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

B436445590

FACILITY: EDW C LEVY CO PLANT 3		**SRN / ID:** B4364
LOCATION: 100 WESTFIELD, ECORSE		**DISTRICT:** Detroit
CITY: ECORSE		**COUNTY:** WAYNE
CONTACT: Rick Herrera , Plant Manager		**ACTIVITY DATE:** 08/13/2018
STAFF: Katherine Koster	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: FY18 Targeted Inspection		
RESOLVED COMPLAINTS:		

REASON FOR INSPECTION: Targeted Inspection
INSPECTED BY: Katie Koster, AQD
PERSONNEL PRESENT: Rick Herrera, Plant Manager, Brian Clark, Assistant Plant Manager, Alicia Ramsdell, Matt Perko, and Tom Green – Levy Corporate Environmental
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FACILITY BACKGROUND

Edward C. Levy Co. Plant 3 is a support facility for U.S. Steel – Great Lakes Works (USSGLW) operations. All of the plant operations are entirely dependent on US Steel. The facility operates 24 hours a day, 7 days a week, and handles and processes slag such as BOF slag, desulfurization byproduct (kish) slag, runway/pit slag, caster slag, and other miscellaneous slag and debris generated by the mill. Blast furnace slag is not processed here; it is loaded into Levy trucks on Zug Island and transported to Levy Plant 1. All metallics are separated, crushed, and screened and returned to USS. The non-metallic portion of the slag is screened and separated into different sizes and sold by Levy.

REGULATORY ANALYSIS

Although this site is a support facility and AQD considers it part of the same stationary source with USSGLW, it was negotiated through a court order that the facility be issued its own ROP.

While the two facilities are considered the same source for Title V applicability, individual Title V permits are issued to Edw. C. Levy Co., Plant 3 and USSGLW separately. Edw. C, Levy Co., Plant 3 was originally intended to be aggregated in the USSGLW's Title V permit as a Section. However, through negotiations that arose from the court judgment of the suit filed by the company against the AQD contesting the aggregation of the Levy Plant 6 with Severstal North America, Inc. (use to be Rouge Steel Company) ROP, Edward C. Levy Company agreed to submit a separate ROP application for Edward C. Levy Company Plant 3 and was issued an ROP of its own."

The facility is operating under its own Wayne County fugitive dust SIP consent order No. 17-1993 revised September 9, 1994.

ROP MI-PTI-B4364-2015 was issued as a renewal on December 2, 2015.

New Source Performance Standards (NSPS) /NESHAPS

It appears that the facility is not subject to Subpart OOO. Slag is not considered a non-metallic mineral. See attached applicability determination.

I reviewed the list of the NSPS source categories. The regulation for metallic mineral processors (Subpart LL) relates to mining and recovery of materials from ore which is not the situation at Plant 3.

There are three generators that were included in the ROP Title V renewal that are subject to the RICE MACT and/or NSPS IIII.

PROCESS OVERVIEW

Edw. C. Levy Co. Plant 3 consists of the following major operations:

The slag processing plant (EUSLAGPLANT) is a 350 ton per hour slag processing operation including one grizzly feeder, four screens, two crushers and up to twenty conveyors and stackers. It is equipped with water spray systems for air pollution control.

The scrap benefication processing plant (EUFEBENEFICATION) is a 150 ton per hour operation where the desulfurization slag (kish) is separated into metallics and non metallics and screened into two main sizes for USS. Processing equipment includes one grizzly feeder, three screens, and up to eleven conveyors and stackers. It is equipped with water spray systems for air pollution control. Formerly referred to as the kish debris plant in the SIP consent order No. 17-1993.

At the kish wetting station (EUKISHPOTDUMP), kish pots are transferred from USSGLW's No. 2 BOP iron skimming station to Levy's watering station where pots are quenched with water for a minimum of 24 hours to cool the kish and control particulate matter when kish pots are dumped and emptied at the kish pot dump station. There are a total of 10 watering stations that comprise the kish wetting station. USSGLW was issued a permit to install for the kish wetting station but it is installed at Levy Plant 3. Also, the day-to-day operation and maintenance of this station is handled by Levy. USSGLW claims that compliance responsibility of this station with all the applicable air pollution regulations lies with Levy Plant No. 3.

There are two basic oxygen furnace (BOF) slag pits (EUBOFSLAGPIT), with water spray systems for air pollution control. A skull knocking station is in between the two pits. Dust boss misters are installed at the knock station as well as one for each pit at the stockpile while loading into the grizzly feeder.

The following processes are sources of air emissions that meet R336.1290 exemption criteria according to the facility:

The drop ball crane process (EUDROPBALLCRANE) consists of dropping a large steel ball from a crane onto scrap steel to break it into small pieces to be reused at the USSGLW steel mill. There are two pits; one for BOF skull breaking and the other for kish skull breaking.

The debris plant (EUDEBRISPLANT) is made up of 1-200 ton per hour hopper, 1-200 ton per hour grizzly feeder, and 1-200 ton per hour conveyor with 4 transfer points. The material is watered at the Euclid watering station prior to being fed into the debris plant for fugitive dust control. This is formerly referred to as the mill scale plant in the SIP consent order.

The recycle material operation (EURECYCLEMATOPERATION) is made up of 1-100 ton per hour hopper, and 1-100 ton per hour conveyor with 2 transfer points (aka the pot slagger). Levy puts seven tons of slag in the bottom of the pot for protection. The slag acts as a cushion as molten steel can burn a hole right through the pot.

The material transfer conveyor system (EUMATRANSFERCONVEYOR) is made up of 1-200 ton per hour conveyor with 4 transfer points.

Cold cleaners that meet the applicable requirements of R336.1281(2)(h) are installed.

Three generators and a portable screen are listed in the ROP. However, at this time, only one generator is in use and that is the generator that provides support power to the FEBENFICATION plant (EUPROCESSGEN).

INSPECTION NARRATIVE

AQD inspector, Katie Koster, arrived at Levy Plant 3 on August 13, 2018, and met with the individuals listed at the beginning of this report. The entrance to the plant was wet as was Westfield Street all the way to Jefferson. The truck wheel wash station was spraying water although no trucks were present. Mr. Herrera and Mr. Clark assumed their positions in December 2017. We discussed the operations and then Mr. Herrera drove me around the site and provided a tour. I observed a water truck circling the property and spraying water onto the roadways (paved and unpaved). According to the facility, the water truck is owned by Levy and a water cannon was recently installed in the truck. The water truck waters the entire facility, paved and unpaved portions and storage piles, twice a day weather permitting. In addition, if staff identifies a fugitive dust area of concern they will call out the water truck for additional watering.

In addition to the water truck, Levy contracts with National to wet sweep twice a week on Tuesday an Thursday and applies calcium chloride dust suppressant twice a week on all unpaved roads and lots. This is significantly higher than the permit requirement of once every three weeks. They also perform a non certified visible emissions observation five days a week.

Plant 3 exists to provide a service to USSGLW; all metallics are returned to the mill for reuse. Tall berms in and around the site, visible from West Jefferson, are iron and steel fines for which there is no market. According to Levy, some of the material has been stockpiled for 20-30 years. The piles have developed a hard crust layer and some have vegetation growing on them. Based on my observations, they do not appear to be a fugitive dust source.

We viewed the BOF slag pits. Levy refers to one pit as the "American" pit and the other as the "Canadian" pit based on the direction the pit faces. Each pit takes about 20 pots of slag before it is "full." Once full, each pit is watered for 24 hours and then dug. A pipe runs along one side of the pit and has various water release points. It was explained to me that there are not really any water "sprays" to maintain and replace; the water exits holes that are cut into the pipe. It takes 4 to 6 hours to dig out a pit. In between the two pits is the skull knocking station where empty slag pots are turned upside down and hit/knocked against a concrete wall to dislodge the hardened mass at the bottom of the pot (aka a "skull"). Every pot is knocked. All of the skulls contain a residual amount of steel that can be reused in the process. Sometimes the outer layer of a skull appears to be entirely slag, but it could break open during the knocking process (to dislodge it from the base of the pot) and release molten steel. This could cause an explosion if water is present. There is a mister that is supposed to be in use when the pot knocking occurs. The pits were not being dug today and I did not observe any dumping or skull knocking. When the mill is running smoothly, a pit is dug every third day. The skull station is dug every day.

Once cooled, the slag is moved to a holding pile and then fed into the grizzly at the start of the EUBOFSLAGPLANT. The slag processing plant separates metallic material from non-metallic and screens it into the following sizes: 6X12 in., fines (non usable material stockpiles), chips (¾ - ¼ in), and B scrap (6 in – ¾ in), and A scrap. B scrap is used in the blast furnaces. The non-metallic material is crushed and screened into different sizes for use as a protective liner in the bottom of the slag pots, in the basic oxygen process, or sold by Levy as ASP9 which is used in asphalt or in agricultural products due to the high lime content. Sizes are 3x (¾– 4 in.), chip (½ - ¾ in), asphalt (½ by zero), and softball size for cushion in the slag pots or in the blast furnace. Water sprays are present in the conveyors of the BOFSLAGPLANT for the control of fugitive dust. The plant was not in operation at the time of inspection. Sprays are on as needed when the plant is running.

The EUFEBENEFICATION plant processes kish material. Six sizes of metallics are produced. USS used two of the sizes. Fines are stockpiled, chips go to USS - Gary Works, and Tube City IMS handles the rest. Non metallics are landfilled at USS's expense. The process was not operating during the inspection. There is a generator associated with this process (EUPROCESSGEN).

At the kish pot watering station, there are 10 stations available. According to Levy, the kish pots are used slag pots. Since the pots are reused for kish, they are already "banged up" by the time that Levy begins using them. Potassium permanganate is added to the water spray for odor control. Water sprays were operational at the stations regardless of whether a pot was in place. Approximately two to three kish pots are dumped every 24 hours. To the west of the pot watering station, are two Euclid ("PT cruiser") watering stations (north and south) for watering pit slag and debris hauled from the plant. It was explained to me that there are not really any water "sprays" to maintain and replace; the water exits holes that are cut into the pipe.

Next, kish pots are dumped in one of two pits. At this point, the material is loose and wet. Since the water cools the kish, it contracts and makes it easier to fully empty the pot including the skull. No watering occurs at the kish dump because the material is already saturated. However, the kish skulls need to be broken by a drop ball crane in the breaking pit. No activity was occurring at the kish dumping area during the inspection.

Two breaking pits exist on site. The cranes are used for kish skulls, caster/tundish slag skulls, pit scrap, and beached iron. There are no water sprays in the breaking pits. A C90 type crane is used for the kish, and C80 crane for other pit. Activity was occurring in one of the pits. I observed the drop ball fall two times. This activity did not generate any visible emissions. Pieces returned to the mill have to be below

a certain size specified by the mill. Even if a piece can fit into the BOF vessel, if it does not meet the size requirement, there is a chance that it would not fully melt during a heat and could block the tap hole.

The debris plant was not in operation. There are various piles of debris such as mill scale, tundish debris, and scarfing scale.

We observed the pot slagger which was not in use at the time. Slag pots have to be at least 200F before being returned to the mill.

Overall, fugitive dust did not appear to be an issue while on site as everything was pretty wet. However, I did not observe any truck traffic or load out operations while on site.

An additional mister was installed at the slag pits. Currently, sprays are observed weekly. I did not observe the cold cleaners at this time.

APPLICABLE RULES/PERMIT CONDITIONS EVALUATED

Facility is operating under MI-ROP-B4364-2016. This ROP includes conditions from fugitive dust SIP Consent Order 17-1993 revised 9/9/94.

I requested and reviewed the records outlined in the attached email.

Sourcewide Fugitive Dust Requirements

- **To minimize the fugitive emissions from the loading of trucks and the transporting of material off-site, the following operating practices shall be adhered to:**
  - **IN COMPLIANCE. All shipping trucks are tarped according to facility. All trucks transporting finished product that has the potential to emit fugitive particulate matter, or material for the landfill, shall be tarped before leaving the property.**
  - **DID NOT OBSERVE AT THIS TIME. No loading was occurring. Drop heights of the front end loader bucket will be no more than two (2) feet above sideboard of the trucks.**
  - **IN COMPLIANCE. Wheel wash is in operation and in use. All trucks transporting finished product, or material for the landfill, shall pass through the truck wheel wash before leaving the property, weather permitting.**
  - **DID NOT OBSERVE AT THIS TIME. Additional water can be added to the finished product stockpiles, with the use of portable rainbirds, if emissions from load-out exceed 5% opacity.**

- **PENDING. A complete demonstration has not yet been submitted related to calcium chloride vs. lignosulfonate However, the facility is currently applying calcium chloride dust suppressant much more frequently than required by this condition. As such discretion is being applied. Control of emissions due to vehicle movement about the stockpiles shall be accomplished by applying lignosulfonate or an equivalent or more effective material to the traveled areas among the piles. If lignosulfonate is used, the application rate shall be 5 gal/100 sq. ft., the diluted ratio shall be 3:1, and the application frequency shall be once every three (3) weeks. The actual square footage to be controlled shall be dependent upon the amount of material in storage. If a dust suppressant other than lignosulfonate is used, facility shall submit the demonstration required in SC IX.1.B.1.**

- **IN COMPLIANCE. I did not observe any spilled material while conducting an inspection. Spilled material under conveyors shall be attended to on an ongoing basis. Spillage on roadways shall be removed daily. A truck operator who has spilled material onto the road shall be notified so that appropriate action can be taken to prevent future incidences.**

B. STOCKPILE AREAS and ACTIVITIES.

1. **IN COMPLIANCE. Raw slag is thoroughly quenched for 24 hours before loading into the grizzly. Raw slag shall be watered prior to transfer by front end loader to the grizzly/feeder at the beginning of the process plant. Water is added to the material at a rate of 4.0 gallons per ton of slag processed.**

2. DID NOT OBSERVE. No load out was occurring. Load-out emissions shall be controlled by limiting drop height of the bucket to a maximum of two (2) feet above the sideboard of the truck.

C. ROADWAYS AND PARKING LOTS

1. Paved Roads
   a. IN COMPLIANCE. Paved roads are watered twice a day with Levy's dedicated water truck, Monday through Friday. While the plant is open on the weekends to receive slag and kish pots from the mill, the paved roads are not in use. Trucks and other material handling equipment is not being operated on the paved roads, and no loading of trucks or operation of the slag plant occurs on the weekends. As such, compliance was chosen. Paved roads shall be cleaned daily during operating hours, weather permitting, with a power flush truck.
   b. IN COMPLIANCE. No track out was observed while on site. Westfield was wet when I arrived. Track-out shall be cleaned up daily when it occurs.
   c. IN COMPLIANCE. Speed limit signs are posted. Speed limit on paved roads is 15 MPH.
2. Unpaved Roads
   a. PENDING. A complete demonstration has not yet been submitted related to calcium chloride vs. lignosulfonate. However, the facility is currently applying calcium chloride dust suppressant much more frequently than required by this condition. As such discretion is being applied. Unpaved roads shall be treated with a lignosulfonate (or equivalent) dust suppressant. If lignosulfonate is used, the application frequency shall be once every three weeks at an application rate of 1.0 gallons per square yard and a dilution ratio of 3:1. If a dust suppressant other than lignosulfonate is used, facility shall submit the demonstration required in SC IX.1.B.1.
   b. IN COMPLIANCE. Speed limit signs are posted. Speed limit on unpaved roads is 5 MPH.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. IN COMPLIANCE. Records include the required data. See attached. The permittee shall record the data and information specified in Appendix 4, Section 4.1- Required Records for Fugitive Dust Sources and shall keep the record for a period of at least two years, and records shall be made available to AQD upon written or verbal request. The permittee may use alternate formats with the approval by the AQD District Supervisor for recording equivalent information without the need to modify or amend this permit.

2. IN COMPLIANCE. Log is attached. The minimum of 5 days per week is being met and the facility is performing observations beyond the minimum required time period of March – October. The permittee shall perform a non-certified visible emission observation of the fugitive dust sources in SC III.A, B and C at least 5 days per week excluding non-operating days during March through October. The permittee shall initiate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken.

VII. REPORTING

4. NOT APPLICABLE. No reports have been received. Facility claims SIP requirements have been met and no report is necessary. A quarterly report shall be submitted by the permittee to AQD identifying each day in which an emission limit, operational requirement, or recording requirement, as specified in SIP No. 17-1993 (Revised 9/9/94) Exhibit A (Fugitive Dust Control Plan, Edward C. Levy Co. – Plant #3), was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data was collected.

EUSLAGPLANT - Processing equipment associated with a 350 ton per hour slag processing operation located at Levy Plant 3. Processing equipment includes one grizzly feeder, four screens, two crushers and up to 20 conveyors and stackers.

POLLUTION CONTROL EQUIPMENT Water spray system

I. EMISSION LIMIT(S)

1. IN COMPLIANCE. See attached. No PM emissions exceeded 64.7 pounds per day from January 2017 – August 2018. PM shall not exceed the amount specified in Table 32 of R336.1331(1)2 based on a calendar day average.
2. IN COMPLIANCE. I did not observe fugitive dust from the slag plant while on site. Based on the attached VE summary log, no readings above 5% opacity on a 3 minute average have been observed by the reader. Fugitive Dust is limited to 5% opacity on 3-minute average from any road, lot, storage pile, or material handling activity at a storage pile.
3. IN COMPLIANCE. I did not observe fugitive dust from the slag plant while on site. Based on attached VE summary log, no readings above 5% opacity on a 3 minute average have been observed by the reader. Fugitive Dust is limited to 20% opacity on a 3-minute average from any other source.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. IN COMPLIANCE. I observed Euclid s being watered in the watering station in use during my inspection. Raw slag delivered by Euclids from the steel mill shall be watered in the Euclids before it is stockpiled in the material handling stockpile.
2. IN COMPLIANCE. Facility is using the moisture content of the finished material (non metallics) to demonstrate compliance as this would be the "worst case" moisture content. Weekly records were presented. A spot check indicates that the ½ by zero product is meeting the minimum moisture requirement. The ¾ by ½ generally is too, but the 3X is not. Below is an explanation I received from Ben Kroeger, Levy environmental staff, on 8/16/17: The 3X and ¾ by ½ are very coarse aggregate and do not readily retain water. However, due to their size and characteristics, they do not become airborne and fugitive dust is not a concern. At this time, this is acceptable to AQD.

VI. MONITORING/RECORDKEEPING

1. IN COMPLIANCE. Readings are being taken at the required frequency by the contracted certified VE readers. Readings are stored in Levy's electronic recordkeeping system. The permittee shall perform a Method 9D certified visible emission observation of a representative operating part of EUSLAGPLANT including the grizzly feeder, crushers, screens, and all conveyors and all transfer points on conveyors at least once every two weeks for a minimum of 15 minutes during screening operations. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken.

2. IN COMPLIANCE. See attached records for January 2017 through August 2018. The permittee shall monitor and record the daily tonnage of material throughput for EUSLAGPLANT.

3. IN COMPLIANCE. See attached records for January 2017 through August 2018. The permittee shall calculate daily PM emissions based on the daily throughput and AQD agreed upon emission factors.

4. IN COMPLIANCE. Sample results were presented during the inspection. Samples have been taken on a weekly basis. The permittee shall sample each finished product storage pile to determine the minimum moisture content by weight on a weekly basis. Records of the minimum moisture content shall be maintained. After six weekly samples, the permittee may petition the Department to reduce the sampling frequency to monthly. This petition must be submitted in writing and approved by the appropriate AQD District Supervisor.

EUFEBENEFICATION - Processing equipment associated with a 150 ton per hour iron (Fe) scrap benefication operation located at Levy Plant 3. Metallic materials are screened into various sizes. Processing equipment includes one grizzly feeder, two screens, and up to eleven conveyors and stackers. Equipped with water spray systems for air pollution

POLLUTION CONTROL EQUIPMENT Water spray system

I. EMISSION LIMIT(S)

1. IN COMPLIANCE. See attached summary VE record for January 2017 through August 2018 readings. Opacity limit is 10% on a 6-minute average for EUFEBENEFICATION.
2. DID NOT EVALUATE. Process was not in operation at the time of the inspection.

Fugitive Dust limit of 5% opacity on a 3-minute average for fugitive dust from any road, lot, storage pile, or material handling activity at a storage pile.

3. DID NOT EVALUATE. Process was not in operation at the time of the inspection.
Fugitive Dust limit of 20% opacity on a 3-minute average for fugitive dust from any other source.

II.1 and 2 – IN COMPLIANCE. See attached records. From January 2017 through August 2018, highest tonnage on a 12 month rolling time period was 70,313 in May 2018. Tons per hour has not exceeded 150 based on attached records. Material throughput limited to 150 tons per hour and 624, 000 tons per 12 month rolling.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. IN COMPLIANCE. See attached. From January 2017 through August 2018, the highest 12 month rolling hours of operation was 1414 hours in May 2018. The permittee shall not operate EUFEBENEFICATION for more than 4160 hours per year based on a 12 month rolling time period.

2. IN COMPLIANCE. The only material received for this process is kish generated at the No. 2 BOP from U.S. Steel. No asbestos is in this material. The permittee shall not crush or screen any asbestos tailings or asbestos containing waste materials in EUFEBENEFICATION pursuant to the National Emission Standards for Hazardous Air Pollutants 40 CFR Part 61, Subpart M.

3. IN COMPLIANCE. Water sprays are routinely inspected for proper operation. See attached. The permittee shall not operate EUFEBENEFICATION unless water spray bars located on the tail pulleys are installed and operating properly.

VI. MONITORING/RECORDKEEPING

1. IN COMPLIANCE. Readings are being taken at the required frequency by the contracted certified VE readers. Readings are stored in Levy's electronic recordkeeping system. The permittee shall perform a Method 9D certified visible emission observation of a representative operating part of EUFEBENEFICATION including all conveyors and all transfer points on conveyors at least once every two weeks for a minimum of 15 minutes during screening operations. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken.

2. IN COMPLIANCE. See attached records. Sprays are checked weekly. The permittee shall periodically inspect the water spray bars located on the tail pulleys of EUFEBENEFICATION to determine the operational and physical condition of the water spray bars at least once per month and immediately after observing visible emissions in excess of the applicable limitation. The water spray bars will be inspected as necessary immediately after a malfunction or failure of the water spray bars or the process equipment to determine the reason for the malfunction or failure. Written records of each inspection and corrective action taken, if any, shall be maintained.

2. IN COMPLIANCE. See attached records. The permittee shall monitor and record the daily tons of material throughput of EUFEBENEFICATION.

3. IN COMPLIANCE. See attached records. The permittee shall monitor and record the daily hours of operation of EUFEBENEFICATION.

4. IN COMPLIANCE. See attached records. The permittee shall monitor and record the monthly and 12 month rolling hours of operation of EUFEBENEFICATION as determined at the end of each calendar month.

5. IN COMPLIANCE. See attached records. The permittee shall monitor and record the total material throughput of EUFEBENEFICATION on a monthly and 12-month rolling time period as determined at the end of each calendar month.

EUKISHPOT DUMP - Kish pots are dumped at the kish pot dump station for processing after they have been saturated with water for 24 hours at the kish pot watering station. Equipped with 10 water spray system at the kish pot watering station.

POLLUTION CONTROL EQUIPMENT Water sprays

I. EMISSION LIMIT(S)

IN COMPLIANCE. See attached summary log of readings for 2017 and 2018 YTD. Opacity limited to 10% on a 6 minute average for EUKISHPOTDUMP (Kish pot dumping area)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. **IN COMPLIANCE. Kish watering records provided show that the minimum duration of 24 hours of watering was met. See attached. The permittee shall water the kish in pots at the kish watering station for twenty-four (24) hours before it is dumped at the kish pot dump station for processing.**

2. **IN COMPLIANCE. River water is recycled but fresh makeup water (river water) is provided by U.S. Steel. The permittee shall not use untreated wastewater or process water for kish pot watering makeup.**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. **IN COMPLIANCE. No exceedances of the 10% 6 minute average opacity limit have been observed based on attached summary log. Also, system appears to be working properly based on visual observation, frequent checks of water sprays, and watering time of 24 hours being maintained. The permittee shall not dump kish pots unless the kish pot watering system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the kish pot watering system is defined as maintaining the visible emissions limit from the kish pot dumping area.**

VI. MONITORING/RECORDKEEPING

1. **IN COMPLIANCE. See attached records. The permittee shall record and keep certification from the permittee that the kish in each of the pot at the kish watering station was watered for approximately twenty four (24) hours before it was dumped at the kish pot dump station for processing.**

2. **IN COMPLIANCE. Based on the individual VE sheets, the requirements of this condition appear to be met. The permittee shall perform a Method 9 certified visible emission observation of the kish pot dump station at least once every two weeks for a minimum of 15 minutes or 3 kish pot dumps totaling a cumulative duration of at least 15 minutes during the kish pot dumping operation. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken.**

3. **IN COMPLIANCE. See attached records. The permittee shall periodically inspect the water sprays at the kish pot watering station to determine the operational and physical condition of the water sprays at least once per month and immediately after observing visible emissions in excess of the applicable limitation. The water spray system will be inspected as necessary immediately after a malfunction or failure of the water sprays to determine the reason for the malfunction or failure. Written records of each inspection and corrective action taken, if any, shall be maintained.**

EUBOFSLAGPIT - Basic Oxygen Furnace (BOF) slag pit with water spray systems for fugitive dust emission control.
POLLUTION CONTROL EQUIPMENT Water spray system

I. EMISSION LIMIT(S)

2 and 3. PENDING. Based on the summary VE log, there are readings of the EUBOFSLAGPIT operations during slag dumping and digging that are above 5% on a 3 minute average. These instances need to be reported as deviations. AQD has informed the facility. Facility disagrees that the slag pits are subject to a 5% opacity limit and is applying the 20% limit on a 3 minute average. None of the certified VE readings have been above 20% on a 3-minute average. Further discussion is needed with the facility and with AQD management to determine the appropriate opacity limit. Fugitive Dust is limited to 5% opacity on a 3-minute average for fugitive dust from any road, lot, storage pile, or material handling activity at a storage pile. Fugitive Dust limited to 20% opacity on a 3-minute average for fugitive dust from any other source.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. **IN COMPLIANCE. Water sprays are in use at the slag pits as observed during the AQD inspection. The permittee shall quench the dumped slag by water sprays before digging.**

VI. MONITORING/RECORDKEEPING

1. **IN COMPLIANCE. See attached records. Frequency and location of readings appear to be met for January 2017 through August 2018 except for April, June, and part of February 2018 for slag digging. This resulted in 4 to 5 missed VE readings of slag pit digging. The company claims the VE reader was on site but did not submit the VE sheets before leaving. Corrective actions have been taken including revising procedures to be followed when the contractor is leaving the site. As this has not been a recurring issue and corrective actions have been taken, compliance is chosen at this time. If it happens again, a violation notice will be issued. The permittee shall perform a Method 9D certified visible emission observation of a representative slag dumping or digging operation at least once every two weeks for a minimum of 15 minutes during dumping or digging operation. Both operations shall be observed within a month. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken.**

2. **IN COMPLIANCE. See attached records. Frequency and location of readings appear to be met for January 2017 through August 2018. The permittee shall perform a Method 9D certified visible emission observation of the pot knocking station during representative pot knocking operations at least once every two weeks for a minimum of 15 minutes. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken.**

3. **IN COMPLIANCE. Records were presented during the inspection for the January 2017 through August 2018. Sprays are checked weekly. The permittee shall conduct periodic inspections for the purpose of determining the operational condition of the water spray systems on slag pit dumping areas, including the pot knocking station, and if necessary, record the reasons for malfunction or failure noted from the inspection. These inspections shall be conducted during scheduled outages or downtimes, and immediately after observing visible emissions, but not less frequently than at least once a month and shall keep a written record of each inspection and corrective action taken if any.**

EXEMPT EMISSION UNITS
IN COMPLIANCE:

- **Cold cleaner – One cold cleaner that meets the Rule 281(2)(h) exemption. Procedures posted. Specifications on cold cleaner are attached to the prior inspection report.**

- **Rule 290 - EUDROPBALLCRANE, EUDEBRISPLANT, EURECYCLEMATOPERATION, EUMATRANSFERCONVEYOR, EUPORTBIV. Maximum monthly emissions demonstrating compliance with Rule 290 have been previously provided and have not changed.**
- **One generator is currently in use at the moment. It is 268 hP which is 682,428 BTU/hr output. Assuming 30% efficiency yields an input of 2.27 MMBTU/hr maximum heat input. This is below 10MMBTU/hr heat input and meets the Rule 285(2)(g) exemption.**

NSPS/MACT

One diesel fired generator subject to RICE and NSPS IIII is currently in operation. It was installed in 2016. It has been operated for 3637 hours thus far. Maintenance records were provided. I informed the facility that more information as to what type of maintenance was performed is needed moving forward. Documentation provided that the generator is using ultra low sulfur diesel fuel. I did not make a compliance determination at this time.

COMPLIANCE DETERMINATION

At this time, facility appears to be in compliance with conditions evaluated above.

NAME Katie Rose DATE 9/26/18 SUPERVISOR W.M.