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Manila

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

B424339802		
FACILITY: EDW C LEVY CO PL	SRN / ID: B4243	
LOCATION: 13800 MELLON AV	E, DETROIT	DISTRICT: Detroit
CITY: DETROIT	COUNTY: WAYNE	
CONTACT: Robert Michalik , Plant Manager		ACTIVITY DATE: 05/12/2017
STAFF: Katherine Koster	SOURCE CLASS: MAJOR	
SUBJECT: FY2017 Scheduled In	nspection	
RESOLVED COMPLAINTS:		

Reason for Inspection: Targeted Inspection Level of Inspection: PCE Inspected by: Katie Koster, AQD Personnel Present: Ben Kroeger, Corporate Environmental Engineer Facility phone number: 313-690-0139

FACILITY BACKGROUND

Edw C. Levy Co. Plant 6 is a support facility for AK Steel – Dearborn Works (formerly Severstal Dearborn, LLC). All of the plant operations are entirely dependent on AK Steel. The plant operates 24 hours a day, 7 days a week, and handles and processes steel slag such as BOF slag, runway/pit slag, caster/tundish slag, and other miscellaneous slag generated by the AK Steel mill. Blast furnace (BF) slag is not processed here; it is processed at the BF slag pits at Miller and Dix by Levy and desulfurization slag is processed at the recently installed desulfurization slag/kish pot watering station (PTI 70-13). The blast furnace slag pits and kish watering station are not considered part of Plant 6; they are included in Section 2 of the AK Steel ROP. At Plant 6, all metallics are separated from the slag, crushed, screened, and returned to AK Steel. The non metallic portion of the slag is conveyed across the Rouge River to Mellon Street. On the Mellon Street side of the operations, the non metallics are separated into different sizes by screening and sold by Levy.

REGULATORY ANALYSIS

Although this site is a support facility to AK Steel, it was negotiated through a court order that the facility be issued its own ROP. Below is an excerpt from the existing ROP staff report (the Severstal name is used because that was the owner of the facility when this was decided):

"Under Rule 336.1119(r), Edw. C. Levy Co. Plant 6 and the Severstal North America, Inc. are determined and treated as a single stationary source and therefore Edw. C. Levy Co., Plant 6 was originally aggregated in the Severstal North America, Inc.'s Title V permit as Section 2. 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 the Severstal ROP, Edw. C. Levy Co., Plant 6 agreed to submit a separate ROP application and will be issued its own ROP." As such, the facility has its own ROP. Plant 6 reports annual emissions under MAERS but it only pays emissions fees and not the facility fee.

Facility is operating under its own Wayne County fugitive dust SIP consent order 18-1993 revised 9/9/94 which is included in the ROP. The ROP was renewed in 2016.

New Source Performance Standards (NSPS)

The facility is not subject to Subpart OOO. Slag is not considered a non metallic mineral. See file for EPA applicability determination.

I reviewed the list of source categories for NSPS. No other NSPS appear to apply. The regulation for metallic mineral processors (Subpart LL) relates to mining and recovery of materials from ore which is not the situation at Plant 6.

NESHAP/MACT

Facility did not include any MACT subject equipment, such as generators, in the recent ROP application.

l did not observe this type of equipment while on site.

PROCESS OVERVIEW

The Levy Plant 6 operation handles all of AK Steel's steel slag. The steel slag is collected in slag pots from AK Steel's Basic Oxygen Facility (BOF). The slag is conveyed by Levy using motorized pot carriers to the EUBOFSLAGPIT where it is poured into one of three pits for air and water cooling before processing. There is fourth pit designated for caster slag. After a pit is full, it is quenched with water sprays for about 16-24 hours. It is very important that during the dumping of molten slag, the area is free of water due to the potential for a thermal explosion. The temperature of the slag and molten steel causes any standing water to instantly expand into steam and the water-slag mixture will "explode". During normal routine steel making operations at the AK Steel BOF Shop, Levy collects and dumps 12 to 16 slag pots per 8-hour shift and digs this dumped slag after 16-24 hours. From the pit, slag is moved by front end loader to another area where it is sprayed with more water and then moved to the staging area for loading into the screening/crushing process. Slag moves through a series of conveyors and screens to remove the metallics on the "Dearborn side" of the plant. Anything metallic from 6 to 60 inches is returned to the mill for reuse. The non metallic portion of the slag is conveyed across the river in the "bridge conveyor" for crushing and separation into various sizes.

Slag pots usually contain some steel as it is impossible to get a complete separation of steel and slag when tapping a heat at the BOF. After dumping the molten slag out of the pot, a hard accumulation of cooled steel mixed with slag usually remains at the bottom and sides of the pot which is called a "skull". To remove this accumulation, the pot carrier moves to the skull knocking station, tips the pot, and bangs it on the wall of the pit. During the banging, the red-hot skull dislodges from the pot and falls into the pit. This can create a cloud of fugitive emissions. A partial enclosure was constructed at the skull knocking pit several years ago for dust control. In addition, two dust boss misters are also in operation inside of the enclosure during knocking. Dislodged skulls are watered and moved to the EUDROPBALLCRANE operation located near the slag pits. The skulls are cracked and broken into smaller pieces by dropping a heavy steel ball with an electromagnetic crane onto the skulls. The broken skulls are returned to AK Steel's BOF for remelting.

This facility has periodically been a source of fallout and opacity complaints. AQD has received 4 complaints in 2017. One of the complaints resulted in a violation notice for fallout.

Levy Plant 6 consists of the following emission units as described in the ROP:

1. EULEVYPLANT6 - Processing equipment associated with Levy Plant 6, including a grizzly feeder, seven conveyors, two screens and a crusher. Equipped with water spray system for air pollution control. It does not include equipment associated with EUCONVEYORSYSTEM and EUDEISTERSCREEN.

2. EUDEISTERSCREEN - A 350 ton per hour Deister Screen designed to separate slag and related materials into various finished product sizes. This emission unit includes nine conveyors and four knuckle conveyors. All but two conveyors are located downstream of the screen. Equipped with water spray system and adjustable stacker height mechanism for air pollution control.

3. EUCONVEYORSYSTEM - Five conveyors, located downstream of the Deister Screen (EUDEISTERSCREEN), designed to transfer slag and related materials to finished product stockpiles. Equipped with water spray system for air pollution control. Additional conveyors located downstream of the Deister Screen are not part of this emission unit.

4. EUBOFSLAGPIT - This emission unit comprises the BOF steel slag dumping area with a water spray quench system for slag cooling and fugitive dust control. Also includes a partial enclosure of the pot knocking station for emission control.

5. EUPROCESSNO2 - 1-100 tons per hour hopper and 2-100 tons per hour conveyor used for recycling slag materials back into the screening portion of the existing slag processing plant.

6. EUCOLDCLEANERS – Cold cleaners that meet the applicable requirements of R336.1281(h).

7. EUDROPBALLCRANE - This process consists of dropping a large steel ball from a crane onto scrap steel to break it into small pieces to be reused by adjacent steel mill, AK Steel, Dearborn Works.

8. EUMATRANSCONVEY - 1-200 tons per hour hopper and one conveyor (Pot Slagger).

INSPECTION NARRATIVE

I arrived at Levy Plant 6 around 1:00 p.m. on May 12, 2017. Mr. Ben Kroeger from the Levy corporate office escorted me onto the premises.

Mr. Kroeger drove me around the site. On the way to Plant 6, we observed the kish pot watering station and natural gas fired preheater that is used to dry the kish pots before returned them to the mill. Visual observation of the water sprays occurs on a weekly basis and potassium permanganate is used for odor control. Kish pots are dumped near the watering station after a minimum of 24 hours of watering. According to Mr. Kroeger, most of the pots are getting 50-75 hours of watering. A crane with a magnet is used to remove metallics from the cooled kish pile and the remaining material is loaded into a truck by front end loader and taken off site. Levy periodically checks the permanganate tank levels and adds permanganate as needed. Water sprays were all operational and appeared to be in good working order based on visual observation of the flow of water out of the sprays and into the pots.

No slag pots were being dumped in the slag pits during the inspection. Water sprays were in use at the pits and at the staging area and appeared to be in good working order. The skull knocking station and drop ball crane were not in operation. The slag in the staging area awaiting loading into the grizzly feeder appeared to be thoroughly wetted. I did not observe any fugitive emissions from this process. The skull knocking station enclosure appeared to be in good condition. Several years ago, the enclosure had been damaged by a water/slag "explosion" during a heavy storm.

We went into the office and reviewed the recordkeeping system where fugitive dust observations and dust suppressant applications are logged and well as throughput and hours of operation.

Next, Mr. Kroeger drove me to the Mellon Street side of the operations. There are 6 different products sizes that can be produced; but at this time, the facility is down to screening for only two products, the 25X and the 3X. We viewed the material exiting the conveyors onto piles. The piles were wet. I did not observe any fugitive dust from the piles. Water sprays along the conveyors are manually activated as needed. The sprays are not on all the time as too much water could mud up the operation. No load out operations were occurring at the time. I noted that the conveyor closest to Dix Street had been adjusted so that the drop height was reduced which I had previously requested due to the observation of fugitive emissions off of the conveyor. However, this product has not been screened for the last several months according to Levy.

APPLICABLE RULES/PERMIT CONDITIONS

SOURCE-WIDE CONDITIONS - MI-ROP-B4243-2016

Levy Plant 6 has an approved fugitive dust control program which is outlined in Consent Order SIP No. 18-1993, revised 9/9/94. The requirements and conditions of the Consent Order were made part of the ROP as Source-wide Requirements.

Some of the main elements of the order are summarized below:

Paved roads – Cleaned daily with a power flush or wet vac truck. At this time, it is unclear what paved roads are Levy's responsibility. I have asked facility for clarification.

Unpaved roads - Apply dust suppressant but no frequency specified.

Tarping of all trucks carrying finished product and drop heights no more than 2 feet.

Stock piles – Once per month application of dust suppressant if using lignosulfonate; no frequency specified if using an alternate suppressant.

Based on the records provided, it appears that the frequency of calcium chloride application is once per month for unpaved roads and stockpiles on the Detroit/Mellon Street side (DS in the records). It is unclear what paved roads the company is responsible for. No trucks were on site at the time of the inspection.

EULEVYPLANT 6 – MI-ROP-B4243-2016

<u>DESCRIPTION</u> Processing equipment associated with Levy Plant 6, including a grizzly feeder, seven conveyors including the bridge conveyor, two screens and a crusher. It does not include equipment associated with EUCONVEYORSYSTEM and EUDEISTERSCREEN.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Water spray system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time	Equipment	Monitoring/
		Period/		Testing
		Scenario		Method
1. PM10	1. 1.06 pounds per hour.	1. Calenda	rEULEVYPLANT6	NA
	IN COMPLIANCE – Based on	day		
	the 2016 MAERS, lb/hr	average		
	emissions were 0.63. Emission			
	factors used are from AP-42			
	Section 11.19.2. Since this is a			
	filterable PM10 and PM are the			
	main pollutants of concern. As			
	the lb/hr is calculated based on			
	the maximum tons per hour			
	throughput for each emission			
	source in EULEVYPLAN16, the	2. Based		
	vear and represents "worst	on a 12-		
	case". Appendix A.	month		
		rolling time		
	2. 0.93 tons per year	period		
	IN COMPLIANCE – Based on			
	the 2016 MAERS, tpy emissions			
	were 0.301. Appendix A.			
2. Deutieulete Metter	1. 8.44 pounds per hour	1. Calendar	EULEVYPLANT6	NA
Particulate Watter	IN COMPLIANCE. PM10	ay		
	filterable is a subset of PM. The	average		
	PM10 limit is 12% of the PM			
	limit. Maximum PM 10			
	emissions were reported as			
	5.25 lbs/hr.	2. Based		
		on a 12-		
	2. 7.43 tons per year	monun rolling time		
	IN COMPLIANCE. PM10	period		
	filterable is a subset of PM. The			
	PM10 limit is 12% of the PM			
	limit. PM10 emissions were			
	reported as 0.301 tpy, so the			
2	10% opacity	6-Minuto	Slag screening	Method 9
Visible Emissions		Averade	operations.	
			conveyors or	
			transfer points	
			on conveyors.	
4. Visible	5% opacity	3-Minute	koadways,	Method 9D

Emissions	Average	parking lots, or storage pile, including any material handling activity at a
	 	storage pile.

IN COMPLIANCE #3 – In compliance based on records generated by the Method 9 reader. A summary of the M9 readings for 2016 and YTD 2017 is attached (Appendix B). No opacity above 10% on a 6-minute average for the slag screening, conveyors, or transfer points has been observed.

IN COMPLIANCE #4 – As it relates to the roadways portion of this condition, in the attached log (Appendix B) roadways appear to be observed under the EU described as Sourcewide Fugitive Sources. 3-minute average values from these observations have been zero. Truck loading from a finished storage pile into a truck is also observed, i.e. Plant 6 truck loading. No exceedances above a 5%, 3minute average have been observed.

II. MATERIAL LIMIT(S)

Material	Limit	Time	Equipment	Monitoring/
		Period/ Operating Scenario		Testing Method
Slag processing plant - Raw Material throughput	400 tons per hour N COMPLIANCE – Throughput and hours of operation are tracked on a daily basis and used to arrive at an hourly number. See attached example. In the example, the 400 tons per hour limit has not been exceeded for January and May 2017. Appendix C. 704,000 tons per year IN COMPLIANCE – Based on the 2016 MAERS, throughput was 382,127 tons (Appendix A). Also, 12 month rolling records are maintained. See attached example for July 2016 – May 2017. The nighest 12 month rolling total was 391,717 tons in March 2017.	Calendar day average 12-month rolling time period	EULEVYPLANT6	VI (1-3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall maintain minimum moisture content of 1.5 percent by weight in the raw materials and crushed stone. NOT IN COMPLIANCE Many of the results for 2017 indicate that the 3X product did not have the minimum moisture content. The ¾- ½ did not meet the minimum moisture on several occasions either. See attached. Proper operation and maintenance of the slag pit water sprays should ensure compliance with the raw material moisture content. Appendix D. I have requested further information from the facility.
- 2. The permittee shall not operate the slag processing plant unless the adjustable stacker height mechanisms and water spray systems are installed, and maintained to minimize fugitive dust emissions on crushers, screens, conveyors, and at all exit points. IN COMPLIANCE Conveyor heights are adjustable and water spray systems are installed and in use as observed during the

inspection. Piles underneath the conveyors were wet.

- 3. The permittee shall not crush and screen asbestos tailings or asbestos containing materials, as defined by the National Emission Standards for Hazardous Air Pollutants (40 CFR, 61.143) regulations, in the crushing plant. IN COMPLIANCE Slag does not contain asbestos. Slag is generated inside the steel mill through the BOF process which does not handle asbestos.
- 4. The permittee shall not operate the slag processing plant unless the program for continuous fugitive dust emissions control for the plant has been implemented and maintained. IN COMPLIANCE The program for continuous fugitive dust emissions control is outlined in SIP CO 18-1993. Fugitive dust records were presented during the inspection. A log of the fugitive dust observations and activities for 2016 and 2017 YTD was provided and is attached. Dust suppressant used is calcium chloride. Facility provided the following explanation. When abnormal conditions are observed, a note is made in the LEAP log and Kleenway is contacted to apply calcium chloride to control dust from the roadways. A review of the SIP CO for fugitive dust does not contain a set frequency of dust suppressant application for unpaved roads; it is only required as needed. Need further explanation of "abnormal" conditions.

NOTE: Unlike Levy Plant 3, the facility does not have a water truck on site. If water is needed, the bucket of a front end loaded is filled and water is distributed by emptying the bucket.

IV. DESIGN/EQUIPMENT PARAMETER(S) and V. TESTING/SAMPLING_NA

VI. MONITORING/RECORDKEEPING

- 1. The permittee shall keep a record of the daily tonnage of material throughput. IN COMPLIANCE See attached example for January and May 2017 from facility electronic recordkeeping system. Appendix C.
- 2. The permittee shall keep a record of the daily hours of operation of the slag processing plant. IN COMPLIANCE - See attached example for January and May 2017 from facility electronic recordkeeping system. Appendix C.
- 3. The permittee shall keep a record of the total material throughput in the slag processing plant on a monthly and 12-month rolling time period as determined at the end of each calendar month. IN COMPLIANCE – Records were presented during the inspection. Records for July 2016 through June 2017 are attached. Appendix C.
- 4. The permittee shall calculate and maintain records of the PM and PM10 hourly emissions based on the daily operating hours and daily throughput and appropriate AP42 emission factors or other factors agreed upon by the appropriate AQD Detroit Supervisor. IN COMPLIANCE. Facility calculates the maximum hourly emissions based on maximum throughput and the AP-42 emission factor. The maximum hourly emissions are below the threshold. Appendix A.
- 5. The permittee shall keep, in a satisfactory manner, calculations determining the monthly and 12month rolling time period mass emissions of PM and PM₁₀ as determined at the end of each calendar month. PENDING. AQD has requested this information.
- 6. The permittee shall keep records as specified in the fugitive dust control program and as required under Consent Order SIP 18-1993, (Revised 9/9/94), Exhibit A, Addendum and Appendix 4 of this permit. IN COMPLIANCE. Records are being maintained as required. Appendix E.
- 7. The permittee shall perform a Method 9 certified visible emission observation of the grizzly feeder, screens, crusher, or of the conveyor system at least once every two calendar weeks for a minimum of 15 minutes during representative 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 or electronic record of each required observation and corrective action taken. IN COMPLIANCE. Frequency appears to have been met. No VE exceedances were observed. Appendix B.
- 8. The permittee shall perform a Method 9D certified visible emission observation of loading activities

- from a finished product storage pile into a truck at least once every two calendar weeks for a minimum of 15 minutes when the loading process is operating. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written or electronic record of each required observation and corrective action taken. IN COMPLIANCE. At this time, the frequency appears to be met and there have been no documented exceedances of the 5%, 3-minute average limit for material handling at a storage pile. Appendix B.
- 9. The permittee shall conduct periodic inspections for the purpose of determining the operational condition of the adjustable stacker height mechanisms and water spray systems on crushers, screens, conveyors, including bridge conveyor side shields (from both sides of the river), and all exit points, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted immediately after observing visible emissions in excess of the visible emission limit, but not less frequently than at least once a month and the permittee shall keep a written or electronic record of each inspection and corrective action taken if any. IN COMPLIANCE. See attached log Appendix F. Inspections are conducted at least once per month. No corrective actions have been needed as VEs in excess of the standard related to the screening and crushing have not been observed. Need further discussion with Levy regarding the definition of normal vs. abnormal and whether there is a routine maintenance schedule in place.
- 10. Permittee shall sample each finished product storage pile to determine the minimum moisture content by weight on a weekly basis. Records of minimum moisture content sampling shall be maintained. After six weekly samples, the permittee may petition to the Department to reduce the sampling frequency to monthly. This petition must be submitted in writing and approved by the appropriate AQD District Supervisor. IN COMPLIANCE. Sampling is occurring at the required frequency and records were presented. See Appendix D.

EUCONVEYORSYSTEM: Five conveyors, located downstream of the Deister Screen (EUDEISTERSCREEN), designed to transfer slag and related materials to finished product stockpiles. Additional conveyors located downstream of the Deister Screen are not part of this emission unit. I. <u>EMISSION LIMIT(S)</u>

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method
Opacity	10% opacity	6-Minute Average	EUCONVEYORSYSTEM	Method 9

IN COMPLIANCE – In compliance based on records generated by the certified Method 9 reader. See Appendix B.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method
Material conveyed	 250 tons per hour IN COMPLIANCE – Throughput and hours of operation are tracked on a daily basis and used to arrive at an hourly number. See attached example. 250 tons per hour limit has not been exceeded for January and May 2017. Appendix C. 492,800 tons per year 	1. Calendar day average 2. Calendar year	EUCONVEYORSYSTEM	VI(1-3)

IN COMPLIANCE - Facility has calculated this on a 12		
month rolling basis even		
though the limit is on a		
calendar year. For July		
2016 – May 2017, highest		
12 month rolling total was		
292,114 tons in March		
2017. Appendix C.	 	

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate the conveyor system unless the water spray systems are installed, maintained, and operated to minimize fugitive dust emissions on conveyors. IN COMPLIANCE Water sprays were in use during inspection. Water sprays are visually inspected on a weekly basis. Log never indicates an issue with the sprays.
- 2. The permittee shall not operate the conveyor system unless the program for continuous fugitive dust emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations has been implemented and is maintained. IN COMPLIANCE – Fugitive dust records were presented during the inspection. A log of the fugitive dust observations and activities for 2016 to 2017 YTD is attached. Dust suppressant used is calcium chloride. Appendix E.
- 3. The permittee shall not process any asbestos tailing or waste materials containing asbestos in the conveyor system pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M. IN COMPLIANCE Slag is generated inside the mill through the steel making process and does not contain asbestos.

IV. DESIGN/EQUIPMENT PARAMETER(S) and V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

- 1. The permittee shall record the daily tonnage of material conveyed. IN COMPLIANCE Records are maintained in the electronic recordkeeping system and presented during the inspection. See attached example for May and January 2017. Appendix C.
- 2. The permittee shall record the daily hours of operation of the conveyor system. IN COMPLIANCE Records are maintained in the electronic recordkeeping system and presented during the inspection. See attached example for May and January 2017. Appendix C.
- 3. The permittee shall record the total material throughput of the conveyor system on a monthly and 12month rolling time period as determined at the end of each calendar month. IN COMPLIANCE – Records were presented during the inspection. Appendix C.
- 4. The permittee shall perform a Method 9 certified visible emission observation of a representative operating conveyor of the conveyor system at least once every two calendar weeks for a minimum of 15 minutes during conveying 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. IN COMPLIANCE Based on records generated by the certified Method 9 reader. A summary of the M9 readings for 2016 and 2017 YTD is attached. The log of dates appears to meet the required frequency. Appendix B.

EUDEISTERSCREENA 350 TON PER HOUR Deister Screen designed to separate slag and related materials into various finished product sizes. This emission unit includes seven conveyors and four knuckle conveyors-all but one conveyor is located downstream of the screen. Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Water sprays

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/	Equipment	Monitoring/
		Operating Scenario		Testing Method
				resting method
Visible	10 opacity %	6-Minute Average	EUDEISTERSCREEN	Method 9
Emissions				

IN COMPLIANCE – In compliance based on records generated from the certified Method 9 reader. A summary of the M9 readings for 2016 and YTD 2017 is attached. Appendix B.

II. MATERIAL LIMIT(S)

Matorial	l imit	Timo	Fauinment	Moniforing/
material	Entre Contraction of the second se	Period/	Equipment	invincoring/
		Operating		Testina
		Operating		Method
		Scenario		metriou
Material	1. 350 tons per hour	1. per hour	EUDEISTERSCREEN	NA
throughput	IN COMPLIANCE –Throughput and hours of operation are tracked on a daily basis and used to arrive at an hourly number. See attached			
	example. 350 tons per hour limit has not been exceeded for January and May 2017.			
	2. 616,000 tons per year	2. Based on a 12-		
	IN COMPLIANCE - 12 month rolling records are maintained. See attached example for July 2016 – May 2017, highest 12 month rolling total was 360664 tons in March 2017.	month rolling time period		

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall set and maintain the opacity sensor at a visible emission rate of five percent opacity. IN COMPLIANCE – Sensor is installed.

IV. DESIGN/EQUIPMENT PARAMETER(S) and V. TESTING/SAMPLING_NA

VI. MONITORING/RECORDKEEPING

- 1. The permittee shall record the hourly tonnage of material throughput. IN COMPLIANCE Records are maintained in the electronic recordkeeping system and presented during the inspection. See attached example for May and January 2017. Appendix C.
- 2. The permittee shall record the daily hours of operation of the Deister screen system. IN COMPLIANCE Records are maintained in the electronic recordkeeping system and presented during the inspection. See attached example for May and January 2017. Appendix C.
- 3. The permittee shall record the total material throughput of the Deister screen system on a monthly and 12-month rolling time period as determined at the end of each calendar month. IN COMPLIANCE Records were presented during the inspection. Appendix C.
- 4. The permittee shall perform a Method 9 certified visible emission observation of a representative

- operating conveyor of the Deister screen system at least once every two weeks for a minimum of 15 minutes during screening 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. IN COMPLIANCE Compliance is based on records generated by the certified Method 9 reader. A summary of the M9 readings for 2016 and 2017 YTD is attached. The log of dates appears to meet the required frequency. Appendix B.
- 5. If the sensor reads above 5% opacity, the water sprays shall be actuated. Permittee shall keep a record of corrective actions taken, if other than water sprays. PENDING. This information was requested and no records were provided. AQD is awaiting explanation as to whether this means that no other corrective actions were taken other than water sprays or if the records have not been maintained.

EUBOFSLAGPIT

<u>DESCRIPTION</u>: Basic Oxygen Furnace (BOF) slag pit with water spray system for fugitive dust emission control. Also includes a partial enclosure of the pot knocking station for emission control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Water sprays

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method
1. Fugitive Dust	5% opacity ²	3-minute average ^{a,b}	Fugitive dust from any road, lot, storage pile, or material handling activity at a storage pile	SC VI.1,2&3
2. Fugitive Dust	20% opacity ²	3-minute average	Fugitive dust from any other source	SC VI.1,2&3

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall quench the dumped slag by water sprays before digging. IN COMPLIANCE – Water sprays in use as evidenced during the inspection.

2. The permittee shall operate and maintain a partial enclosure with water misting at the pot knocking station. IN COMPLIANCE - Enclosure with water sprays is installed and appears to be in good condition.

IV. DESIGN/EQUIPMENT PARAMETER(S) and V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform a Method 9D certified visible emission observation of slag dumping or digging operation at least once every calendar week for a minimum of 15 minutes during representative dumping or digging operations. 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 or electronic record of each required observation and corrective action taken.

2. 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 calendar week 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 or electronic record of each required observation and corrective action taken.

PENDING #1 and #2 - Needs further discussion about the proper opacity limit for this process.

3. The permittee shall conduct periodic inspections for the purpose of determining the operational condition of the water spray systems on the slag pit dumping areas and 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 every calendar week and permittee shall keep a written or electronic record of each inspection and corrective action taken if any.

IN COMPLIANCE. See attached log. Inspections are conducted at the required frequency. Records never indicate an issue.

FGR290 - I did not review the records at this time.

FGCOLDCLEANERS - I did not observe cold cleaners while on site

COMPLIANCE DETERMINATION

At this time, facility does not appear to be in compliance with the minimum moisture content requirements.

NAME ROUTERS DATE 8/10/12 SUPERVISOR_