

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

B887851589

FACILITY: COOPER FOUNDRY INC.		SRN / ID: B8878
LOCATION: 8216 DOUGLAS AVE, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Jay Lawson , Vice President of Operations		ACTIVITY DATE: 11/20/2019
STAFF: Monica Brothers	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced scheduled inspection		
RESOLVED COMPLAINTS:		

Staff, Monica Brothers, arrive on-site at about 1:00 pm and met with Jay Lawson, Vice President. No visible emissions were observed upon arrival. First, I sat down in his office and briefly went over the inspection process and asked some preliminary questions. They do not have any boilers, emergency generators, or cold cleaners at the facility. I asked if there had been any changes to their process since their last inspection in March 2008, and Jay said that things really haven't changed much at all. In 2008, they were operating under various exemptions, including the Rule 282(2)(a)(iv) exemption for crucible furnaces, pot furnaces, and induction melting and holding furnaces that have a capacity of 1,000 pounds or less each. This exemption also requires that fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds. I asked Jay for the SDS for the fluxing material he uses, and it showed that it contains fluoride. This is considered a violation because this does not comply with the exemption cited above, and the facility does not have a permit.

After our initial discussion, we took a tour of the facility. They still have the same two natural gas-fired aluminum furnaces as during the last inspection, which have capacities of 300 lbs and 600 lbs. They also have the same brass induction furnace, which has a capacity of 300 lbs. There is also a gas-fired core oven, used to cure the sand cores. They have five fabric filters, one for the Wheelabrator, two for pulling brass and aluminum dust from the grinder, one strictly for aluminum grinding, one for the brass and aluminum shake-out area, and one for the downdraft table. Jay said that they change these filters about once per year. The metal that is collected by these filters is put into drums and sold to companies that will reuse it.

We then toured the outside of the building to look at the external vents for some of the fabric filters. Some are also vented internally. The areas around the exhausts looked clean. We then looked at the sand storage silo, which can hold about twenty tons of sand. I noticed a lot of sand just below the silo and on the roof. Jay said that there is no fabric filter on the silo. According to AQD records, the company did install an overflow collection line on the silo sometime in 1998, but it does not seem to be doing enough to keep the sand contained, especially while the silo is being filled. Jay said that he can see some visible emissions of particulate matter coming from the silo when it gets filled. This does not comply with the Rule 284(2)(k) exemption for silos, which states that they must be "controlled with an appropriately designed and operated fabric filter collector system or an equivalent control system". Because the storage silo cannot currently comply with this exemption, and because it also does not have a permit, this is considered a violation.

After the tour, I reviewed my findings with Jay and let him know that he will be receiving a violation notice for the flux that contains fluoride and the lack of proper filtration on the sand silo. I thanked him for his time and left the facility at about 2:30pm.

NAME Monica BrothersDATE 12/18/19SUPERVISOR RIL 12/18/19