

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

N768854973

<b>FACILITY:</b> Dicastal North America, Inc.		<b>SRN / ID:</b> N7688
<b>LOCATION:</b> 1 Dicastal Dr., GREENVILLE		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> GREENVILLE		<b>COUNTY:</b> MONTCALM
<b>CONTACT:</b> Daniel Schwab , EHS Manager		<b>ACTIVITY DATE:</b> 09/08/2020
<b>STAFF:</b> Eric Grinstern	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Compliance Inspection		
<b>RESOLVED COMPLAINTS:</b>		

## FACILITY DESCRIPTION

Dicastal North America Inc. is located in the city of Greenville, in Montcalm County. The facility is a low pressure permanent mold aluminum alloy wheel manufacturing operation. All process associated with the alloy wheel manufacturing process are conducted onsite, including melting, casting, heat treating, finishing and coating.

## REGULATORY ANALYSIS

The stationary source has as an opt-out permit (No. 78-15G) that covers all permitted processes. Additionally, the facility is operating under Consent Order No. AQD 2021-19, which addresses violations associated with the operation of an aluminum chip dryer. The facility has one chip dryer (EU-Dryer) that is subject to the area source requirements of Subpart RRR, Secondary Aluminum Production NESHAP. A natural gas boiler (11.2 MMBtu/hr), associated with the paint shop (EU-PaintShopBlr) is subject to NSPS Dc. The facility also has a 1,500 kW diesel emergency generator (EU-Gen1) that is subject to the RICE MACT, Subpart ZZZZ and NSPS subpart IIII.

## COMPLIANCE EVALUATION

Due to COVID 19, facility records were requested prior to the onsite inspection and were provided by the facility on September 4, 2020. Additionally, due to COVID 19, the onsite inspection was scheduled with the facility. At the facility, AQD staff, consisting of Eric Grinstern (EG), met with Daniel Schwab, Environmental Health & Safety Specialist. Prior to entering the facility, EG completed the EGLE COVID Screening form. EG also completed a Dicastal visitor COVID form prior to arriving at the facility, as well as upon arriving at the facility, including the taking of body temperature. Proper PPE, including a mask, was worn during the onsite visit.

Below is an evaluation of compliance based on PTI No. 78-15G.

### EU-Chip Dryer

**DESCRIPTION:** Machining fluid removal system and thermal chip dryer. A spinner uses centrifugal force to mechanically remove excess emulsion fluid from the chips, followed by a thermal chip dryer for volatilizing remaining emulsion on the chips using natural gas combustion (6.0 MMBtu/hr) for heat. Control consists of a cyclone followed by a baghouse.

Under PTI 78-15G, the chip dryer was permitted to be controlled by a thermal oxidizer. Under the previous permit (PTI 78-15E), the chip dryer was controlled by a baghouse. The facility is currently not operating the chip dryer due to a fire within the thermal oxidizer that occurred in early August 2020. The facility is currently evaluating options for controlling the chip dryer. The facility will be submitting a permit application when a decision is made regarding a new control device. Without the chip dryer operating, the facility is sending aluminum chips off-site for processing. No chips are currently being melted at the facility.

### EMISSION LIMITS

The permit limits the emission of PM, PM10, PM2.5, VOC and dioxins and furans. Particulate matter and VOC are limited on a pph basis. Dioxins and furans are limited under Subpart RRR on a grain per ton of charge basis.

Testing was conducted for dioxin/furan in May 2017 and April 2018, at which time compliance was demonstrated. The facility retested to account for increased chip throughput associated with the installation of a second melt line. Testing was conducted in May 2018, for PM, PM10, PM2.5 and VOC, at which time it was determined that the emission unit was exceeding the permitted PM, PM10, and PM2.5 emission limits. Additionally, due to the low VOC inlet concentrations to the thermal oxidizer, the minimum destruction efficiency of 95% was not met. The facility had previously informed AQD that they had conducted an engineering study that showed they would not be able to meet the PM limits, which resulted in the installation of baghouses control. The baghouse had a fire shortly after it was put into operation. The facility then re-permitted the emission unit to account for control via a thermal oxidizer and established new PM limits. As part of the permitting process, the facility provided updated modeling for NAAQS, PSD Increment and TACs. In order to pass PSD Increment modelling, north portion of the facility's property, with is vacant, needed to be considered secured. The facility stated that there is 24-hour surveillance and would ensure there are signs around the entire property. EG drove along the east side of the north property and observed no trespassing signs.

### **MATERIAL LIMITS**

The chip dryer is limited to processing 3.31 tons of chips per hour (daily average) and 20,834 tpy on a 12-month rolling time period.

Compliance with the material throughput limits is determined through the permit and Subpart RRR requirement that the chip dryer be equipped with a device to measure and record the weight of chips fed to the dryer. The facility is also required to monitor and record the weight of chips fed to the dryer on a daily basis, keep a log of the hourly average throughput rate of material charged and keep monthly and 12-month rolling records of the total weight of charge materials to the dryer.

The conveyor system is equipped with a feed rate scale that shows tons per hour and a recorder that tracks total chips feed to the dryer.

The chip dryer was not operating during the inspection, and the thermal oxidizer was in the process of being prepared for removal. The facility supplied daily and 3 hour block throughput records, as requested, for the previous 7 days. The records showed no throughput. The facility supplied requested throughput records for the previous 12 months, documenting a high of 14,065 tons of chips processed for the 12-month period ending in March 2020. Which is below the 20,834 tpy limit.

Feedstock to the chip dryer is limited to unpainted/uncoated aluminum chips. Only unpainted/uncoated aluminum chips have been previously observed being fed to the dryer. Since the chip dryer is not currently being operated, aluminum chips generated by the facility are shipped offsite for processing.

### **PROCESS/OPERATIONAL RESTRICTIONS**

Requires that the emissions from the chip dryer be controlled with a thermal oxidizer. The thermal oxidizer was observed and was operated up until the process had a catastrophic fire and was shutdown.

The 3-hour block average inlet temperature of the thermal oxidizer is required to be maintained at or below the average temperature established during performance testing, plus 25 degrees. The facility

reported numerous occurrences where the chip dryer operate with the thermal oxidizer below the require temperature. The facility also reported a loss of temperature records for the month of January 2020. A violation notice was issued on June 4, 2020 addressing the temperature deviations. The facility paid a stipulated penalty under the active consent order in response to the violations.

### **DESIGN/EQUIPMENT PARAMETERS**

Requires a device to measure and record the weight of feed to the chip dryer. The device has been installed as previously discussed.

Requires that the capture and control equipment meet the requirements of Subpart RRR. The facility is required to certify compliance in the Notification of Compliance Status Report.

### **TESTING/SAMPLING**

Retesting to verify compliance with the permitted PM, PM10, PM2.5 emissions is required within 36 months of permit issuance. Testing has not been completed, but the facility still has time to complete the requirement. Testing requirements may change when the facility permits a new control device.

### **MONITORING/RECORDKEEPING**

The facility is required to maintain records of the following: chip dryer feed weight per operating cycle, daily record of average hourly throughput rate and 12-month rolling total charge to the dryer.

The facility is maintaining the required records, with exceptions, as previously detailed in this report.

### **EU-MoldPreHeat**

**DESCRIPTION:** 1.86 MMBtu/hr natural gas combustion furnace for preheating the die casting molds. Furnace has 3 burners each rated at 180 kW. Exhaust gases are vented with EU-MoldCoatFurn.

The mold preheat furnace is restricted to burn only pipeline quality natural gas and to not exceed 180 kilowatts per burner.

The process is piped with natural gas.

### **EU-MoldCoatFurn**

**DESCRIPTION:** 1.24 MMBtu/hr two-chamber natural gas combustion furnace for drying the water-based mold coating. Furnace has 2 burners each rated at 180 kW. Furnace includes two rail car bays. Exhaust gases are vented with EU-MoldPreHeat.

The mold coat furnace is restricted to burn only pipeline quality natural gas and to not exceed 180 kilowatts per burner.

The process is piped with natural gas.

### **EU-MoldSonicClean**

**DESCRIPTION:** Mold sonic cleaner baths consisting of alkaline cleaner, rinse, followed by rust inhibitor used to clean the molds before casting. Vapors from the baths are vented externally out the wall.

### **MONITORING/RECORDKEEPING**

Requires that the facility maintain a current list, from the manufacture, of the chemical composition of every material used in EU-MoldSonicClean. The facility previously provided copies of the SDSs for the cleaners used in the process.

### **EU-DieCasting**

**DESCRIPTION:** 28 low-pressure die casting machines used to form the shape of the aluminum wheels. There is no dedicated exhaust system for the die casting machines. Molten aluminum is transported to the electric holding furnaces of the die casting machines. A solid fluxing agent is used in the die casting machines' holding furnaces for removing impurities in the molten aluminum prior to the aluminum being injected into the molds. A cooling tower is used to cool process water. Process water is used to cool the molds in the die casting machines.

### **EMISSION LIMITS**

The emission of PM from the cooling tower is limited to 0.005% drift loss. Compliance with the emission limit is verifiable via testing, which has not been required.

### **MATERIAL LIMITS/ RECORDKEEPING**

The permit limits the use of flux in EU-DieCasting. Compliance is based on the requirement that the facility maintains records of the daily flux usage as well as the monthly and 12-month rolling usage of flux.

Flux usage is limited to 80lb/ 8-hours and 92,594 lb./ year limit. Review of the previous 7 days of flux records showed a daily usage high of 74.66 pounds. Review of 12-month rolling total usage records showed a high usage of 56,592 pounds, on a 12-month rolling time period.

### **MONITORING/RECORDKEEPING**

In addition to records of flux usage, the facility is required to maintain records of HCL emissions. HCL emissions are associated with the use of flux in EU-DieCasting. The facility provided monthly and 12-month rolling HCL emissions. EU-DieCasting does not contain a limit for HCL. Facility records for the previous 12 months show a monthly high occurred in February 2020 with 0.31 tons of HCL emitted. The 12-month rolling high also occurred in February 2020 with 3.38 tons emitted, based on a 12-month rolling total.

### **Observations**

Observation of the die casters showed no visible emissions.

### **EU-SandBlast**

**DESCRIPTION:** Sand Blasting Machine used to clean the molds following casting. The emissions from the sand blasting machine are controlled by a fabric filter.

### **EMISSION LIMITS**

The emission of PM is limited to 0.007 grains per dscf of gas. Compliance with the emission limit is based on proper operation of the fabric filter. To assure proper operation of the fabric filter unit the facility is required to monitor and record the pressure drop once per day.

The facility provided a copy of the pressure drop readings for the previous 30 days. All readings were 4.0 inches or below. The facility has established an upper limit of 6 inches, (above 6 inches they are to notify Maintenance.

### **Observations**

Observation of the baghouse showed no visible emissions and no collected material on the ground around the baghouse.

### **EU-Pretreatment**

**DESCRIPTION:** Wheel surface preparation consisting of degreasing tanks (3), acidic, passivation and sealant tanks, which will be spray apply acidic or alkaline solutions to degrease (remove the machining fluid) and prepare the surface for proper coating adhesion to the aluminum. During various steps in the surface preparation process, water will be used to rinse off the alkaline and acidic solutions.

### **MONITORING/RECORDKEEPING**

Requires monthly and 12-month rolling time period records of acid and degreasing solvent additions.

The facility provided copies of acid and degreasing additions for the previous 12-months.

### **EU-PretreatOven**

**DESCRIPTION:** 7.6 MMBtu/hr Natural Gas Combustion Oven for removing the surface moisture on the wheels that have been treated.

After the wheels are processed through the pretreatment surface preparations they are conveyed through the pretreatment oven.

### **EMISSION LIMITS/DESIGN PARAMETERS**

The primary requirement for the pretreat oven is the limited heat input capacity of 7.6 MMBtu per hour and NOx emission rate guarantee from the manufacture of 75 ppmv@3% O2. Additionally, fuel usage is limited to pipeline quality natural gas.

The facility appears to be in compliance with these requirements, based on installed design.

### **EU-PaintShopBlr**

**DESCRIPTION:** 11.2 MMBtu/hr Natural gas Combustion Paint Shop Boiler

The Paint Shop boiler is located adjacent to the paint line thermal oxidizer.

### **EMISSION LIMITS/MATERIAL LIMITS/DESIGN PARAMETERS**

The primary requirement for the pretreat oven is the limited heat input capacity of 11.2 MMBtu per hour and NOx emission rate guarantee from the manufacture of 75 ppmv@3% O2.

The previously observed rating plate listed 10.5 MMBtu.

The permittee shall burn only pipeline quality natural gas in EU-PaintShopBlr.

No other fuel supply was observed during the inspection, the facility supplied natural gas usage records for the boiler.

The facility is required to maintain records of monthly natural gas usage. The facility supplied the previous 12 months of fuel usage records as requested.

The permittee shall submit notification of the date of construction and actual startup of EU-PaintShopBlr in accordance with NSPS 40 CFR 60.7.

The notification was submitted on November 30, 2015.

### **EU-LiquidCoat**

**DESCRIPTION:** One Base liquid coating booth and one Clear liquid coating booth, each utilizing high volume low pressure (HVLP) or comparable applicators, associated flash off tunnels, and one 2.6 MMBtu/hr Natural Gas Combustion Curing Oven. The VOC emissions from this line will be controlled by Non-Fugitive Enclosure (NFE) and a recuperative thermal oxidizer (TO). The particulate emissions are controlled by water spray.

### **EMISSION LIMITS**

The emissions of VOC, Heavy aromatic solvent naphtha, Mixed Xylenes, Butyl carbitol, Formaldehyde and Naphthalene are limited by the permit.

Compliance with the VOC emission limit is based on compliance testing and proper operation of the thermal oxidizer. Compliance testing was conducted in September 2016, at which time compliance with the thermal oxidizer destruction efficiency (minimum 95%) was documented. Compliance with the Heavy aromatic solvent naphtha, Mixed Xylenes and Butyl carbitol emission limit is demonstrated via the facility recording daily usage of each material.

The facility is required to install and operate a thermal oxidizer with a minimum VOC destruction efficiency of 95% and maintain a minimum temperature of 1292 degrees F (700 degrees C).

Review of the RTO temperature records for the previous 7 days showed recorded temperatures were consistently at 725 C, (or above).

The facility is required to operate EU-LiquidCoat in a non-fugitive enclosure.

The facility has installed pressure drop gages to verify and demonstrate negative pressure in the bake oven, liquid base coat and liquid clear coat booths. The facility stated that the pressure drop readings are taken with every color change, which is currently done frequently.

The facility is required to maintain coating usage and VOC emission records on a monthly basis. The facility provided records as requested, documenting compliance with the permitted limits.

The facility supplied records demonstrating compliance with the above requirements. Supplied records showed compliance with the VOC limit of 17.5 tpy based on a 12-month rolling average. The 12-month rolling emission rate ending in August 2020 was 0.52 tons, the highest for the 12-month period was 0.64 tons.

The facility is required to maintain the following solvent usage records on a daily basis, the facility provided records of solvent usage, as requested.

The facility is required to maintain usage and HAP emissions data on a monthly basis. The facility provided records documenting compliance.

The records supplied demonstrated compliance with the applicable emission limits (below)

Pollutant	Limit	Time Period / Operating Scenario	Maximum emission rate from records
2. Heavy aromatic solvent naphtha (CAS No. 64742-94-5)	105.50 lb/day <sup>1</sup>	Calendar day	0.99 lb/day
3. Mixed Xylenes (CAS No. 1330-20-7)	150.66 lb/day <sup>1</sup>	Calendar day	4.28 lb/day
4. Butyl carbitol (CAS No. 112-34-5)	30.14 lb/day <sup>1</sup>	Calendar day	0.055 lb/day
5. Formaldehyde (CAS No. 50-00-0)	0.83 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	0.00086 tons/12-month rolling time period
6. Naphthalene (CAS No. 91-20-3)	0.18 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	0.01 tons/12-month rolling time period

### **EU-BrushingBurr**

**DESCRIPTION:** 12 Brushing Burr Machines controlled by a common fabric filter.

### **EMISSION LIMITS**

The emission of PM is limited to 0.007 grains per dscf of gas. Compliance with the emission limit is based on proper operation of the fabric filter. To assure proper operation of the fabric filter unit the facility is required to monitor and record the pressure drop.

The facility supplied pressure drop records for the previous 30 days. The records showed all readings below the facility established 7" upper limit. The highest recorded pressure drop was 1.0 inch.

Observation of the baghouse showed no VE and good housekeeping practices.

### **EU-Gen1**

**DESCRIPTION:** A 1,500 kilowatt (kW) or smaller diesel-fueled emergency engine with a model year of 2006 or later, and a displacement of less than 30 liters/cylinder. This emergency engine is subject to the New Source Performance Standards Stationary for Reciprocating Internal Combustion Engines (RICE), combustion ignition, emergency RICE less than 3000 HP.

### **EMISSION LIMITS/MATERIAL LIMITS**

The permit limits the emission of NO<sub>x</sub>+HC, CO, PM, NO<sub>x</sub> and PM<sub>2.5</sub>.

Compliance is based primarily on the facility installing an EPA Certified engine and maintaining the

engine in accordance with the manufacture recommendations.

Opacity from the unit is limited to 15% during lugging and 20% at all other times.

The unit is limited to burning diesel fuel with a maximum sulfur content of 15 ppm by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent.

The facility verifies compliance based on fuel delivery records. The facility provided a copy of a fuel analysis record from May 2019, demonstrating compliance with the sulfur content and Cetane index minimum.

The engine is limited to 500 hours of operation a year and 100 hours per year for maintenance checks. Compliance is based the requirement that engine be equipped with non-resettable hours meters and the maintaining records of the hours of operation. The facility provided records of the hours of usage showing 7 hours of total operation (12-month rolling total) ending in August 2020.

### **FG-Melting**

DESCRIPTION: Two natural gas fired aluminum melting furnaces with burners rated at 10.1 MMBtu/hr and a capacity of 13.2 tons each, two natural gas fired aluminum chip melting furnaces with burners rated at 6.2 MMBtu/hr and a holding capacity of 13.2 tons each, two natural gas fired aluminum holding furnaces with burners rated at 2.7 MMBtu/hr and a holding capacity of 13.2 tons each, and the process transfer ladles.

Emission Units: EU-Melt1, EU-Melt2, EU-Chip1, EU-Chip2, EU-Hold1, EU-Hold2, EU-LadleHood

### **EMISSION LIMITS/RECORDKEEPING**

The permit limits the emission of PM, PM10, PM2.5, HCL, HF, cadmium and chromium.

Compliance with the emission limits is demonstrated via material throughput limits, proper operation of the lime-injected baghouse and compliance testing. Compliance testing was conducted in May 2018, at which time compliance was demonstrated for the following pollutants.

	Measured	Permit limit
PM (lb/hr)	0.25	2.92
PM-10 (lb/hr)	0.43	2.68
PM-2.5 (lb/hr)	0.42	1.89
HCL (lb/hr)	<0.02	7.69
HF (lb/hr)	<0.01	1.67

The facility provided records demonstrating compliance with the 12-month rolling total emission rate for HCL, cadmium and chromium.(ending in August 2020)

HCL emissions recorded at 0.3 tons/12-month rolling (Limit=3.72 tpy)

Cadmium emission recorded at 7.8 E-05 tons/12-month rolling (Limit=1.79E-04 tpy)

Chromium emissions recorded at 9.0 E-04 tons/12-month rolling (Limit=1.83E-3 tpy)



## **MATERIAL LIMITS/ RECORDKEEPING**

Feed/charge and material throughput rates are limited for each of the melting furnaces, chip furnaces, and holding furnaces, on a ton per hour basis. Review of the daily material usage records for the previous 7 days for each of the furnaces showed compliance with the limits. The highest charge rate for a melt furnace was 2.74 tons/hr (limit=3.31 tons/hr). The highest throughput rate for a chip furnaces was 0.77 tons/hr (limit=1.65 tons/hr).

The highest throughput rate for a holding furnaces was 2.74 tons/hr (limit =4.96 tons/hr)

The records show through put in the chip furnaces, even though the chip dryer in down. The facility stated that they fed ingots into the chip furnaces for a period of time in an attempt to increase production, but have since stopped because it was inefficient.

The melt rate for painted wheels is limited to 904,020 wheels per year. Review of the facility records (attached) shows a 12-month total high of 101,814 wheels melted (occurring in March 2020).

Flux usage is limited to 1,866 lb/day and 564,053 lb/yr. The facility provided daily (previous 7 days), monthly and 12-month records for flux usage (previous 12 months). Facility records showed a daily flux usage high rate consistent at 40 pounds, for records reviewed. The 12-month rolling usage high occurred in January 2020 with 85,690 pounds of flux used. The facility records show a reduction of flux usage with only surface application used.

During the inspection and based on facility records, the facility appears to only use charge materials that are defined as clean charge under Subpart RRR. This includes ingots and rejected painted/unpainted wheels that have remained under the control of Dicastal.

## **PROCESS/OPERATIONAL RESTRICTIONS**

The facility is required to implement and maintain a malfunction abatement plan (MAP). The facility previously submitted a MAP.

## **DESIGN/EQUIPMENT PARAMENTERS**

FG-MELTING requires proper operation of a capture system and lime injected baghouse equipped with a bag leak detection system. The facility has capture for each of the furnaces which duct to a lime injected baghouse equipped with a bag leak detection system.

The facility supplied requested lime records for August 20-27,2020, which showed a lime injection rate of 5.3 lb/hr. Additionally, the observed lime feed rate at the time of the inspection was 5.3 lb./hr. Following the onsite inspection, a request for the lime injection records for the past 90 days was made. Review of the supplied records showed that lime injection rate was reduced from around 8.76 lb./hr. to approximately 5.3 lb./hr. around

July 4, 2020. Mr. Schwab provided a response from the maintenance department stating that due to finding a partially blocked lime injection tube, they removed barrels of pure lime, so they stepped back (lime injection) to reduce wasted lime that was not mixing. It was set above the minimum requirement of 5 lbs. per hour. Review of the MAP shows a minimum lime injection rated listed at 5 lb. per hour. Review of the melt furnace stack test conducted on May 10, 2018, shows that the reported limit injection rate was 5.9 lb./hr. during each of the three stack test runs. Mr. Schwab stated that went by the 5 lb. per hour rate listed in the MAP.

It appears that the MAP contains an error regarding the required lime injection rate. The facility stated that they will make the correction (increase rate at the baghouse) to the lime injection rate immediately. Additionally, the facility was requested to correct the MAP and submit a revised copy. A VN will be issued to address the low lime injection rate.

**TESTING/SAMPLING**

Emission testing for PM, PM10, PM2.5, HCL and HF was required. Testing was conducted on May 8-10, 2018, at which time compliance was demonstrated.

**Observations**

During the previous inspection, fugitive emissions were observed being emitted into the in-plant atmosphere from the upper door of Melt Furnace 1. The facility stated that the correct the problem with the door immediately after the previous inspection. No fugitive emissions were observed during this inspection.

**FG-HeatTreat**

**DESCRIPTION:** Three natural gas fired heat treat lines with burners rated at 10 MMBtu/hr each.

**Emission Units:** EU-HeatTreat1,EU-HeatTreat2,EU-HeatTreat3

**EMISSION LIMITS/MATERIAL LIMITS**

FG-HeatTreat does not have specific emission limits but is restricted to burn only pipeline quality natural gas. No gas other than pipeline quality natural gas has been observed in use.

**DESIGN/EQUIPMENT PARAMETERS**

The designed heat input for each burner in FG-HeatTreat is limited to 10MMBtu per hour. Compliance is based on the manufacture specifications.

**FG-PowderCoat**

**DESCRIPTION:** The powder coating process which includes two primer coatings booths, a 3.5 MMBtu/hr rated primer powder curing oven, one clear coating booth, and a 3.5 MMBtu/hr clear coat powder curing oven. The powder coating portions of this process are controlled by a dry filtering system with isolation chamber.

**Emission Units:** EU-PrimePowder, EU-PrimeOven, EU-ClearPowder, EU-ClearOven

**EMISSION LIMITS/RECORDKEEPING**

FG-PowderCoat has emission limits for PM and NOx. PM is limited to 0.03 tpy and NOx is limited to 75 ppmv@3%O2. Compliance with the PM limit is based on proper operation of the dry filtering system and isolation chamber. Compliance with the NOx limit is based on the manufacture guarantee.

**PROCESS/OPERATIONAL RESTRICTIONS**

Requires a minimum transfer efficiency of 93%. Compliance can be determined via testing.

**FG-MACT6Z**

**DESCRIPTION:** The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry, that is (or is part of) an area source of hazardous air pollutant (HAP) emissions. The affected source is a new small foundry as defined by 40 CFR Part 63 Subpart ZZZZZZ.

**Emission Units:** EU-Melt1, EU-Melt2, EU-Chip1, EU-Chip2, EU-Hold1, EU-Hold2, EU-LadleHood

Subpart 6Z establishes material limits regarding the type of scrap metal melted, covering each furnace with a lid, if it is equipped with a lid, and operating in accordance with a management practices plan.

### **MATERIAL LIMITS/ RECORDKEEPING**

The facility's charge material consists of ingot and internal scrap. Therefore, they are in compliance with the NESHAP requirements regarding the use of HAP metal depleted scrap.

### **PROCESS/OPERATIONAL RESTRICTIONS**

The facility is complying with the cover and enclosing requirements for the furnaces. The facility provided a copy of the August 2020 furnace cover/enclosure inspection check sheet.

The facility previously submitted a written management practices plan as required by Subpart 6Z.

### **FGFACILITY**

1. Each Individual HAP	Less than 8.9 tpy *	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
2. Aggregate HAPs	Less than 22.5 tpy *	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)

The facility provided records demonstrating compliance with the emission limits and record keeping requirements for FGFACILITY.

For the 12-month period ending in August 2020, the total aggregate HAP emission amount was 3.43 tons. The individual HAP with the highest emission rate was mixed Xylenes, with a 12-month rolling total of 0.44 tons ending in August 2020.

### **CONCLUSION**

Based on the information and observations made during this inspection, the facility is in compliance with applicable air quality rules and regulations, with the exception of the following:

A Violation Notice will be issued for the above documented permit deviation associated with FG-MELTING, lime injection rate below level established during testing.

NAME Eric Grinstern

DATE 09/24/2020

SUPERVISOR HH