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

A076745822

FACILITY: EJ USA, Inc.		**SRN / ID:** A0767
LOCATION: 301 Spring St., EAST JORDAN		**DISTRICT:** Gaylord
CITY: EAST JORDAN		**COUNTY:** CHARLEVOIX
CONTACT: Tony Pitts , Assistant Environmental Director		**ACTIVITY DATE:** 08/16/2018
STAFF: Bill Rogers	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On August 16, 2018, Chance Collins and I inspected the EJ USA Foundry in East Jordan, MI. I didn't find any violations during the inspection. Mr. Tony Pitts and Mr. Scott Nachazel accompanied me during this inspection.

The East Jordan Foundry is EJ USA's original foundry. The company has operated at this site for well over 100 years. They plan to close this site. A replacement foundry, near Elmira, MI, is almost ready to begin operation. Much of the equipment at the East Jordan site is to be transferred to the Elmira site when that is ready for it. Therefore, this may be the last inspection report for the East Jordan site.

This facility is covered by Renewable Operating Permit MI-ROP-A0767-2015, issued October 29, 2015. Compliance with conditions of this permit is as follows:

SOURCE WIDE CO NDITIONS

The only significant condition in this table is III.1, which requires a source-wide preventative maintenance plan (PMP). This plan is in place. AQD approved it in July, 2009.

EUMELT-OPERATIONS. An iron cupola fired by coke. It has an afterburner and baghouse for CO and PM control, respectively. There is a quencher to maintain exhaust temperatures within safe ranges for the baghouse. This equipment is not to be relocated to the new foundry in Elmira when that goes into operation.

Section I, Emission Limits:

1. Carbon Monoxide (CO), 332 pounds per hour. According to the attached emissions report supplied by EJ during my inspection, Co emissions in the most recent month are 198.67 pounds per hour. This complies with the permit condition.

2. CO, 1,175 tons per 12 month rolling time period. Reported emissions are 305.36 tons in the most recent 12 month rolling time period. This complies with the permit condition.

3. Particulate Matter (PM) , 0.60 pounds per ton of charged material. Reported PM emissions are 0.05 pounds per ton of charged material. This complies with the permit condition.

4. PM, 36.6 pounds per hour. Reported emissions are 1.82 pounds per hour. This complies with the permit condition.

5. PM, 129 tons per 12 month rolling time period. Reported emissions for the most recent 12 month rolling time period were 2.80 tons. This complies with the permit condition.

Section II, Material Limits. Condition II.1 limits material charged into the cupola to 431,868 tons per 12 month rolling time period. Reported amount is 103,863 tons in the most recent 12 month period. This complies with the permit condition.

Section III, Process and Operational Limits.

1. Baghouse, afterburner, and quencher must be installed and operating properly. These are in place and appear unchanged from previous inspections. This complies with the permit condition.

2. Afterburner must operate at a temperature specified in the PMP. The PMP specifies 1300 degrees f or greater. Records Mr. Pitts showed me during the inspection indicated compliance with this permit condition. At the time of my inspection the afterburner temperature was 1625 degrees f.

3. Baghouse must operate at a pressure drop specified in the PMP. The PMP specifies a range of 1-8 inches w.g. Records Mr. Pitts showed me during the inspection indicated compliance with this permit condition.

Section IV. Design/Equipment Parameters

1. Must have a device to monitor pressure drop across the baghouse. Pressure drop readings were available, indicating compliance with this permit condition.

2. Must have a device to monitor afterburner temperature. Afterburner temperature readings were available, indicating compliance with this permit condition.

Section V, Testing/Sampling. Condition V.1 requires PM and CO testing once in each 5 calendar years. The most recent tests were run December 2016. This is within 5 years, therefore this complies with the permit condition.

Section VI. Monitoring/Recordkeeping

1. Afterburner temperature should be above 1300 degrees f. Records Mr. Pitts showed me during the inspection indicate compliance with this permit condition.

2. Afterburner temperature should be recorded at least 4 times per hour. Mr. Pitts showed me records that complied with this permit condition. He explained that the company actually records temperatures more often than required by permit, but reduces them to one per 15 minutes for the compliance report. The more frequent readings are stored also, in case they are needed.

3. Defines excursions and mandates corrective action plans, if needed. Therefore this condition was not one I could check during an inspection.

4. Specifies which data is to be used in the case of a monitoring malfunction. There was no monitoring malfunction during my inspection therefore I was not able to check this condition.

5. Specifies actions to be taken during an excursion or exceedance. There was no excursion or exceedance at the time of my inspection, therefore I was not able to check this condition.

6. Requires taking actions necessary to maintain the afterburner, including keeping spare parts on hand. A list of spare parts kept on hand is attached.

7. Requires keeping a list of responses required in a quality improvement plan. A quality improvement plan has not been necessary for this facility, therefore this condition is not applicable.

8. Requires recording baghouse pressure drop 4 times per hour. This is being done as required.

9. Requires keeping records of metal charging rate per month and 12 month rolling time period. This is being done. Results are included in the attached reports.

10. Requires calculating monthly and 12 month PM and CO emissions. This is being done. Results are included in the attached reports.

11. Requires calculating PM per ton of metal charged. This is being done. Results are included in the attached reports.

Section VII. Reporting

Conditions VII.1 through VIII.5 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VII.6 through 8 refer to stack test plans. These have not been required during the last year, therefore this condition is not applicable for the purposes of this report.

Section VIII. Stack/Vent Restrictions. Condition 1 sets a minimum exhaust height of 65 feet above ground level. The exhaust vents of the cupola baghouse appear to meet this requirement. No other exhaust dimensions are specified for this baghouse which, being of a relatively unusual design, does not have a conventional exhaust stack.

Section Ix. Other Requirements.

1. Requires modifications to CAM plans if necessary. No such modification has been necessary, therefore this condition is not applicable.

2. Requires general compliance with 40 CFR Part 64. To the best of my knowledge the facility is in compliance.

EUNOBAKE-MOLD. CC21 line used to make large floor molds of sand, mixed with resin and activator. Pollution control equipment consists of two baghouses on the mixer.

The emission data provided makes it clear this equipment has not been used much this year. Plant personnel mentioned to me that EJ does not intend to transfer this equipment to the new foundry in Elmira when the East Jordan foundry ceases operations.

Section I, emission limits.

1. VOC limit 7.9 pounds per hour. According to the attached report, emissions in the last month were 0.17 pounds per hour. This complies with the permit condition.

2. VOC limit 23.3 tons per 12 month rolling time period. According to the attached report, emissions in the last 12 month rolling time period is 0.11 tons. This complies with the permit limits.

3. PM limit 1.5 pounds per hour. According to the attached report, emissions in the last month were 0.03 pounds per hour. This complies with the permit limit.

4. PM limit 4.3 tons per 12 month rolling time period. According to the attached report, particulate emissions in the most recent 12 month time period round to zero tons; 0.07% of the annual limit, which calculates out as about 6 pounds. This complies with the permit limit.

Section II. Material limits. Metal poured limited to 10,512 tons per 12 month rolling time period. According to the attached report, metal poured was 53 tons per the most recent 12 months. This complies with the permit limit.

Section III. Process and operational limits.

1. Baghouses must be installed and operating properly. The baghouses appeared to be in place and operating as required.

2. Baghouses should operate within a pressure range specified in the MAP. The MAP specifies a pressure drop of from 1.5 to 9 inches w.g. Data Mr. Pitts showed me showed compliance with this permit condition. Pressure drop was running generally 2.9 to 3.6 inches w.g.

Section IV. Design/ equipment parameters. 1. Pressure drop measuring devices required on baghouses. Pressure drop values were listed in the facility compliance data, so it appears the measuring devices are present as required.

Section V. Testing/Sampling

1. VOC content of resin and activators must be determined at least once each five years. Plant records indicate this was done November 2016. This is within five years, so the facility is in compliance with this condition.

2. Best available information should be used to calculate emissions. This facility passed audit on their annual emission report; to the best of my knowledge the facility is in compliance with this condition.

Section VI. Monitoring/Recordkeeping

1. Pressure drop across each baghouse to be measured continuously and recorded daily. Mr. Pitts showed me the records of this information. It is being recorded as required.

2. Records of raw materials using VOCs, per month. This information is being kept as required. It is included in the CC21 emissions report, attached.

3. Satisfactory VOC emission report, on a monthly and 12 month basis. This information is in the attached emission report.

4. Satisfactory PM emission report, on a monthly and 12 month basis. This information is in the attached emission report.

5. Records of hours of operation, tons of metal poured, and pounds of resin used, per month. This information is in the attached emission report.

Section VII, Reporting.

Conditions VII.1 through VIII.3 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VII.4 through 6 refer to stack test plans. These have not been required during the last year, therefore this condition is not applicable for the purposes of this report.

Section VIII, Stack Vent Requirements, and Section IX, Other Requirements, contain no conditions in this table.

EUTACCONE-MOLD. A molding line making iron castings. It includes pouring, sand handling, sand mixing, and shakeout operations. Pollution control equipment includes five baghouses and a bin vent.

Plant personnel have told me this equipment is meant to be transferred to the new foundry in Elmira, where it will be "Line 2."

Section I, Emission Limits

1. PM limit of 0.05 pounds per 1000 pounds exhaust gasses on some most points in the line. The highest emissions listed for these points in the test results, attached, was 0.0055 pounds per 1000 pounds. This complies with the permit condition.
2. PM limit of 0.10 pounds per 1000 pounds exhaust gasses on sand cooling system. I could not identify which of the test points in the attached emission report was the sand cooling system, but all points were below this limit. This complies with the permit condition.
3. PM limit of 0.018 pounds per 1000 pounds exhaust gasses on sand cooling system. According to test results, attached, emissions were 0.0028 pounds per 1000 pounds exhaust gasses. This complies with the permit condition.
4. PM limit of 47.3 pounds per hour. According to the emissions report, attached, emissions are 0.01 pounds per hour. This complies with the permit condition.
5. PM limit of 147.4 tons per 12 month rolling time period. According to the emissions report, attached, emissions are 0.016 tons per 12 months. This complies with the permit condition.
6. Visible emissions limit of 10% on shakeout, etc. Informal VE readings, attached, indicate no visible emissions. This complies with the permit condition.
7. Visible emissions limit of 20% on dust storage bin. Informal VE readings, attached, indicate no visible emissions. This complies with the permit condition.
8. Visible emissions limit of 5% on the sand cooling system. Informal VE readings, attached, indicate no visible emissions. This complies with the permit condition.

Section II. Material Limits. No conditions.

Section III. Process/Operational Restrictions.

1. Baghouses must operate within the pressure range required in the PMP. The PMP requires a pressure drop of 1.5 to 8.5 inches w.g. Data Mr. Pitts showed me indicated the pressure drop was within the required range.
2. Baghouses must be installed and operated properly. During my inspection they were installed and appeared to be operating properly.
3. Shakeout, etc., should not operate more than 6240 hours per year. According to the emissions report, attached, this mold line has operated 3055 hours this year. This complies with the permit condition.

Section IV, Design /Equipment Parameters. Condition 1 requires pressure drop meters across each baghouse. Pressure drop readings are available, so it appears the meters are in place.

Section V., Testing/Sampling

1. PM tests required at least once each 5 years. The most recent test was performed in 2016. This is less than 5 years ago, therefore this complies with the permit condition.

2. Informal VE readings required at least once per day. Mr Pitts showed me the records of these tests. Copies are attached. This complies with the permit condition.

Section VI, Monitoring/Recordkeeping

1. Requirement to monitor pressure continuously and record values four times per hour. Mr. Pitts showed me records which indicate compliance with this condition.
2. Requirement to calculate PM emissions rates in pounds per hour and tons per year. This information is on the attached emission report. This complies with the permit condition.
3. Records of hours of operation of the shakeout, etc. This information is kept and is included in the attached emission report. This complies with the permit condition.
4. Records of daily informal VE readings. These records are being kept, in compliance with the permit condition.

Section VII, Reporting

Conditions VII.1 through VIII.4 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VII.5 through 7 refer to stack test plans. These have not been required during the last year, therefore this condition is not applicable for the purposes of this report.

Section VIII, Stack/Vent Restrictions. Conditions 1-11 set stack dimensions for many exhaust points from the Taccone Line. One stack is specified as 6 inches in diameter, the other ten as 52 inches. All stacks are to be either 50 or 60 feet high. I did not formally measure the stacks, but from what I could see from outside the facility they appeared to meet these requirements.

Section IX, Other Requirements, does not contain any conditions in this table.

EULADLEREPAIR, ladle repair and replacement, controlled by a baghouse.

Section I, Emission Limits. Condition 1, emission limit of 0.10 pounds PM per 1000 pounds exhaust gasses. Data Mr. Pitts showed me showed compliance with this limit.

Section II, Material Limits, contains no conditions in this table.

Section III, Process/Operational Restrictions

1. Baghouse should operate within a pressure range specified in the PMP. The PMP specifies a pressure range of 1.5-8 inches w.g. Mr. Pitts showed me data indicating compliance with this limit.
2. Baghouse should be installed and operating properly. The baghouse was installed and appeared to be operating properly.

Section IV, Design/Equipment Parameters. Condition 1 requires a pressure drop meter on the baghouse. There were pressure drop readings recorded, so it appears this meter was installed as required.

Section V, Testing/Sampling. Daily informal VE observations are required. According to the VE check sheet, attached, these are being performed.

Section VI, Monitoring/Recordkeeping

1. Baghouse pressure drop should be measured continuously and recorded once daily. Mr. Pitts showed me the records where this is done.
2. Records of informal VE checks should be kept. A copy of these records is attached.

Section VII. Reporting.

Conditions VII.1 through VIII.3 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Section VIII, Stack/Vent Restrictions. Condition 1 requires a stack diameter of 24 inches and minimum height of 32.5 feet. The stack which was pointed out to me as belonging to this equipment appeared to meet these requirements.

EUWHEELABRATOR. A shot blast cleaning machine with two baghouses for particulate emissions control.

Section I, emission limits. Condition 1, PM limit of 0.10 pounds per 1000 pounds of exhaust gasses. According to emissions test results, attached, the highest of the two baghouses showed 0.0039 pounds per 1000 pounds exhaust gasses. This complies with the permit condition.

Section II, Material Limits, contains no conditions in this table.

Section III, Process/Operational Restrictions

1. Baghouses should operate within the pressure range specified in the PMP. The PMP specifies 1.5-8.5 inches w.g. Mr Pitts showed me data demonstrating compliance with this condition.
2. Baghouses should be installed and operating properly. The baghouses appeared to comply with this condition.

Section IV, Design/Equipment Parameters. Condition 1 requires pressure drop meters on each baghouse. Pressure drops are being recorded, so it appears the meters are in place.

Section V, Testing/Sampling. Condition 1 requires testing for PM rates each 5 years. PM tests were run in 2016, which is less than 5 years ago. This complies with the permit condition.

Section VI, Monitoring/Recordkeeping

1. Baghouse should operate within the pressure range specified in the PMP. As noted above, the facility appears to be in compliance with this condition.
2. Baghouse pressure should be monitored continuously and recorded daily. Mr. Pitts showed me the records demonstrating compliance with this condition.
3. This condition states what data may and may not be used to show compliance with Federal requirements, especially with regard to startup, shutdown, and malfunction. The facility was operating normally at the time of my inspection, so I was not able to check on this.
4. Pressure gauge must be maintained and operated. The facility is in compliance with this condition.
5. Defines operating outside the PMP's pressure range as an excursion. This did not happen during my inspection.
6. Requires quick repairs to return the equipment to normal operation after an excursion. There has not been an excursion on this equipment this year, therefore this condition is not applicable to this inspection.
7. Requires keeping records of monitoring data, which are being kept. Also requires quality improvement plan records and corrective action records. There has not been a quality improvement plan and no corrective actions have been necessary, therefore there are no records necessary for these.

Section VII, Reporting.

Conditions VII.1 through VIII.5 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VII.6 through 8 refer to stack test plans. These have not been required during the last year, therefore this condition is not applicable for the purposes of this report.

Section VIII, Stack/Vent Restrictions

1. SV165-DC is listed, but has no restrictions.
2. SV-019-DC has no required diameter and a required minimum height of 50 feet. I believe I saw this stack during my inspection and it appeared to meet this requirement.

Section IX, Other Requirements

1. Requires CAM plan improvements, if necessary. They have not been necessary, so this condition is not applicable for the purposes of this inspection.
2. Requires general compliance with 40 CFR 64. I am not aware of any violations.

EUASPHALTDIP, asphalt dip coating line.

Section I, Emission Limits. Condition I.1 sets a VOC limit of 36.6 tons per 12 month rolling time period. The attached emission report claims 10.19 tons per 12 months. This complies with the permit condition.

Section II, Material Limits.

1. VOC limit of 1.1 pounds per gallon less water as applied. The attached emission report claims 0.47 pounds per gallon, less water. This complies with the permit condition.
2. No volatile organic HAPS in the coating. The company states there are none.

Section III, Process / Operational Restrictions. Condition III.1 sets a maximum dip temperature of 160 degrees f. I forgot to check this on this inspection. It was in compliance on prior inspections.

Section IV, Design/Equipment Parameters. Condition IV.1 requires a device to continuously measure tank temperature. This device is in place as required.

Section V, Testing/Sampling. Condition V.1 requires that at least once every 5 years the coating must be tested for VOC content. The most recent results are attached. They are from 2016, which is less than 5 years ago. Therefore the facility is in compliance with this condition.

Section VI, Monitoring/Recordkeeping

1. Dip tank temperature must be recorded daily. This is being done, in compliance with the permit condition.
2. Record gallons, with and without water, of each solvent and coating per month. Record VOC in pounds per gallon, with and without water, as applied. Record solvents used, their VOC content, and amount reclaimed. Mr Pitts told me they have not been using cleanup solvents. The rest of this information is recorded on the emission report, attached.
3. Monthly and 12 month VOC emissions. This information is recorded on the attached emission report, as required.
4. Records of organic HAP content of the coating. The company states there is no organic HAP in the coating.

Section VII, Reporting

Conditions VII.1 through VIII.3 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Condition VIII.4 requires sending AQD copies of the Method 24 analysis results for the coating. We have received this, as required.

Section VIII, Stack/Vent Restrictions, contains no conditions in this table.

Section IX, Other Requirements, contains no conditions in this table.

EUSMALLSHELLCORE, three core machines

Most sections of this table have no conditions. The exceptions are:

Condition II.1, no more than 6000 tons of cores per 12 month rolling time period. The emissions report, attached, claims 1411 tons. This complies with the permit limit.

Condition VI.1 requires records of tons of cores produced. The records are being kept.

Conditions VII.1 through 3 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Condition VIII.1 sets stack dimensions of 30 inches diameter and 32.5 feet above ground. I did not mark down seeing this stack, so may not have checked it.

EUNOBAKECORES-A. Line A core production. PM emissions control through a baghouse, no VOC control.

Section I, emission limits

1. VOC limit of 13.90 pounds per hour. According to the emissions report, attached, VOC emissions were 1.58 pounds per hour. This complies with the permit limit.
2. VOC limit of 40.9 tons per year. According to the emissions report, attached, VOC emissions are 1.27 tons per year. This complies with the permit limit.
3. PM limit of 0.01 pounds per 1000 pounds exhaust gasses. Due to difficulty in conducting formal PM emissions testing on a process which operates intermittently for short times, the method of compliance specified in the permit is monitoring pressure drop on the baghouse to show that it is operating properly. Pressure drop is within the approved range, implying compliance.
4. Visible emissions limit of 5%. Informal VE observations are being taken and are included in the VE report, attached.

Section II, Material Limits

1. Resins limited to 35 tons per month. The emission report, attached, claims 3.06 tons per month. This complies with the permit condition.
2. Resins limited to 400 tons per year. The emission report, attached, claims 13.58 tons so far this year. This complies with the permit condition.
3. Isopropyl alcohol limited to 8 tons per month. The emission report, attached, claims 0.37 tons per month. This complies with the permit condition.
4. Isopropyl alcohol limited to 96 tons per year. The emission report, attached, claims 8 tons so far this year. This complies with the permit condition.

Section III, Process/Operational Limitations

1. The baghouse must be installed and operating properly. It appeared to be installed and operating properly at the time of my inspection.
2. The baghouse will operate at a pressure range specified in the PMP. The PMP specifies 1.5 to 8.5 inches w.g. Mr. Pitts showed me records indicating compliance with this condition.

Section IV, Design/Equipment Parameters, has no conditions in this table.

Section V, Testing/Sampling

1. PM emissions must be calculated based on the best available information. I am not aware of any violation of this condition.
2. At least once each five years VOC content of any VOC containing material must be determined. Mr. Pitts explained that the VOC containing materials of this line are the same as the resins in other lines, for which this data is available.
3. Daily informal VE checks must be performed and recorded. These are included in the VE Checklist, attached.

Section VI, Monitoring/Recordkeeping

1. Hourly, monthly, and 12 month VOC calculations are required. These are included in the attached emission report.
2. Pressure drop across the baghouse must be measured continuously and recorded daily. Mr. Pitts showed me records demonstrating compliance with this requirement.
3. Records of resins used per month and per year are required. These are present on the attached emission report.
4. Records of isopropyl alcohol used per month and per year are required. These are present on the attached emission report.
5. Records of hours of operation are required. These are present on the attached emission report.
6. Records of the informal VE checks are required. These are included in the VE Checklist, attached.

Section VII, Reporting

Conditions VII.1 through VIII.3 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VII.4 through VII.6 refer to stack test plans. As no stack test plans have been submitted within the past year, these conditions are not applicable for the purposes of this inspection.

Condition VII.7 requires submission of VOC content testing reports. AQD has received these as required.

Section VIII, Stack/Vent Restrictions, Condition 1 requires a maximum exhaust diameter of 72 inches and a minimum height above ground of 42 feet. I believe I saw this stack during my inspection. It appeared to meet the requirements.

Section IX of this table contains no conditions.

EU749HP-EGEN Diesel fired reciprocating internal combustion engine powering an emergency generator. No pollution control equipment.

The significant conditions in this table are III.3 and III.4, which limit the generator to 100 hours total operation per calendar year, 50 of which may be in non-emergency situations. Mr. Pitts said that the engine does not operate except for periodic tests. It would be used in an emergency; Condition III.2 allows unlimited operating in an emergency, so this would not be a violation however long it continued.

I could not find an hour meter on the engine. Mr. Pitts said the maintenance crew keeps track of how long they operate the engine, and he could get that information for me.

EU112HP-EGEN. Natural gas-fired emergency generator in the office building, to provide emergency power to the computers. This was not in the foundry building; I did not think to ask to see it. The only conditions in this table are a general requirement to comply with 40 CFR 63, Subpart JJJJ. For an engine this small, violations of JJJJ seem very unlikely.

FGCOLDCLEANERS: Any small parts washers on site. I did not see any during my inspection. I got the impression there weren't any. They are minor enough I used enforcement discretion and did not search for any.

FGFINISHING- Ervin shot blasting and grinding operations, controlled by two baghouses.

Section I, Emission Limits, Condition 1 sets a PM limit of 0.037 pounds per 1000 pounds of exhaust gas. Stack test results, attached, indicate emissions from the two baghouses as 0.00026 and 0.00034 pounds per 1000 pounds. This complies with the permit limit.

Section II, Material Limits, contains no conditions in this table.

Section III, Process/Operational Restrictions:

1. Baghouses must operate within a pressure range specified in the PMP. The PMP specifies a pressure drop of 1.0 to 8.5 inches w.g.
2. The baghouses must be installed and operating properly. During my inspection they appeared meet this requirement.

Section IV. Design/Equipment Parameters. Condition 1 requires a pressure drop device across each baghouse. As pressure drop is being recorded, it appears the devices exist as required.

Section V.1 requires PM testing each 5 years. PM testing was performed in 2016, which is less than 5 years ago. Therefore the facility is in compliance with this condition.

Section VI, Monitoring and Recordkeeping

1. Baghouses must operate within the pressure range specified in the PMP, as noted above. Mr. Pitts showed me records demonstrating compliance with this condition.
2. Pressure drop across baghouses must be measured continuously and recorded once per day. Mr. Pitts showed me records demonstrating compliance with this condition.
3. Specifies that data collected during malfunctions should not be used to demonstrate compliance. No malfunctions occurred during the inspection, so this is not applicable for purposes of this inspection.
4. Requires maintaining the pressure drop measuring devices. These were operating properly at the time of my inspection, in compliance with this condition.
5. Defines an excursion for PM emissions. None occurred during my inspection, so this is not applicable for purposes of this inspection.
6. Requires prompt return to proper operation in the event of an excursion or exceedance. Neither of these happened during my inspection, so this is not applicable for the purposes of this inspection.
7. Requires documenting actions in response to a request for a Quality Improvement Plan. No such has been necessary, so this condition is not applicable.

Section VII, Reporting.

Conditions VII.1 through VIII.5 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VIII.6 through VIII.8 refer to stack test plans. No stack test plan has been required in the past year, so this is not applicable for purposes of this inspection.

Section VIII, Stack/Vent Restrictions

1. SV018-DC to have maximum diameter of 76 inches and minimum height of 60 feet. I believe I saw it and it appeared to meet these requirements.
2. SV141-DC to have maximum diameter of 57 inches and minimum height of 55 feet. I believe I saw it and it appeared to meet these requirements.

Section IX, Other Requirements

1. Requires modifications to a CAM Plan if necessary. None have been necessary, so this condition is not applicable.
2. Requires general compliance with 40 CFR Part 64. I am not aware of any violations of this Subpart.

FGMACT: All processes in the facility subject to 40 CFR 63, Subpart EEEEE for Iron and Steel Foundries.

Section I, Emission Limits

1. 20% visible emission limit on the buildings containing equipment subject to this subpart. EJ conducts formal opacity observations of the foundry building twice per year. We have copies of their emission observations on file. Generally they don't see any opacity from the buildings at all. I have also, during past visits, observed the building while they were taking opacity observations and I concurred that there was no opacity. This complies with the permit condition.
2. Total Metal HAP or PM: .0005 gr/dscf TMHAP, or .008 pounds TMHAP per ton, OR .006 gr/dscf PM, or 0.10 pounds PM per ton of metal charged, for EUMELT-OPERATIONS. Stack tests covering all sources in this flexible group were performed September 13-28, 2016. In my review of the test results I concluded that EUMELT-OPERATIONS passed its limits with an average of 0.00093 grains PM per DSCF, one of the emission limits allowed to show compliance. This complies with the permit condition.
3. Volatile Organic Hazardous Air Pollutants, 20PPMV corrected to 10% oxygen. Stack tests for this for all equipment in this flexible group were part of the September 13-28 2016 test program. In my review of these results I concluded that the equipment passed the limit. This complies with the permit condition.

4. 0.0008 gr/dscf TMHAP or 0.10 gr/dscf PM from EU-PMC and EUTACCONE-MOLD. Tests for this were part of the September 13-28 2016 test program. In my review of the test results I concluded that the equipment averaged 0.0015 gr/dscf PM. This complies with the permit condition.

Section II, Material Limits, contains no conditions in this table.

Section III, Process/Operational Restrictions

1. Requires an Operation and Maintenance Plan. EJ provided us with one. We approved it September 27, 2016. This complies with the permit condition.
2. Specifies details of the O&M Plan. The plan appears to include adequate site-specific operation limits as required.
3. Requires compliance with work practices except during startup, shutdown, and malfunction. I am not aware of any violations of this condition.
4. Requires a Startup, Shutdown, and Malfunction Plan. EJ provided us with one. We approved it October 3, 2012.
5. Requires a scrap inspection plan. EJ provided us with one. We approved it April 15, 2005.
6. Requires maintaining 15 minute average combustion temperatures in the cupola at or above 1300 degrees f. According to records Mr. Pitts showed me during my inspection, the combustion temperature was well above this limit. This complies with the permit condition.
7. through 10, sets requirements for a Continuous Parameter Monitoring System. EJ has one monitoring baghouse pressure drops, cupola temperatures, and afterburner temperatures. It appears to function adequately to demonstrate compliance.

Section IV, Design/Equipment Parameters, does not contain any conditions in this table.

Section V, Testing/Sampling

1. Opacity observations of the entire foundry building each six months. EJ has been doing this. The most recent opacity observations were in May of this year. No opacity was detected.
2. Total Metal Hazardous Air Pollutant, Volatile Organic Hazardous Air Pollutant, and PM testing once each five years. The most recent test was September of 2016. This is within the past five years, so the facility is in compliance with this permit condition.

Section VI, Monitoring/Recordkeeping

1. Requires demonstrating initial compliance with work practice standards and O&M requirements. We have the required documentation of this on file.
2. Requires measuring continuously and recording at least four times per hour the afterburner temperature. Records Mr. Pitts showed me at the time of my inspection showed compliance with this condition.
3. Requires using a bag leak detection system "as applicable." I do not believe this requirement is applicable at this foundry.
4. Requires baghouse inspections. To the best of my knowledge, baghouse inspections are being performed as required in the operation and maintenance plan, in compliance with this permit condition.
5. Requires keeping records of the chemical composition of catalyst binder formulation. I forgot to check this. Chemical analysis data for catalysts and binders is included under other emission unit table reviews, so it appears this information is being kept as required.
6. Requires continuous data collection except during malfunctions and the like. Data is being collected continuously as required.

Section VII, Reporting

Conditions VII.1 through VIII.5 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VIII.6 refers to stack test plans. No stack test plan has been required in the past year, so this is not applicable for purposes of this inspection.

Section VIII, Stack Vent Restrictions, contains no conditions in this table.

Section IX, Other Requirements, contains a general requirement to comply with Subpart EEEEE. I am not aware of any violations of this Subpart.

FG-LML Large Mold Line: Mold making, pouring, cooling, shakeout, and sand preparation. One baghouse with two stacks.

Section 1: Emission Limits

1. PM-10, 27.46 tons per 12 month rolling time limit. According to an emission report, attached, emissions in the most recent 12 months were 11.04 tons. This complies with the permit limit.
2. PM-10, 0.0045 grains per DSCF. Test data, attached, claims 0.0018 grains per DSCF. This complies with the permit limit.

Section 2, Material Limits. Condition 1 limits metal poured to 52,000 tons per 12 month rolling time period. An emissions report, attached, claims they poured 23,678 tons in the most recent 12 months. This complies with the permit limit.

Section III: Process/Operational Restrictions

1. Requires the baghouse be installed and operating properly. It appeared to be installed and operating properly during the inspection.
2. Requires operating within a pressure drop specified in the PMP. The PMP specifies a pressure drop of 1.5 to 8.5 inches w.g. for this baghouse. Records Mr. Pitts showed me indicated compliance with this condition.

Section IV, Design/Equipment Parameters, Condition 1 also requires the baghouse to be installed and operating properly. It appeared to be operating properly during the inspection.

Section V , Testing/Sampling, Condition 1 requires PM-10 testing each five years. PM-10 tests were run in September 2016. This is less than five years ago, therefore the facility is in compliance with this permit condition.

Section VI, Monitoring/Recordkeeping:

1. Record tons of metal poured, monthly and 12 month PM-10 emissions, hours of operation, and tons of sand processed. This information is included in the emission report, attached. This complies with the permit condition.
2. Monitor pressure drop across the baghouse and record it once per day. Records Mr. Pitts showed me complied with this condition.

Section VII, Reporting

Conditions VII.1 through VIII.3 refer to regular reports reviewed individually in other activity reports under "Report Received." I am not aware of any violations or deficiencies in these regular reports.

Conditions VIII.4 through VIII.6 refer to stack test plans. No stack test plan has been required in the past year, so this is not applicable for purposes of this inspection.

Section VIII, Stack / Vent Restrictions

Conditions VIII.1 and 2 set dimensions for the two stacks at a maximum exhaust diameter of 58 inches and a height of 75 feet. I believe I saw these stacks from outside the plant and that they appeared to comply with these requirements.

Section IX, Other Requirements, contains no conditions in this table.

FG-MACT-BOILERS: Processes subject to 40 CFR 63, Subpart DDDDD, including two .14 MMBTU and one 0.90 MMBTU natural gas fired boilers.

The significant conditions in this table are that an initial tune-up of boilers is required. This was performed as required in January of 2016, according to Mr. Pitts.

NAME William J Rogers L. DATE 9/5/18 SUPERVISOR SN