

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

A054746083

FACILITY: BRONSON PLATING CO		SRN / ID: A0547
LOCATION: 135 INDUSTRIAL AVENUE, BRONSON		DISTRICT: Kalamazoo
CITY: BRONSON		COUNTY: BRANCH
CONTACT: Toby Welch , Vice President Operations		ACTIVITY DATE: 09/17/2018
STAFF: Dennis Dunlap	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

This was not an announced inspection. Toby Welch is the contact person for Bronson Plating. Dennis Dunlap was the inspector for AQD. Bronson Plating operates 10 hours a day Tuesday through Friday.

SHOP AREA

This area had one parts cleaner with mineral spirits. The lid was closed. A metal grinder was seen. This is exempt by Rule 285(2)(I)(vi)(B). There is a salt spray chamber that is enclosed. Some welding is done. Welding is exempt by Rule 285(2)(I).

Line 1

Line 1 has 32 tanks. It is covered by PTI 331-99. It is a nickel plating and decorative hexavalent chrome plating line. Tank 1 is an electropolishing tank. This is exempt by Rule 285(2)(r)(vi). Tanks 8 and 13 and 14 are acid tanks that have stacks and are covered by the permit. Tanks 4 and 5 and 11 are alkaline tanks with stacks that are exempt by Rule 285(2)(I)(iii). Tank 26 is the chrome plating tank and is vented to a wet scrubber on the roof. They use MiniMist as a wetting agent/surfactant in this tank. This product does not contain PFOS. They have been using this product since Dec., 2011. They measure surface tension once per week and add more MiniMist as appropriate. They have an O & M plan for this tank. This plan has a chart to record dates that the surface tension was checked, reading, amount of surfactant added, and the adder's initial. These records were checked March through August. There is a Malfunction Abatement Plan required by the permit. This has a chart that specifies quarterly and monthly inspections for the scrubber. The scrubber pressure drop, and flowrate are recorded monthly. They are keeping these records. They have Ongoing Compliance Status Reports onsite for 2016 and 2017. These pertain to Line 1.

Line 2

This line has 23 tanks. It is a nickel plating and decorative trivalent chrome plating line. Tanks 1, 4, and 6 are vented through a common stack. Tank 4 is an acid tank and covered by PTI 332-99. Tanks 1 and 6 are caustic tanks exempt by Rule 285(2)(I)(iii). This line was converted from hexavalent chrome to trivalent chrome in June, 2011. The stack and scrubber for the chrome plating tank were removed. It was previously determined that this change was allowed by Rule 285(2)(b). Because the Special Conditions in PTI 332-99 pertain to a hexavalent chrome tank, there are no conditions to enforce. Tank #18 is the decorative chrome plating tank containing chromic sulfate (trivalent chrome). The surface tension is tested twice per week and records of this testing and the amount of wetting added are being kept. The surfactant (wetting agent) used is part of an additive called TC Regulator. It does not contain PFOS.

Line 3

This is a nickel plating and decorative trivalent chrome plating line covered by PTI 333-99. Tanks 1 and 3 are caustic tanks and are vented to a common stack. These are exempt by Rule 285(2)(I)(iii). Tank 6 is an acid tank and is vented to a stack. It is covered by the permit. Tank 9 is a caustic tank and is vented to a stack. This is exempt by Rule 285(2)(I)(iii). Tank #19 is the trivalent chrome tank. It is not vented. Surface tension is tested twice per week and records of this testing and the amount of wetting agent added are being kept. The surfactant (wetting agent) used is part of an additive called TC Regulator. It does not contain PFOS.

Line 4

This is a zinc plating line. It was converted from a nickel-chrome plating line to zinc plating in Dec., 1997, that was covered by PTI 482-85. It was previously determined that this met a Rule 285(2)(b) exemption. Tank #1 is a caustic tank that is vented to a stack. This is exempt by Rule 285(2)(I)(iii). Tanks #3 and 9 are caustic tanks that are vented to a stack, and Tank #6 is an acid tank that is vented through the same stack. Tanks 3, 6, and 9 are vented through a scrubber on the roof. In the permit these are termed "cleaning tanks". This line also has a gas fired dryer at the end of this line that is not vented This may be exempt by Rule 281(2)(e).

Miscellaneous

There is a black oxide system consisting of 5 tanks. These consist of 2 water rinses, an acid tank, a caustic soap cleaner, and a heated black oxide tank. The burner for the oxide tank is vented outside. The tank itself is vented inside the room. The black oxide solution contains sodium hydroxide, sodium nitrite, and sodium nitrate.

There are two nickel stripping tanks. These are vented inside the room. These are exempt by Rule 285(2)(r)(iii).

There is an enclosed buffing and polishing area. Emissions are controlled by a scrubber that vents inside the building. This is exempt by Rule 285(2)(I)(vi)(B).

There are two Cleaver Brooks boilers. The name plates could not be read. Based on a previous activity report the boilers are 6.3 MMBtu/hr. These are exempt by Rule 282(2)(b)(I).

The sludge dryer is not being operated. it is covered by PTI 330-99.

It was recommended that Bronson Plating seek to terminate Consent Order No, 4-2000 that was issued in 2000.

They are subject to the Chrome NESHAP, 40 CFR Part 63 Subpart N. The affected sources are the chrome plating tank #26 on Line 1, the trivalent chrome plating tank #19 on Line 3, and the trivalent chrome plating tank #18 on Line 2. The chromium tank on Line 1 is subject to the reporting and continuous compliance requirements. The trivalent tanks are not subject to work practice standards (342(e)) or continuous compliance monitoring requirements in 343(c). The wetting agent used in the trivalent chrome tanks must be clearly identified as a component in the additives to the tank (342(e)). The surface tension requirement has been revised from 45 dynes/cm to 40 dynes/cm when a stalagmometer is used.

They have an onsite water treatment system that is monitored by the City of Bronson. Treated wastewater is sent to the Bronson WWTP. Sometime before 2003 they had a permit to discharge to surface water. Associated with the treatment system is a caustic tank and sulfuric acid bulk tanks. The tanks may be exempt by Rule 285(2)(m).

Before Sept., 2003, a wetting agent containing PFOS was used in the hexavalent chrome tanks. This wetting agent was called Zero Mist R. From Sept., 2003 to Nov., 2011, a wetting agent called Chematrol 2 was used in the hexavalent chrome tanks. It is unknown if this contained PFOS. Since Dec., 2011, MiniMist was used. This does not contain PFOS. Wetting agents containing PFOS were not used in the trivalent chrome tanks.

NAME Dennis Dewlany

DATE 9/21/18

SUPERVISOR MMR 9/21/2018