

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

A637138343

FACILITY: Armstrong International		SRN / ID: A6371
LOCATION: 816 Maple St., THREE RIVERS		DISTRICT: Kalamazoo
CITY: THREE RIVERS		COUNTY: SAINT JOSEPH
CONTACT: Emily Martin , HSE Manager		ACTIVITY DATE: 01/19/2017
STAFF: Dennis Dunlap	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

This was not an announced inspection. Dennis Dunlap was the inspector for AQD, Emily Marvin and Dan Findlay were the contacts for Armstrong.

This facility manufactures fittings and valves from castings and also makes tanks, fittings, and water heaters from stainless steel and other metals.

Building 1

There are three natural gas-fired boilers in this building that are exempt by Rule 282(b)(I):

1. Cleaver Brooks 375,000 MMBtu/hr, 8/12/66
2. Johnston 2.7 MMBtu/hr, 1967, in Lab area
3. Cleaver Brooks 2.5 MMBtu/hr, 10/8/80, in Lab area.

There is one electric Coates boiler, 32 BHP. This is not subject to permitting.

There is one paint booth in this building where black paint is used to paint metal parts. It was not in operation. The filters were in good condition. This is exempt by Rule 287(c). For paint usage see below.

One parts cleaner was seen . The lid was closed and rules were posted.

There are about 8 CNC (Computer Numerical Control) machines used to machine castings. These machines are enclosed and do not vent externally. They use a lubricant. There are manual machining tools also that emit to the in-plant environment. These processes are exempt by Rule 285(l)(vi)(B). Castings that have been milled are cleaned with Trim Microsol 690 xt. This is done inside the plant with no outside emissions and exempt by Rule 285(r)(iv).

Finished castings go to other areas for assembly.

There is some MIG welding in this building. It is exempt by Rule 285(l).

Butler Building

This is a warehouse building with one paint booth. The paint booth is used to apply a ceramic coating to humidifier parts. It is used every 1 to 2 weeks. Paint volume was estimated at 8 gallons per month. This would be exempt by Rule 287(c).

Plant 2/3

This is a warehouse building with manufacturing areas.

There are two paint booths here, one for blue paint and one for black paint. They were not in operation. The filters were in good shape.

There is a natural gas-fired dryer to dry the painted parts. It is operated at 87-90 degrees F. The drying time is one hour. The painting processes are exempt by Rule 287(c). Based on information supplied during the inspection, the monthly usage of black paint used in the facility is 12.5 gallons/month, and for blue paint it is 35 gallons/month. Burgundy paint is applied only with spray cans. This is exempt by Rule 287(b). There were also a few red spray cans of lubricant. This would meet the same exemption.

There are CNC machines and other metal working operations such as turning, cutting, stamping, and drilling. These operations are exempt by Rule 285(l)(vi)(B).

One parts cleaner was seen. The lid was closed and the rules were posted.

There are packaging operations. No glues or inks are used.

There is one Cleaver Brooks natural 6 MMBtu/hr gas-fired boiler installed in 1973. It is exempt by Rule 282(b)(I).

There are MIG, TIG, and stick welding operations. These are exempt by Rule 285(I). Five TIG welder booths were ducted to an outside stack.

There were two washing operations used to clean machining oil from metal parts. One washer was stationary and had a conveyer that brought parts inside an enclosure where they were sprayed with cleaner. The cleaner was heated and there was an outside stack. The cleaner used was Power TERG Z-233, which contains no VOC. According to the MSDS for the machining oil, the vapor pressure is less than 0.01 mm Hg. This would meet the exemption Rule 281(e) for the cleaning operation. There was one other portable washer that would be put under a hood that emitted outside. The exemption would be the same for this washer.

There were two Vibradyne washers used to clean mainly stainless steel parts. These machines were filled with cleaning beads (they were oblong) and the parts were cleaned with the beads. Water and occasionally soap were used in the process. The wastewater went to the sanitary sewer. Because there were no outside emissions these processes were exempt by Rule 285(r)(iv).

Armstrong Yoshitake Building

Tanks, such as water heaters and valves are assembled in this building. There is a spray booth for blue and black spray paint. It was not in operation. The filters were in good condition. This spray booth is exempt by Rule 287(c). As mentioned above, the total facility usage of black paint is 12.5 gallons/month, and for blue paint it is 35 gallons/month.

NAME Dennis Dwyer

DATE 1/23/17

SUPERVISOR MA 1/23/2017