

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

N605267688

FACILITY: East Jordan Foundry, LLC		SRN / ID: N6052
LOCATION: 2675 North US 131, ELMIRA		DISTRICT: Gaylord
CITY: ELMIRA		COUNTY: ANTRIM
CONTACT: Tim Smock , EHS Manager		ACTIVITY DATE: 05/25/2023
STAFF: David Bowman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Site inspection on 25 May 23.		
RESOLVED COMPLAINTS:		

On 25 May 2023 I, David Bowman MI EGLE AQD, conducted a scheduled site inspection for N6052 East Jordan Iron Works as part of the annual compliance inspection program. N6052 is a major source that has not had its renewable operating permit (ROP) issued yet, it is currently operating under Permit to install (PTI) 186-16B.

During the installation of the plant equipment the source installed equipment that was not in the original permit. The plant self-reported this issue and it found that the cumulative BTU value of the equipment was different than the original permitted equipment. Upon review it was determined that this is a violation of Rule 201. A Violation Notice was issued to the source for this violation. The source replied with explanation and that they would be submitting a new PTI application to cover the equipment and any other information required. Application APP-2023-0108 is in progress and addresses the required information. The VN is still unresolved until the new PTI is issued.

The plant is located at the intersection of US 131 and M32 approximately 1 miles West of Elmira MI. The closest operating business is a truck stop/fuel stop approximately 1500 feet southeast of the plant. The medical center across the street is closed from the Covid 19 Pandemic and not currently scheduled to reopen. The area is rural with farmland and a municipal waste transfer station approximately 0.25 miles due east of the plant. The closest residential area is due south of the plant approximately 0.75 miles from the plant fence line.

Weather conditions on the day of the inspection were clear and sunny, with light winds out of the East at 2-5 MPH. The temperature was 60°F and the humidity was low.

Prior to entering the plant footprint, I observed the stacks from a position that would meet the requirements for a method 9 visible emissions (VE) check. There were no observed emissions from any stack at the source.

For the site inspection I met with Tim Smock, EHS Manager for the plant. We reviewed the scrap metal, MAP/O&M Plan, fugitive dust plan, and the CAM plan. For the walk-through Tim had Ken, the Maintenance Manager for the plant to join us in the walk around to answer any questions I had.

EUCHRGHAND

III. Process/Operational Restrictions

1. The permittee shall not operate EUCHRGHAND unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23.

2. The permittee shall process and store furnace charge material in an enclosed building.

Discussion – we walked through the process during the plan review see MACES>Compliance Activity> Report CA_N605267540 for information on the plan requirements that meet this condition. During the inspection was able to physically verify that process and storage is taking place inside the plant.

IV. Design/Equipment Parameters

1. The permittee shall not operate EUCHRGHND unless a fabric filter collector controlling emissions...

Discussion – Baghouse A,B,E,H,J, and K control emissions from EUCHRGHAND. All were functioning at the time of inspection.

2. The permittee shall not operate EUCHRGHAND unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from EUCHRGHAND by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUDUCTINOC

III. Process/Operational Restrictions

1. The permittee shall not operate EUDUCTINOC unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23.

IV. Design/Equipment Parameters

1. The permittee shall not operate EUDUCTINOC unless a fabric filter collector controlling emissions...

Discussion – Baghouse A and B control emissions from EUDUCTINOC. All were functioning at the time of inspection.

2. The permittee shall not operate EUDUCTINOC unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from EUCHRGHAND by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUMLTXFER

III. Process/Operational Restrictions

1. The permittee shall not operate EUMLTXFER unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUMLTXFER unless a fabric filter collector controlling emissions...

Discussion – Baghouse A and B control emissions from EUMLTXFER. All were functioning at the time of inspection.

2. The permittee shall not operate EUMLTXFER unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from EUMLTXFER by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUSHMM

III. Process/Operational Restrictions

1. The permittee shall not operate EUSHMM unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUDUCTINOC unless a fabric filter collector controlling emissions...

Discussion – Baghouse A, B, E, F, and G control emissions from EUSHMM. All were functioning at the time of inspection.

2. The permittee shall not operate EUDUCTINOC unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from EUSHMM by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUBLAST

III. Process/Operational Restrictions

1. The permittee shall not operate EUBLAST unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUBLAST unless a fabric filter collector controlling emissions...

Discussion – Baghouse H and J control emissions from EUBLAST. All were functioning at the time of inspection.

2. The permittee shall not operate EUBLAST unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from EUBLAST by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUGRIND

III. Process/Operational Restrictions

1. The permittee shall not operate EUGRIND unless a malfunction abatement plan (MAP)...

Discussion – During the inspection source and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUGRIND unless a fabric filter collector controlling emissions...

Discussion – Baghouse H and J control emissions from EUGRIND. All were functioning at the time of inspection.

2. The permittee shall not operate EUGRIND unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from EUGRIND by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUDIPTANK

III. Process/Operational Restrictions

1. The dip tank shall not be operated at a temperature of greater 160° F...

Discussion – EUDIPTANK was in operation at the time of the inspection, the temp was not over 160° F.

2. The permittee shall not operate EUDIPTANK unless a device to measure the temperature of coating material in the tank is installed, maintained.....

Discussion – The temperature monitoring system is installed, maintained, and operating as recommended by the manufacturer.

VIII> Stack/Vent Requirements

1. The permittee shall not discharge emissions from EUDIPTANK directly into the atmosphere.

Discussion - All emissions are emitted into plant air. At the time of inspection EUDIPTANK was in operation and there was no odor or visible emission present. EUDIPTANK is installed at floor level and the process for which the parts are dipped, drained, and dried is automated once the operator presses a manual start button. When EUDIPTANK is not being operated it is covered.

EUPUNBCM

III. Process/Operational Restrictions

1. The permittee shall not operate EUPUNBCM unless a malfunction abatement plan (MAP)...

Discussion – During the inspection source and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUPUNBCM unless a fabric filter collector controlling emissions...

Discussion – Baghouse L control emissions from EUPUNBCM. Baghouse L was functioning at the time of inspection.

2. The permittee shall not operate EUPUNBCM unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

2. The permittee shall verify every six months the VE from EUPUNBCM by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EUSHELLCM

III. Process/Operational Restrictions

1. The permittee shall not operate EUSHELLCM unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUSHELLCM unless a fabric filter collector controlling emissions...

Discussion – Baghouse L control emissions from EUSHELLCM. Baghouse L was functioning at the time of inspection.

2. The permittee shall not operate EUSHELL unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

2. The permittee shall verify every six months the VE from EUSHELLCM by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

EULDLREPAIR

Note: in PTI there is a typo for the EU name, PTI reads EULCLREPAIR. In the body of the document there is consistent referral to EULDLREPAIR. This report reflects the correct EU name of EULDLREPAIR.

EULDLREPAIR is not used on a daily basis as part of the process. This process is for the repair of the refractory in the ladle and only used as needed.

III. Process/Operational Restrictions

1. The permittee shall not operate EULDLREPAIR unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EULDLREPAIR unless a fabric filter collector controlling emissions...

Discussion – Baghouse K control emissions from EULDLREPAIR. Baghouse L was functioning at the time of inspection.

2. The permittee shall not operate EUPUNBCM unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

EUWASTESAND

III. Process/Operational Restrictions

1. The permittee shall not operate EUWASTESAND unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate EUWASTESAND unless a fabric filter collector controlling emissions...

Discussion – Baghouse H and J control emissions from EUWASTESAND. Baghouses were functioning at the time of inspection.

2. The permittee shall not operate EUWASTESAND unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

FGMELTING

III. Process/Operational Restrictions

1. The permittee shall not operate FGMELTING unless a malfunction abatement plan (MAP)...

Discussion – During the inspection source and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate FGMELTING unless a fabric filter collector controlling emissions...

Discussion – Baghouse A and B control emissions from FGMELTING. Baghouses were functioning at the time of inspection.

2. The permittee shall not operate FGMELTING unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from FGMELTING by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

FGPOURCOOL

III. Process/Operational Restrictions

1. The permittee shall not operate FGPOURCOOL unless a malfunction abatement plan (MAP)...

Discussion During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 an accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate FGPOURCOOL unless a fabric filter collector controlling emissions...

Discussion – Baghouse A, B, and D control emissions from FGPOURCOOL. Baghouses were functioning at the time of inspection.

2. The permittee shall not operate FGPOURCOOL unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from FGPOURCOOL by conducting 1-hour VE readings following procedures of federal reference test method 9...

Discussion – for information about these reports see MACES>Reports Received.

FGSHAKEOUT

III. Process/Operational Restrictions

1. The permittee shall not operate FGSHAKEOUT unless a malfunction abatement plan (MAP)...

Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23. See MACES>Compliance Activity>report CA_N605267677 for a review of the MAP

IV. Design/Equipment Parameters

1. The permittee shall not operate FGSHAKEOUT unless a fabric filter collector controlling emissions...

Discussion – Baghouse C, D, and E control emissions from FGSHAKEOUT. Baghouses were functioning at the time of inspection.

2. The permittee shall not operate FGSHAKEOUT unless a gauge measures pressure drop and sounds alarm when pressure drop exceeds 10 inches of water...

Discussion – Each baghouse has a pressure gauge and alarms. The alarms are a combination of operator panel alarms and notification via text/email to the plant management.

V. Testing/Sampling

1. The permittee shall verify every six months the VE from FGSHAKEOUT by conducting 1-hour VE readings following procedures of federal reference test method 9...

FGCORECHEM

III. Process/Operational Restrictions

1. The permittee shall capture all waste materials and solvents used in FGCORECHEM and store them in closed containers...

Discussion – All the containers in the FGCORECHEM area were covered at the time of inspection.

2. Permittee shall dispose of spent filters...

Discussion – the process used does not include any filters.

3. The permittee shall handle all VOC and or/HAP containing materials used in FGCORECHEM... In a manner to minimize the generation of fugitive emissions...

Discussion – The Section Supervisor stated that the materials used are VOC free. There was no odors and no observable fugitive emissions in this section of the process indicating that the fugitive emissions were being minimized.

4. The permittee shall establish and implement specific procedures for the light off of core washes....

Discussion – There is no light off in this process. The process at the old foundry used a light off process, the new foundry does not. There is an established procedure available on the electronic display at the process for employees to refer to for all the FGCCORECHEM processes.

VIII. Stack Restrictions

1. The permittee shall not discharge emissions from FGCORECHEM directly into the atmosphere...

Discussion – Any discharge of emissions is into a dust collector.

FGEG

III. Process/Operational Restriction

1. Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23.

IV. Design/Equipment Parameters

1. Each engine shall in FGEG shall be certified to meet the applicable emission standard of 40 CFR 60.4233...

Discussion – engines are certified, installed, and maintained by MI CAT. Records are on file in the computerized maintenance system at the source.

2. The permittee shall equip each engine in FGEG with a non-resettable hour meter...

Discussion – Each engine's hour meter is non-resettable. EUENGINE1 hours 131.4 and EUENGINE2 hours 133.5.

3. The name plate capacity of each engine in FGEG shall not exceed 300 kW...

Discussion – The name plates specify each engine at 300 kW.

VIII. Stack/Vent Restrictions

Stack and Vent ID	Max Exhaust	Estimated	Min Stack Height	Estimated Stack Height
SVEG1	6"	6"	10'	10'
SVEG2	10"	6"	10'	10'

The stacks are inside of an external enclosure that is part of the engine skid and appear to exit the top of the enclosure for 1-2". I estimated that the enclosure was at least 10' tall and therefore the stack met the requirement for height.

IX. Other requirements

1. Permittee shall comply with 40 CFR Part 60 Subpart A and Subpart JJJJ as they apply to FGEG...

Discussion – the source engines are under the 500 horse power (they are 402 horse power) and this does not apply.

2. Permittee shall comply with 40 CFR Part 60 Subpart A and Subpart ZZZZ...

Discussion – records kept onsite indicate that compliance is being maintained. The maintenance of the engines is handled by third party and then reports of the maintenance are stored onsite in the computer maintenance system.

FGMACTZZZZZ

III. Process/Operational Restrictions

1. For each segregated metallic scrap storage area, bin, or pile, the permittee must comply with the materials acquisition requirements described in 40 CFR 63.10885(a)...

Discussion-- see MACES>Compliance Activity> Report CA_N605267540 for information on the plan requirements.

2. The permittee must prepare and operate at all times according to a written operation and maintenance plan....

Discussion – Source has a standardized plan that is used for facility and the required processes are found referred to in the different plans. Currently the bulk of the O&M plan is found in the MAP. The source is reviewing the MAP and going to ad language to have it cover the O&M plan for AQD purposes.

3. The permittee must install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse on melting...

Discussion – the baghouse for melting, FGMELTING, is baghouse AB and has a bag leak detection system installed and maintained on it. Records confirm that the emplacement of the

4. The permittee must make monthly inspections of the equipment that is important to the performance of the total capture system...

Discussion – the monthly maintenance requirements are tracked in the computerized maintenance system. Every EU/FG has a digital data display that alerts with alarms and shows operational data for the plant and can be accessed by plant employees to ensure that proper operation is maintained.

5. The permittee must install, operate, and maintain each CPMS or other measurement device according to your O&M Plan.

Discussion – The O&M plan and MAP are combined into a single document. The requirements and the information regarding the operation and maintenance is in the computerized maintenance system at the source.

FGFACILITY

III. Process/Operational Restriction

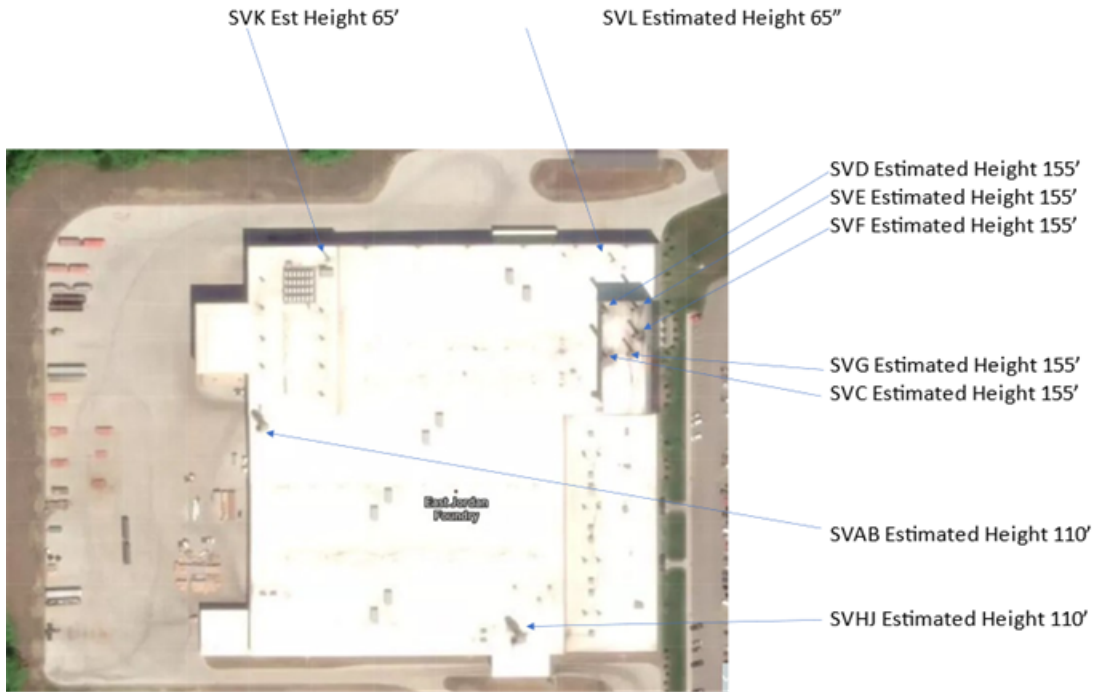
1. Discussion – During the inspection Tim and I discussed updates (administrative in nature) to the MAP. Updated MAP was submitted 9 June 2023 and accepted by the Department on 12 June 23.

2. Permittee shall not operate FGFACILITY unless a fugitive dust control plan is implemented...

Discussion – See MACES>Compliance Activity>Fugitive Dust Control Plan report CA_N605267510 for information relating to this plan and its implementation at the source.

VIII. Stack/Vent Restrictions

Discussion -- The stack height above ground was estimated using the Nikon Forestry Pro II handheld laser range finder.



Each stack appeared to meet the requirements of maximum diameter and minimum stack height.

NAME DJB

DATE 6-20-23

SUPERVISOR Shane Nixon