

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

B013543532

FACILITY: Primetals Technologies USA		SRN / ID: B0135
LOCATION: 470 N PAW PAW AVE, BENTON HARBOR		DISTRICT: Kalamazoo
CITY: BENTON HARBOR		COUNTY: BERRIEN
CONTACT: Jim Strzyzkowski , Maintenance		ACTIVITY DATE: 02/28/2018
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	
SUBJECT: Unannounced Scheduled Inspection		SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:		

On February 28, 2018 AQD Staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Primetal Technology (formerly Siemens Industries) facility located in Benton Harbor, Berrien County. According to AQD district file information, Primetal Technology is a minor source and their main business is the electroplating of chrome, nickel, and copper. They have three active air permits issued by the AQD (PTI Nos. 413-85, 414-85, and 226-95) according to the file and the Permit Cards database related to a sandblasting operation, an acid scrubber, and a hard chrome plating line respectively. Because of the hard chrome plating line, the facility is also subject to the federal regulation 40 CFR Part 63 Subpart N (NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (a.k.a. the Chrome NESHAP)). The facility also is now subject to 40 CFR Part 63 Subpart WWWW (NESHAP for Area Source Plating and Polishing Operations). The purpose of the inspection was to determine the facilities compliance status with the aforementioned permits and the Chrome NESHAP. Please note that the AQD is not delegated to enforce the NESHAP WWWW regulation at this time so no compliance determination was made pertaining to that regulation.

Staff arrived at the facility at approximately 11:20 a.m. Prior to entering the facility, staff drove by it several times to see if any visible emissions could be seen or if any odors could be detected. Neither were noted. Staff then proceeded into the office area and introduced them self to the receptionist and stated the purpose of the visit. Staff was asked to sign in and was referred to Jim Strzyzkowski (Maintenance). Jim came to greet staff and led them to back to his office. Staff then mentioned to Jim that on their previous inspection staff had met with Jim Chevrette (former EHS/Quality Manager) and Phil Schignel. Jim mentioned that Jim Chevrette no longer works there and that Phil retired a few years back. Staff then sat down at a chair across from Jim's desk where we discussed the various permits, the Chrome NESHAP, and facility operations. The following is a summary of staff's discussions with Jim.

According to Jim, Primetal currently employs approximately 33 people between production and office personnel. They are currently working 1 shift Monday through Friday but will work some weekends, if maintenance or business requires it , which lately has been quite often. He said that electroplating is still their main business and it is mainly for refurbishing equipment for steel mills such as U.S. Steel. He said that their work still generally revolves around steel molds that they receive that are to be copper lined and nickel plated and they refurbish them. He said that there still is not much competition for this type of work for the steel industry and business had been holding steady. Staff then asked about the various plating tanks. He said that they no longer do any chrome plating and that the tank (#27) and associated equipment had been removed in September of 2017. He went on to state that the last day of operation of the tank was 9/14/17 and they removed the tank on 9/17/17 and the scrubber on 9/21/17. Jim stated that the cost of maintaining the equipment wasn't worth the amount of chrome plating business that they had. Staff mentioned that if that's the case Primetal will no longer be subject to the Chrome NESHAP nor be subject to annual MAERS fees. Staff also stated that they could submit a request to have the permit for the Chrome Plating operation voided out. Jim said he would look into doing that.

Staff then asked if they had ever used any fume suppressants in their operations to which Jim stated they never have. Staff then asked about stormwater and sewer discharges. Jim said that they do have an NPDES permit for stormwater and it discharges into Ox Creek which flows into the St. Joseph River. He said that they pre-treat their wastewater on-site to adjust the ph prior to discharging it to the Benton Harbor-St. Joseph wastewater treatment system.

Staff then asked about the remaining plating tanks and if any have been added or removed. Jim said that nothing has changed in that regard and that they still have 14 tanks used for nickel plating and 1 for copper plating. He said that the copper plating is still only done on the edges of the mold dies (broad and narrow edges) when the steel gets worn down on them. He said that they still have the acid scrubber that controls the

emissions from the tanks. He also said that the tanks are still being covered with either plastic or fiberglass slats. Staff then asked Jim about any other equipment at the facility that is not permitted and if it was still present. The following is what was stated to and noted by staff:

Emergency Generator: It is rated at 0.9 MMBtu/hr and is diesel fired. It was installed under the permit exemption Rule 285(g). It is subject to the RICE MACT (40 CFR Part 63 Subpart ZZZZ) as an area source. The AQD is not delegated to enforce this regulation so a compliance determination wasn't made. It appears that only an hour meter has to be installed (if it doesn't have one) and they have certain hour intervals when maintenance has to be conducted and documented.

Water Boiler: It is rated at 7 MMBtu/hr and is natural gas fired. It was installed under the permit exemption Rule 282(b)(i) and is used to heat the nickel baths. It is not subject to the new Boiler MACT (40 CFR Part 63 Subpart JJJJJJ) because it is fired by natural gas. The only requirement is that they maintain records of fuel design and usage.

Heat Treat Oven: According to Jim, this oven is no longer in use and another company will be buying it from them. It is rated at 5 MMBtu/hr and is natural gas fired. It was installed under the permit exemption Rule 282(a)(i). In the past they used it to only to warm up uncoated steel materials prior to welding different grades of stainless steel onto rollers (using submerged arc welders that don't create fumes).

Spray Painting: They used to do some spray painting (done under permit exemption Rule 287(c)) but they don't do that anymore. Any painting done now is with the use of aerosol spray cans which is exempt under Rule 287(b).

Masking Agent: They used to brush on a masking agent on the edges of the steel that was not to be plated with copper and it was exempt under Rule 287(c). Staff was that they still haven't used the masking process in years and are strictly using a 3M tape instead.

Sanding Booths: Jim mentioned that they have two booths that strictly used for sanding/finishing and they exhaust inside the plant. These booths are exempt under Rule 285(l)(vi).

Staff then went on a facility tour with Jim. The following is what staff noted/observed and will be followed by the various permit special conditions along with the facilities compliance status with them. On the way out staff asked Jim how many buildings they had on site. Jim said that they had still three standalone buildings and they referred to them as the Office Building, Copper Production Building, and the West Wing. The West Wing used to be called the Roll Shop but they don't do that type of work in there anymore. Staff then asked about any Parts/Cold Cleaners and Jim said that they still have the two of them and they're both serviced by Crystal Kleen. Staff noted during the walk through that they both had their lids closed and instructions on their use posted.

Our first stop was at the Sand Blast Unit in the Copper Production Building. It was not in use during the inspection and Jim said they may use it two times per week. He said that they installed a new baghouse on the unit back in 2012 which staff mentioned was in place during their last inspection in 2014. As mentioned in that inspection report, it is a larger unit than the previous one but the stack still exhausts out the side of the building like the last one did. Staff did not note any dust/sand around it on the inside nor anywhere on the ground outside of where the stack vents out.

Staff's next stop was at the two booths equipped with HEPA filters that they use for sanding/finishing work in the Copper Production Building. As mentioned earlier, these booths were installed under the permit exemption Rule 285(l)(vi). Staff was told during the previous inspection that they installed these do to them being subject to 40 CFR Part 63 Subpart WWWWWWW - NESHAP for Plating and Polishing Operations. The AQD is not delegated to enforce this regulation so a compliance determination wasn't made.

Staff's next stop was at the machining/lathe area found in the West Wing Building (formerly Roll Shop). All the equipment located here is exempt under Rule 285(l)(vi). Jim said that they plan to get rid of most of this equipment except for the two milling machines since they don't do the type of work that use to be done when it was called the Roll Shop. The Heat Treat Unit is also still housed here also but it was not in use and as mentioned earlier, it is being purchased by another company.

Staff's next stop was back in the Copper Production Building at the copper and nickel plating area. The acid bath (nitric and/or hydrochloric) used in the process are controlled by an acid scrubber. At the beginning of the

process, steel plates (molds) come into the pre-treatment area which is located right next to one of the tanks. Depending on the steel material, they have steps to follow for the pre-treatment process which consists of applying various acids to it. After this, they go into whatever plating bath is required. As mentioned earlier, the facility has 14 nickel and 1 copper plating tank and they were all covered with either plastic or fiberglass slats. According to Jim, the process is still the same and the steel molds/parts are in the baths 4 to 7 days before the plating process is done. He said that the process plates about 1000th of an inch of an hour.

Staff's next stop with Jim was at the location where the Chrome Plating Tank had been located. Staff noted that the tank and scrubber had been completely removed and all that was left were some metal parts piled up on the floor.

Staff's next stop was in the room that houses the boiler. It was manufactured by Johnston Brothers in 1965 and is rated at 7 MM/btu/hr. It is natural gas fired and as mentioned earlier, appears to be exempt the Boiler MACT (40 CFR Part 63 Subpart JJJJJJ). The only requirement is that they maintain records of fuel design and usage. Staff did not make a applicability or compliance determination since the AQD is not delegated to enforce this regulation.

Staff's last stop was outside in a small building that houses the emergency generator. It is a diesel fired Onan Gen Set 250 and it is rated at 0.9 MMBtu/hr. As mentioned earlier, it was installed under the permit exemption Rule 285(g) and is subject to the RICE MACT (40 CFR Part 63 Subpart ZZZZ) as an area source. The AQD is not delegated to enforce this regulation so a compliance determination wasn't made. It appears that only an hour meter has to be installed (if it doesn't have one) and they have certain hour intervals when maintenance has to be conducted and documented.

The following lists the permit special conditions of PTI No. 413-85 for the sandblasting unit. It was also issued for an aluminum metalizing operation but that equipment had been removed years ago.

S.C. 10: Visible emissions from the sandblasting operation shall not exceed 0% opacity.

AQD Comment: Appears to be in COMPLIANCE. The unit wasn't in use during staff's inspection and we haven't received any dust fall out complaints. Staff didn't note any accumulated sand inside or outside the building.

S.C. 11: the particulate emission from the sandblasting operation shall not exceed 0.01 pounds per 1,000 pounds of exhaust gases, calculated on a dry gas basis.

AQD Comment: Appears to be in COMPLIANCE. Staff has to assume this is being met by use and proper maintenance of the baghouse. Stack testing has not been requested by the AQD to date.

S.C. 12: Applicant shall not operate the sandblasting operation unless the bagfilter is installed and operating properly.

AQD Comment: Appears to be in COMPLIANCE. As mentioned earlier, the unit was not operating during staff's inspection but they do have a newer baghouse and staff will assume that they operate it properly.

S.C. 13: The disposal of collected air contaminants shall be performed in a manner which minimizes the introduction of air contaminants to the outer air.

AQD Comment: Appears to be in COMPLIANCE. Staff will assume that they are doing this.

The following lists the permit special conditions of PTI No. 414-85 for the acid scrubber used on the copper and nickel plating lines.

S.C. 10: There shall be no visible emissions from the rinse tank.

AQD Comment: Appears to be in COMPLIANCE. Staff did not observe any VEs coming from them.

S.C. 11: The emissions form the rinse tank shall not exceed 0.07 milligrams per cubic meter, corrected to 70 degrees F and 29.92 inches of Mercury (Hg).

AQD Comment: Appears to be in COMPLIANCE. The AQD has not requested any stack testing to date.

S.C. 12: Applicant shall not operate the rinse tank unless the scrubber is installed and operating properly.

AQD Comment: Appears to be in COMPLIANCE. The scrubber is installed and staff will assume it is being operated properly.

S.C. 13: The exhaust gases from the rinse tank shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 14 inches at an exit point not less than 40 feet above ground level.

AQD Comment: Appears to be in COMPLIANCE. Staff did not observe this stack but will assume it meets these requirements.

The following lists the special conditions of PTI No. 226-95 for the Hard Chrome Plating Line.

As mentioned earlier, the chrome tank plating operation along with associated scrubber has been removed so this permit along with the Chrome NESHAP requirements are no longer applicable. Staff was shown all applicable records and On-Going Compliance Status reports up until the date it ceased operations and was dismantled.

INSPECTION SUMMARY: The facility appears to be in COMPLIANCE with their various permits and the special conditions contained within them. The facility will no longer be subject to the Chrome NESHAP. As mentioned previously, staff did not make a compliance determination pertaining to 40 CFR Part 63 Subparts ZZZZ and WWWW since the AQD is not delegated by the EPA to enforce these regulations at area sources of HAPs. Staff thanked Jim for their time and departed the facility at approximately 12:45 p.m.

NOTE: Staff later received a request from Jim to void out PTI No. 226-95 for the Chrome Plating Tank and staff has proceeded to have that done.

NAME Matt DeR

DATE 3-7-18

SUPERVISOR ma 2/8/2018