has been idled for several years.

Cement Board Plant

EU-33: Bulk Portland Cement. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bin and reused. Portland cement is not considered to be a non-metallic mineral and therefore not subject to Subpart OOO.

EU-42: Bulk Perlite. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bin and reused. Perlite is considered a non-metallic mineral; however, since there is no additional grinding of perlite, it is not subject to Subpart OOO per 40 CFR 60.670(a)(2).

EU-43: Bulk Fly Ash. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bin and reused. Fly ash is not considered to be a non-metallic mineral and therefore not subject to Subpart OOO.

EU-55: Cement Board Process (Process Bin, Hadite/Aggregate storage, elevator/conveyor taking hadite to mixer, conveyor taking Portland cement, fly ash, perlite, and land plaster from HRA bin to mixer). This unit is controlled by a baghouse which is exhausted through a stack to ambient air. This unit was previously determined to not be subject to Subpart OOO; however, due to the use of land plaster in a small portion of the process, this unit was tested for particulate emission rates and opacity in case it is later determined to be subject to the requirements of Subpart OOO.

EU-69: Cement Board Saw. This unit is uncontrolled and is exempt from permitting requirements per R. 285(l)(vi)(B).

EU-70: Portland Cement Silo. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. Portland cement is not considered to be a non-metallic mineral and therefore not subject to Subpart OOO.

EU-71: Perlite Silo. This unit is controlled by a baghouse which is exhausted through a stack to ambient air.

Perlite is considered a non-metallic mineral; however, since there is no additional grinding of perlite, it is not subject to Subpart OOO per 40 CFR 60.670(a)(2).
EU-72: Fly Ash Silo. This unit is controlled by a baghouse which is exhausted through a stack to ambient air. Fly ash is not considered to be a non-metallic mineral and therefore not subject to Subpart OOO.
EU-73: Cement Board Waste Recycling. This unit is controlled by a baghouse which operates as a closed system. There is no exhaust stack or vent; all particulate collected is screw-conveyed back into the bin and reused. This unit is permitted in ROP No. MI-ROP-B3518-2011, Section 2 under FG-RULE290; however, it has been determined that unit is exempt from permitting requirements per R. 285(I)(vi)(B), so the recordkeeping to demonstrate compliance with Rule 290 do not apply.

Board Plant
The board plant has been idled for several years, so a description of the emission units will not be discussed in this report, other than to note that several emission units are subject to Subpart OOO and will need to be tested for particulate emission rates and opacity if the units are ever put back into operation.

APPLICABLE RULES/ PERMIT CONDITIONS:

US Gypsum is a major source and subject to Title V permitting requirements. US Gypsum was issued Renewable Operating Permit (ROP) No. MI-ROP-B3518-2011 on November 15, 2011.

The ROP is separated into three sections: Mill Plant (Section 1), Cement Board Plant (Section 2), and Board Plant (Section 3). Only the conditions of Section 1 and Section 2 were evaluated during this inspection. The Board Plant has been idled for several years, so the conditions of Section 3 are not applicable, except for the requirements to report deviations and submit annual and semi-annual ROP certifications.

Notes: Records from January 2014 through March 2016 were reviewed during this inspection. These records can be found in the orange facility file. For the purpose of demonstrating compliance with the visible emission observation requirements, both Mr. Kempton and Mr. Geter are Method 9 certified readers.

ROP No. MI-ROP-B3518-2011, Special Conditions:

SECTION 1 – MILL PLANT

EU-5 – Land Plaster System

I. Emission Limits:
1. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed a particulate emission rate of 0.0005 lbs. per 1,000 lbs. exhaust gas, demonstrating compliance with the permit limit of 0.029 lbs. per 1,000 lbs. of exhaust gas.
2. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed a particulate emission rate of 0.03 lbs. per hour, demonstrating compliance with the permit limit of 1.6 lbs. per hour.
3. IN COMPLIANCE. Facility reported particulate emissions of 22 lbs. in 2014, 25 lbs. in 2015, and 6 lbs. from January through March, 2016, well below the permit limit of 6.95 tons annually.
4. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed 0% opacity over a 6-minute average, demonstrating compliance with the permit limit of 7% opacity based on a 6-minute average.

V. Testing/Sampling
1. IN COMPLIANCE. Testing for particulate emission rates and visible emissions, in accordance with Subpart OOO, was performed on December 18-19, 2012. Results were reported to AQD on February 15, 2013.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-5 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-5 are calculated and recorded on a monthly basis using hourly throughput and emission rates determined during the testing performed on December 18-19, 2012.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each

year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-5 meets permit specifications.

IX. Other Requirements
1. IN COMPLIANCE. Facility maintains compliance with the applicable requirements of 40 CFR Part 60, Subpart OOO – National Standards of Performance for Nonmetallic Mineral Processing Plants.

EU-6 – Rock Dryer

I. Emission Limits
1. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed a particulate emission rate of 0.0008 lbs. per 1,000 lbs. exhaust gas, demonstrating compliance with the permit limit of 0.042 lbs. per 1,000 lbs. of exhaust gas.
2. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed a particulate emission rate of 0.06 lbs. per hour, demonstrating compliance with the permit limit of 4.5 lbs. per hour.
3. IN COMPLIANCE. Facility reported particulate emissions of 17 lbs. in 2014, 17 lbs. in 2015, and 4 lbs. from January through March, 2016, well below the permit limit of 19.8 tons per 12-month rolling time period. Emission calculations are based on the results of testing performed December 18-19, 2012, and throughput.
4. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed 0% opacity over a 6-minute average, demonstrating compliance with the permit limit of 10% opacity based on a 6-minute average.

III. Process/Operational Restrictions
1. IN COMPLIANCE. Facility only burns natural gas in the rock dryer.
2. IN COMPLIANCE. Facility does not process any asbestos-containing materials in the rock dryer.

V. Testing/Sampling
1. IN COMPLIANCE. Testing for particulate emission rates and visible emissions, in accordance with Subpart OOO, was performed on December 18-19, 2012. Results were reported to AQD on February 15, 2013.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-6 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-6 are calculated and recorded on a monthly and annual basis using hourly throughput and hourly emission rate determined during the testing performed on December 18-19, 2012. Note: Recordkeeping requirement states annual basis, though the emission limit is for 12-month rolling time period. This condition needs to be updated upon renewal of the ROP to specify that records must be calculated and maintained on a monthly and 12-month rolling time period basis.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-6 meets permit specifications.

IX. Other Requirements
1. IN COMPLIANCE. Facility maintains compliance with the applicable requirements of 40 CFR Part 60, Subpart OOO – National Standards of Performance for Nonmetallic Mineral Processing Plants.

EU-9 – Granular System

I. Emission Limits
1. IN COMPLIANCE. Compliance with the particulate emission rate of 0.05 grams per dry standard cubic meter on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of

FG-MILL, VI.1 through 8. However, initial performance testing required per Subpart OOO to demonstrate compliance with the particulate emission rate of 0.05 grams per dry standard cubic meter has not been performed. The granular process operates as a closed system with no external exhaust for the baghouse.
2. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-MILL, VI.1 through 8. However, the facility has not provided documentation that the initial performance testing required per Subpart OOO to demonstrate compliance with opacity limit of 7%, 6-minute average has been performed. The granular process operates as a closed system with no external exhaust for the baghouse.

V. Testing
1. NOT DETERMINED. Initial performance testing for particulate emission rate and visible emissions per Subpart OOO has not been performed. However, the granular process operates as a closed system with no external exhaust for the baghouse.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

IX. Other Requirements
1. NOT DETERMINED. Further review of the requirements of Subpart OOO is required to determine if the facility needs to perform testing to determine particulate emission rates and opacity to demonstrate compliance with the applicable requirements of 40 CFR Part 60, Subpart OOO – National Standards of Performance for Nonmetallic Mineral Processing Plants.

EU-10 – No. 1 and No. 2 Warehouse Bins

I. Emission Limits
1. IN COMPLIANCE. Testing performed on October 1, 2013, showed a particulate emission rate of 0.001 lbs. per 1,000 lbs. of exhaust gas, demonstrating compliance with the permit limit of 0.029 lbs. per 1,000 lbs. of exhaust gas.
2. IN COMPLIANCE. Testing performed on October 1, 2013, showed a particulate emission rate of 0.02 lbs. per hour, demonstrating compliance with the permit limit of 0.9 lbs. per hour.
3. IN COMPLIANCE. Facility reported particulate emissions of less than one pound in 2014, 2015, and from January through March, 2016, well below the permit limit of 4.0 tons annually.
4. IN COMPLIANCE. Testing performed on October 1, 2013, showed 0% opacity over a 6-minute average, demonstrating compliance with the permit limit of 7% opacity based on a 6-minute average.

V. Testing/Sampling
1. IN COMPLIANCE. Testing for particulate emission rates and visible emissions, in accordance with Subpart OOO, was performed on October 1, 2013. Results were reported to AQD on December 2, 2013.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-10 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-10 are calculated and recorded on a monthly and annual basis based on hourly throughput and emission rates determined during testing performed October 1, 2013.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-10 meets permit specifications.

IX. Other Requirements
1. IN COMPLIANCE. Facility maintains compliance with the applicable requirements of 40 CFR Part 60, Subpart OOO – National Standards of Performance for Nonmetallic Mineral Processing Plants.

EU-23 – Raymond Mill System

I. Emission Limits:
1. IN COMPLIANCE. Compliance with the particulate emission rate of 0.029 lbs. per 1,000 lbs. exhaust gas on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-MILL, VI.1 through 8. However, initial performance testing required per Subpart OOO to demonstrate compliance with the particulate emission rate of 0.029 lbs. per 1,000 lbs. exhaust gas has not been performed. The Raymond Mill System operates as a closed system with no external exhaust for the baghouse.
2. IN COMPLIANCE. Compliance with the particulate emission rate of 1.6 pound per hour on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-MILL, VI.1 through 8. However, initial performance testing required per Subpart OOO to demonstrate compliance with the particulate emission rate of 1.6 pound per hour has not been performed. The Raymond Mill System operates as a closed system with no external exhaust for the baghouse.
3. IN COMPLIANCE. Facility reported particulate emissions of 22 lbs. in 2014, 25 lbs. in 2015, and 6 lbs. from January through March, 2016, well below the permit limit of 6.95 tons annually. The facility uses an EPA emission factor to calculate emissions to demonstrate compliance with this condition; however, the Raymond Mill System operates as a closed system with no external exhaust for the baghouse.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-MILL, VI.1 through 8. However, the facility has not provided documentation that the initial performance testing required per Subpart OOO to demonstrate compliance with opacity limit of 7%, 6-minute average has been performed. The Raymond Mill System operates as a closed system with no external exhaust for the baghouse.

V. Testing/Sampling
1. NOT DETERMINED. Initial performance testing for particulate emission rate and visible emissions per Subpart OOO has not been performed. The Raymond Mill operates as a closed system with no external exhaust for the baghouse.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-5 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-5 are calculated and recorded on a monthly basis using EPA emission factors to demonstrate compliance with EU-23, I.3; however, the Raymond Mill operates as a closed system with no external exhaust for the baghouse.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

IX. Other Requirements
1. NOT DETERMINED. Further review of the requirements of Subpart OOO is required to determine if the facility needs to perform testing to determine particulate emission rates and opacity to demonstrate compliance with the applicable requirements of 40 CFR Part 60, Subpart OOO – National Standards of Performance for Nonmetallic Mineral Processing Plants.

EU-34 – North and South Stucco Bins

This unit has been idled for several years and was not evaluated during this inspection.

EU-35 – HRA Land Plaster Bin

I. Emission Limits:
1. IN COMPLIANCE. Compliance with the particulate emission rate of 0.019 lbs. per 1,000 lbs. exhaust gas on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of

FG-MILL, VI.1 through 8. However, initial performance testing required per Subpart OOO to demonstrate compliance with the particulate emission rate of 0.019 lbs. per 1,000 lbs. exhaust gas has not been performed. The HRA Land Plaster Bin operates as a closed system with no external exhaust for the baghouse.
2. IN COMPLIANCE. Compliance with the particulate emission rate of 1.6 pound per hour on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-MILL, VI.1 through 8. However, initial performance testing required per Subpart OOO to demonstrate compliance with the particulate emission rate of 1.6 pound per hour has not been performed. The HRA Land Plaster Bin operates as a closed system with no external exhaust for the baghouse.
3. IN COMPLIANCE. Facility reported particulate emissions less than one pound for 2014, 2015, and from January through March 2016, well below the permit limit of 0.19 tons annually. The facility uses an EPA emission factor to calculate emissions to demonstrate compliance with this condition; however, the HRA Land Plaster Bin operates as a closed system with no external exhaust for the baghouse.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average on an ongoing basis is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-MILL, VI.1 through 8. However, the facility has not provided documentation that the initial performance testing required per Subpart OOO to demonstrate compliance with opacity limit of 7%, 6-minute average has been performed. The HRA Land Plaster Bin operates as a closed system with no external exhaust for the baghouse.

V. Testing/Sampling
1. NOT DETERMINED. This unit is exempt from the initial performance testing requirements for particulate emission rates in Subpart OOO per 60.672(f). However, testing for visible emissions, in accordance with Subpart OOO, may still be required.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-35 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-35 are calculated and recorded on a monthly basis using EPA emission factors to demonstrate compliance with EU-35, I.3; however, the HRA Land Plaster Bin operates as a closed system with no external exhaust for the baghouse.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

IX. Other Requirements
1. NOT DETERMINED. Further review of the requirements of Subpart OOO is required to determine if the facility needs to perform testing to determine particulate emission rates and opacity to demonstrate compliance with the applicable requirements of 40 CFR Part 60, Subpart OOO – National Standards of Performance for Nonmetallic Mineral Processing Plants.

EU-48 – Wallboard Waste System

The Wallboard Waste System was discontinued several years ago, so the conditions relating to this emission unit were not evaluated during this inspection.

EU-60 – No. 1 and No. 4 Packing Warehouse Bins and Airveyor

The No. 1 Warehouse Bin is included in EU-10, and compliance is demonstrated through the conditions related to that emission unit. No. 4 Warehouse Bin and Airveyor are discontinued and not evaluated during this inspection.

FG-KETTLES – Nos. 1, 2, and 3 Calcining Kettles. Associated Emission Unit IDs: EU-36, EU-37, and EU-38.

I. Emission Limits:
1. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed a particulate emission rate of 0.0019 grams per dry standard cubic meter for No. 1 Calcining Kettle (EU-36) and 0.0028 grams per dry standard cubic meter for No. 3 Calcining Kettle (EU-38), demonstrating compliance with the permit limit of 0.05

grams per dry standard cubic meter for each calcining kettle. No. 2 Calcining Kettle has not been operational for several years and was not evaluated.
2. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed a particulate emission rate of 0.13 lbs. per hour for No. 1 Calcining Kettle (EU-36) and 0.18 lbs. per hour of No. 3 Calcining Kettle, demonstrating compliance with the permit limit of 6.8 lbs. per hour for each calcining kettle. No. 2 Calcining Kettle has not been operational for several years and was not evaluated.
3. IN COMPLIANCE. Facility reported particulate emissions of 22 lbs. in 2014, 25 lbs. in 2015, and 6 lbs. from January through March, 2016, well below the permit limit of 6.95 tons annually. Emission calculations are based on the results of testing performed December 18-19, 2012, and throughput.
4. IN COMPLIANCE. Testing performed on December 18-19, 2012, showed 0% opacity over a 6-minute average for both No. 1 Calcining Kettle (EU-36) and No. 3 Calcining Kettle (EU-38), demonstrating compliance with the permit limit of 7% opacity based on a 6-minute average. No. 2 Calcining Kettle has not been operational for several years and was not evaluated.

V. Testing/Sampling
1. IN COMPLIANCE. Testing for particulate emission rates and visible emissions, in accordance with Subpart UUU, was performed on December 18-19, 2012, for No. 1 Calcining Kettle (EU-36) and No. 3 Calcining Kettle. Results were reported to AQD on February 15, 2013. No. 2 Calcining Kettle (EU-37) has not been operational for several years and was not tested; if this unit is put back into operation, then the facility will be required to test in accordance with Subpart UUU.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of FG-KETTLES are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from FG-KETTLES are calculated and recorded on a monthly and annual basis using hourly throughput and emission rates determined through testing performed on December 18-19, 2012.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stacks SV-36, SV-37, and SV-38 meet permit specifications.

IX. Other Requirements
1. IN COMPLIANCE. Facility maintains compliance with the applicable requirements of 40 CFR Part 60, Subparts A and UUU – National Standards of Performance for Calciners and Dryers in Mineral Industries.

FG-MILL – Mill Department. Associated Emission Unit IDs: EU-5, EU-6, EU-9, EU-10, EU-23, EU-34, EU-35, EU-36, EU-37, EU-38, EU-48, and EU-60.

III. Process/Operational Restrictions
1. IN COMPLIANCE. A Preventative Maintenance/Malfunction Abatement Plan (PM/MAP) was submitted to AQD Detroit Office for review and approval. The plan is implemented and maintains and meets the requirements specified in this condition.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Emission units in FG-MILL are not operated unless its associated baghouse is installed, operated, and maintained in a satisfactory manner.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility monitors and records the differential pressure drop across each baghouse on a daily basis, which is more frequently than the weekly monitoring required.
2. IN COMPLIANCE. Facility performs non-certified visible emission readings of each emission point on a daily basis, which is more frequently than the weekly monitoring required. All visible emission readings are recorded.
3. IN COMPLIANCE. If visible emissions are observed, a Method 9 certified observer would perform visible

emission readings. There were no instances of Method 9 readings needed during this compliance evaluation period.
4 through 8. IN COMPLIANCE. Baghouses are inspected on a daily basis, and repairs are made promptly if any malfunctions are observed. All inspections and maintenance activities are recorded with information detailing the equipment, date, details of issues found, and any repairs or maintenance performed. These maintenance logs were reviewed during the inspection.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

Appendix 2-1. Schedule of Compliance:

NOT DETERMINED. The facility has reported that all units subject to the initial performance testing requirements of Subpart OOO or Subpart UUU have been tested. However, EU-9, EU-23, and EU-35 have not had initial performance testing for particulate emission rates and/or opacity limits. These units operate in a closed system with no externally vented emissions. A further review of the testing requirements and applicability of Subpart OOO for these units needs to be performed before compliance can be determined.

SECTION 2 – CEMENT BOARD PLANT

EU-33 – Bulk Portland Cement

I. Emission Limits
1. IN COMPLIANCE. Compliance with the emission rate of 0.019 lbs. per 1,000 lbs. of exhaust gas is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
2. IN COMPLIANCE. Compliance with the emission rate of 0.08 lbs. per hour is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
3. IN COMPLIANCE. Facility reported particulate emissions of less than one pound in 2014, 2015, and from January through March 2016, well below the permit limit of 0.35 tons annually.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-33 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-33 are calculated and recorded on a monthly and annual basis using EPA emission factors.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. Exhaust gases from EU-33 are discharged within the Cement Board Plant, not the ambient air.

EU-42 – Bulk Portland Cement

I. Emission Limits
1. IN COMPLIANCE. Compliance with the emission rate of 0.019 lbs. per 1,000 lbs. of exhaust gas is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

2. IN COMPLIANCE. Compliance with the emission rate of 0.08 lbs. per hour is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
3. IN COMPLIANCE. Facility reported particulate emissions of less than one pound in 2014, 2015, and from January through March 2016, well below the permit limit of 0.30 tons annually.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-42 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-42 are calculated and recorded on a monthly and annual basis using EPA emission factors.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-43 – Bulk Fly Ash

I. Emission Limits
1. IN COMPLIANCE. Compliance with the emission rate of 0.019 lbs. per 1,000 lbs. of exhaust gas is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
2. IN COMPLIANCE. Compliance with the emission rate of 0.08 lbs. per hour is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
3. IN COMPLIANCE. Facility reported particulate emissions of less than one pound in 2014, 2015, and from January through March 2016, well below the permit limit of 0.30 tons annually.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-33 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-33 are calculated and recorded on a monthly and annual basis using EPA emission factors.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-55 – Cement Board Process

I. Emission Limits:
1. IN COMPLIANCE. Testing performed on October 1, 2013, showed a particulate emission rate of 0.0003 grains per dry standard cubic foot, demonstrating compliance with the permit limit of 0.015 grains per dry standard cubic foot.
2. IN COMPLIANCE. Testing performed on October 1, 2013, showed a particulate emission rate of 0.016 lbs. per hour, demonstrating compliance with the permit limit of 1.54 lbs. per hour.
3. IN COMPLIANCE. Facility reported particulate emissions of 100 lbs.in 2014, 117 lbs. in 2015, and 31 lbs. from January through March 2016, well below the permit limit of 6.76 tons annually.
4. IN COMPLIANCE. Testing performed on October 1, 2013, showed 0% opacity over a 6-minute average, demonstrating compliance with the permit limit of 7% opacity based on a 6-minute average.

V. Testing/Sampling
1. IN COMPLIANCE. Although there is not a testing requirement for this emission unit in the ROP, testing for

particulate emission rates and visible emissions, in accordance with Subpart OOO, was performed on October 1, 2013. Results were reported to AQD on December 2, 2013.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-55 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-55 are calculated and recorded on a monthly and annual basis using the hourly throughput and emission rates determined during testing on October 1, 2013.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-55 meets permit specifications.

EU-70 – Portland Cement Silo

I. Emission Limits
1. IN COMPLIANCE. Compliance with the emission rate of 0.038 lbs. per 1,000 lbs. of exhaust gas is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
2. IN COMPLIANCE. Compliance with the emission rate of 0.22 lbs. per hour is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
3. IN COMPLIANCE. Facility reported particulate emissions of 0.30 tons in 2014, 0.34 tons in 2015, and 0.09 tons from January through March 2016, below the permit limit of 0.97 tons annually.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-70 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-70 are calculated and recorded on a monthly and annual basis using EPA emission factors.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-70 meets permit specifications.

EU-71 – Perlite Silo

I. Emission Limits
1. IN COMPLIANCE. Compliance with the emission rate of 0.038 lbs. per 1,000 lbs. of exhaust gas is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
2. IN COMPLIANCE. Compliance with the emission rate of 0.22 lbs. per hour is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
3. IN COMPLIANCE. Facility reported particulate emissions of less than ten pounds in 2014, 2015, and from January through March 2016, below the permit limit of 0.97 tons annually.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-71 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-71 are calculated and recorded on a monthly and annual basis using EPA emission factors.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-71 meets permit specifications.

EU-72 – Fly Ash Silo

I. Emission Limits
1. IN COMPLIANCE. Compliance with the emission rate of 0.038 lbs. per 1,000 lbs. of exhaust gas is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
2. IN COMPLIANCE. Compliance with the emission rate of 0.14 lbs. per hour is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.
3. IN COMPLIANCE. Facility reported particulate emissions of 0.17 tons in 2014, 0.21 tons in 2015, and 0.05 tons from January through March 2016, below the permit limit of 0.60 tons annually.
4. IN COMPLIANCE. Compliance with the opacity limit of 7%, 6-minute average is demonstrated through compliance with the monitoring and recordkeeping requirements of FG-CEMENTBOARD, VI.1 through 8.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Hours of operation of EU-72 are recorded on a monthly basis.
2. IN COMPLIANCE. Particulate emissions from EU-72 are calculated and recorded on a monthly and annual basis using EPA emission factors.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. According to facility documentation, stack SV-72 meets permit specifications.

FG-CEMENTBOARD – Cement Board Plant. Associated Emission Unit IDs: EU-33, EU-42, EU-43, EU-55, EU-70, EU-71, and EU-72.

III. Process/Operational Restrictions
1. IN COMPLIANCE. A Preventative Maintenance/Malfunction Abatement Plan (PM/MAP) was submitted to AQD Detroit Office for review and approval. The plan is implemented and maintained and meets the requirements specified in this condition.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Emission units in FG-CEMENTBOARD are not operated unless its associated baghouse is installed, operated, and maintained in a satisfactory manner.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility monitors and records the differential pressure drop across each baghouse on a daily basis, which is more frequently than the weekly monitoring required.
2. IN COMPLIANCE. Facility performs non-certified visible emission readings of each emission point on a daily

basis, which is more frequently than the weekly monitoring required. All visible emission readings are recorded.
3. IN COMPLIANCE. If visible emissions are observed, a Method 9 certified observer would perform visible emission readings. There were no instances of Method 9 readings needed during this compliance evaluation period.
4 through 8. IN COMPLIANCE. Baghouses are inspected on a daily basis, and repairs are made promptly if any malfunctions are observed. All inspections and maintenance activities are recorded with information detailing the equipment, date, details of issues found, and any repairs or maintenance performed. These maintenance logs were reviewed during the inspection.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

FG-RULE290 – Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290. Associated Emission Unit: EU-73.

EU-73 is permitted in ROP No. MI-ROP-B3518-2011, Section 2 under FG-RULE290; however, it has been determined that unit is exempt from permitting requirements per R. 285(l)(vi)(B), so the recordkeeping to demonstrate compliance with Rule 290 do not apply; as such, the conditions of FG-RULE290 have not been evaluated for this inspection.

SECTION 3 – BOARD PLANT

The Board Plant has been idled for several years, so the conditions of ROP No. MI-ROP-B3518-2011, Section 3 were not evaluated during this inspection. The Board Plant is still subject to the Title V reporting requirements, so the following applies to all Emission Units and Flexible Groups in Section 3:

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A. Facility reports deviations for the failure to meet the initial performance testing requirement for the emission units subject to Subpart OOO. These units are currently idled; the facility will be required to perform testing any emission unit subject to Subpart OOO that is put back into service.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

SOURCE-WIDE CONDITIONS: These conditions apply to Section 1, Section 2, and Section 3.

I. Emissions
1. NOT DETERMINED. Testing to determine for all particulate collection equipment to demonstrate compliance with the particulate emission rate of 0.03 grains per dry standard cubic foot has not been requested by AQD. However, based on compliance with the monitoring and recordkeeping requirements of FG-MILL, VI. 1 through 8, and FG-CEMENTBOARD, VI.1 through 8, the facility is able to demonstrate substantial compliance with the intent of this limit.
2. IN COMPLIANCE. Facility maintains opacity of fugitive dust sources other than roads, lots, and storage piles below 20%, 6-minute average. Compliance is demonstrated through daily visible emission readings.
3. IN COMPLIANCE. Facility maintains opacity of fugitive dust sources of roads, lots, and storage piles below 5%, 6-minute average. Compliance is achieved through the use of dust suppressant and daily sweeping and demonstrated through daily visible emission readings.

III. Process/Operational Restrictions
1. NOT APPLICABLE. No unloading of freighters is performed on USG property.
2. NOT APPLICABLE. No unloading of freighters is performed on USG property.
3. NOT APPLICABLE. Facility does not use or store slag.
4. NOT DETERMINED. Facility uses front-end loaders to move gypsum rock from the outside storage piles to

the indoor open silos, but records of rate of slag loading and tons per hour were not reviewed during this inspection.
5. NOT APPLICABLE. Facility does not use or store slag.
6. IN COMPLIANCE. Facility uses water as dust suppressant and applies as necessary based on weather conditions. Based on my visible observations, this appears to be sufficient in maintaining fugitive dust control.
7 and 8. IN COMPLIANCE. All paved roadways, parking lots, and truck marshalling areas are swept on a daily basis when temperatures are over 32 F.
9. NOT APPLICABLE. End saw dust collector is no longer in use.
10. IN COMPLIANCE. All crushers, grinding mills, bucket elevators, and conveyor transfer points are controlled by dust collectors.
11. IN COMPLIANCE. Cement Board Plant waste containers are tarped and not filled beyond six inches from the top of the container.
12. IN COMPLIANCE. Facility cleans up any spillage from the transport of raw materials on a daily basis.

V. Testing
1. IN COMPLIANCE. Non-certified visible emission readings of roads, lots, and storage piles are performed on a daily basis.
2. IN COMPLIANCE. Visible emission readings by a Method 9 certified reader is performed if visible emissions are observed during non-certified readings of roads, lots, or storage piles.
3. IN COMPLIANCE. Non-certified visible emission readings fugitive dust sources other than roads, lots, and storage piles are performed on a daily basis.
4. IN COMPLIANCE. Visible emission readings by a Method 9 certified reader is performed if visible emissions are observed during non-certified readings of fugitive dust sources other than roads, lots, or storage piles.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility maintains practical compliance with the intent of the SIP No. 33-1993 to control fugitive dust emissions and the recordkeeping requirements of Appendix 4-1 of ROP No. MI-ROP-B3518-2011.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

IX. Other Requirements
1. NOT APPLICABLE. SIP No. 33-1993 is still in effect.
2. NOT APPLICABLE. Wayne County is currently in attainment for PM-10.
3 and 4. IN COMPLIANCE. Facility has updated its fugitive dust plan reflecting changes to operations at the facility since the issuance of SIP No. 33-1993. The updated fugitive dust plan does not appear to result in an increase in fugitive emissions and has been submitted to and approved by AQD.
5. NOT DETERMINED. AQD has not yet submitted the revised fugitive dust plan to EPA for approval.

Appendix 4-1, 4-2, and 4-3: The facility maintains the required records to demonstrate compliance with the Source-Wide Conditions for Sections 1, 2, and 3.

Appendix 8-1.B, 8-2.B, and 8-3.B – Other Reporting: Facility submits quarterly reports to AQD to report any deviations of SIP No. 33-1993, including the recordkeeping requirements of Appendix 4-1, 4-2, and 4-3.

FINAL COMPLIANCE DETERMINATION
At the time of inspection, USG was determined to be substantially in compliance with the conditions of ROP No. MI-ROP-B3518-2011. However, the regulatory applicability and testing requirements of Subpart OOO for Emission Units EU-9, EU-23, and EU-35 needs to be reevaluated before a full compliance determination can be made. In addition, an updated fugitive dust plan must be submitted to USEPA to revise the conditions of SIP 33-1993 to reflect current operating conditions at the facility.

NAME _____ DATE 9-28-16 SUPERVISOR JK