

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

N728338661

FACILITY: UNILOY MILACRON, INC.		SRN / ID: N7283
LOCATION: 5550 OCCIDENTAL HWY, TECUMSEH		DISTRICT: Jackson
CITY: TECUMSEH		COUNTY: LENAWEЕ
CONTACT:		ACTIVITY DATE: 02/16/2017
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced compliance inspection. No findings.		
RESOLVED COMPLAINTS:		

Minor Source**Facility Contacts**

George Stocks: Plant manager

ph 517-424-8757 Email: george_m_stocks@milacron.comWebsite: <https://www.milacron.com/our-brands/uniloy/>**Purpose**

On February 16, 2017, I conducted an unannounced compliance inspection of Uniloy Milacron Inc. (Company) located in Tecumseh, Michigan in Lenawee County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules and their Permit to Install (PTI) # 202-03

Facility Location

The facility is located in a mixed commercial/residential area within the town of Tecumseh. See aerial photo dated April 22, 2016.

Facility Background

The Company was issued PTI #202-03 on September 16, 2003 for 12 manual mold polishing process stations all tied into a common exhaust and control system. The control system consists of a baghouse dust collector followed in series by a hepa filter system.

From the permit application review sheet:

"The molds polished are aluminum, stainless steel, and copper/beryllium alloy. The 12 stations and the associated control equipment will be referred to as EUMOLDPOLISH. Because the copper/beryllium alloy molds contain less than 5% beryllium by weight, the process is not subject to the beryllium NESHAP....The proposed beryllium emissions are subject to TBACT. The applicant has proposed add-on control of a bag house followed in series by a Hepa Filter system. The total projected yearly beryllium emissions are less than 1 pound per year. Given that, the company's proposed control is considered to be TBACT....Permit is approvable. Very very small source of particulates, of which a portion is beryllium. Given the beryllium content in the alloys being polished, the source is not subject to the beryllium NESHAP"

The facility was last inspected in 2010. The inspection report that was written at that time included the following paragraphs:

"I received via e-mail documentation regarding the compliance status of beryllium contained in the mold or mold products that are polished at this facility on September 21, 2010. A copy of those documents are attached. A copy of their permit is below. The material safety data sheets for the mold material containing Beryllium are in the range of 1.6-2 percent by weight as is written in the permit. They use different types of polishing tools (see attachment from internet) on the molds they produce, which may result in the generation of mold component particles which are collected by a baghouse followed by a

hepa filter.

Based upon the e-mails received, only the aluminum molds could have a beryllium copper component which would get polished. They have also included indoor air testing for beryllium for OSHA evaluation. They plan to have Safety Kleen remove the collected waste from the polishing process since it has never been done, although he says the barrels are not nearly full. They will have Safety Kleen verify operating conditions on the baghouse and hepa filters as part of the waste removal process.

Based upon the material safety data sheets and the monitoring of the control equipment to indicate acceptable operation, this facility is complying with the conditions of the permit below. I also received via e-mail the material safety data sheets for the polishing agents used. They make the molds there and sell them. The plastic is injected through the mold and then air is blown in to expand it. Copies of the polishing agents material safety data sheets are attached."

Regulatory Applicability

PTI # 202-93 is applicable to various to the manual mold polishing process stations. (EUMOLDPOLISH)

There are various machining type operations at the facility but any minor emissions are only being released inside the plant and are exempt from permitting generally under Rule 285 (2) I (vi). In some cases, fumes are being captured by electrostatic mist eliminators.

There is one small welding station that is exhausted outside but is considered exempt from permitting per Rule 285 (2) (i). (Note: When welding parts that contain chromium, the potential exists for hexavalent chromium fumes to be generated.)

The facility does not have any paint booths, boilers, emergency generators or other processes that might be subject to federal air requirements. (Note: An older boiler had been disabled.)

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at 9:25 AM, proceeded to the facility office to request access for an inspection, provided my identification, and met with the plant manager George Stocks (GS). I informed him of my intent to conduct a facility inspection and to review the various records as necessary. GS extended his full cooperation and fully addressed my questions and accompanied me on the facility tour.

Pre-Inspection Meeting

GS outlined that the Company has 120 employees and operates 24 hours a day 5 to 7 days a week. Business has been up good recently but there are no plans currently to expand. He explained that he had been working at the plant for only a year and wasn't familiar with the PTI permit. I showed him a copy of it. He indicated that it appears that there has been very little change to the process since the permit was issued and that basically the same materials were being machined that contains mostly steel and aluminum. (They basically polish the molds to make them shinny.)

Onsite Inspection

GS then conducted a brief tour of the facility. Overall, the facility looked well maintained with very little odor and no smoke visible.

GS showed me the mold polishing process stations. (There was one operator present at a station but it wasn't clear if that station was in operation or not. There was only 10 of them. Each station has a dedicated exhaust. The operator turns on a switch to turn on the exhaust vent for an individual station each time it is used. The fan to the dust collector system located outside the building is turned on all the time. The mold polishing stations are small and appear to be generating very little dust. The operators use mostly ultrasonic techniques and some grinding hand tool to polish the molds. Directly adjacent to the mold polishing process station is a welding station of similar design with a few different exhaust ports options to use depending on the size of the metal to be welded . (See attached photos.) It gets limited use and was not operating during the inspection. Emissions are vented out through the side of the building then exhausted vertically.

Next I went outside to take a look at the dust collector and the hepa filter system that is attached to it. (See attached photos.) The dust collectors appeared to be in good shape and were operating. No sign of any fallout nor was there any visible emissions. I did not see any indication of a pressure gauge that measured pressure drop across it. The bottom of the dust collector was attached to two 55 gallon barrels to collect any waste material. After talking with plant personnel, GS was unable to tell me when the barrels had been emptied last or when the last time the dust collectors had been serviced. (Note: They do service the fan on a regular basis.) It was felt that the polishing stations were generating so little dust that it was not surprising that more servicing wasn't required. Based on my observations of the very small size of the polishing stations, I tend to agree with them. (Based on review of previous inspection report, the barrels underneath the bag house were only about 1/4 full after 7 years of use. The Company at that time indicated that they planned to service the filters in the Fall of 2010.)

Recordkeeping/Permit Requirements Review

GS sent an email to me with the records I requested. See Attachment (1) which contains all the MSDS's of the materials used in the molds. The MSDS's appear to show materials that are similar to the composition of materials that were in use by the Company back in 2010 which were similar to the materials first used when the permit was issued 7 years previously. None of the materials contain more than 2% beryllium. Some of the materials do contain significant amounts of chromium. However, the form of chromium that exists inside the metal (and generated after polishing) is the less toxic form of the metal (compared to hexavalent chromium) and is less toxic than beryllium so there has been no meaningful change in the quality of emissions.

Post-Inspection Meeting

I held a brief post-inspection meeting with GS as he was leaving for another meeting. I indicated that I didn't have any findings but would be sending out an email to him to request records that are required by the permit. I thanked GS for his time and cooperation, and I departed the facility at approximately 10:00 AM.

Compliance Summary

Based upon the facility inspection, review of the records, and review of applicable requirements, the Company is in full compliance with their PTI. There is some concern that the Company does not have a pressure drop indicator on their duct collectors or otherwise a way to monitor the performance of the dust collectors especially since very long periods of time go by between service calls on the filters due to the very low amount of particulate loading.



Image 1(aerial photo) : aerial photo

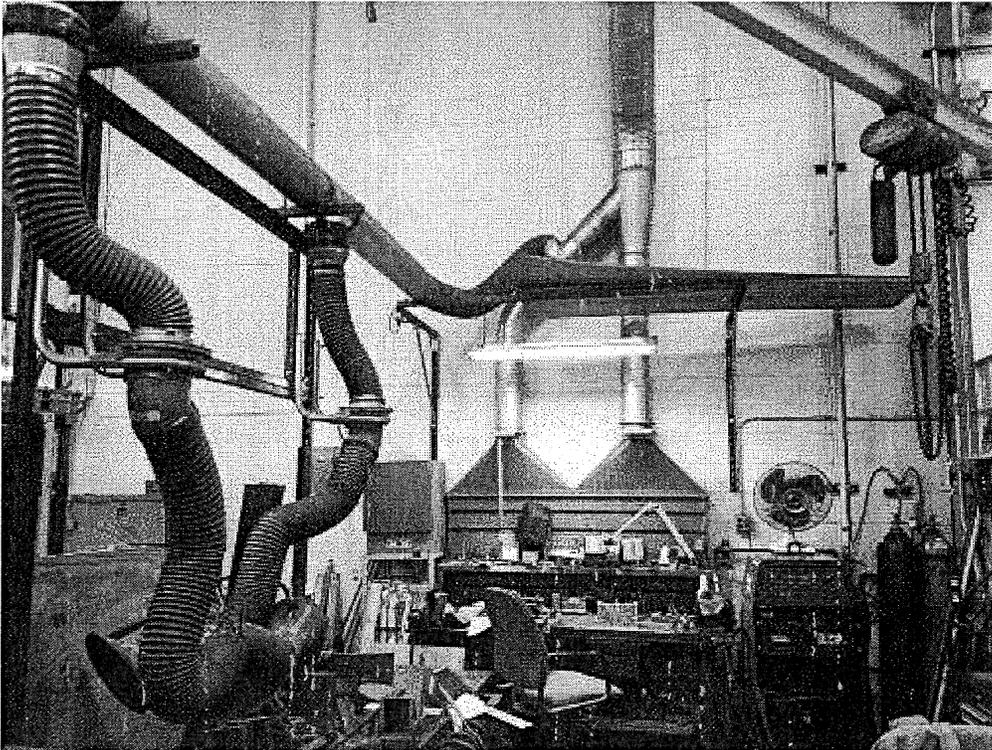


Image 2(welding station) : Welding station. Just to the left of the picture are the polishing booth stations.

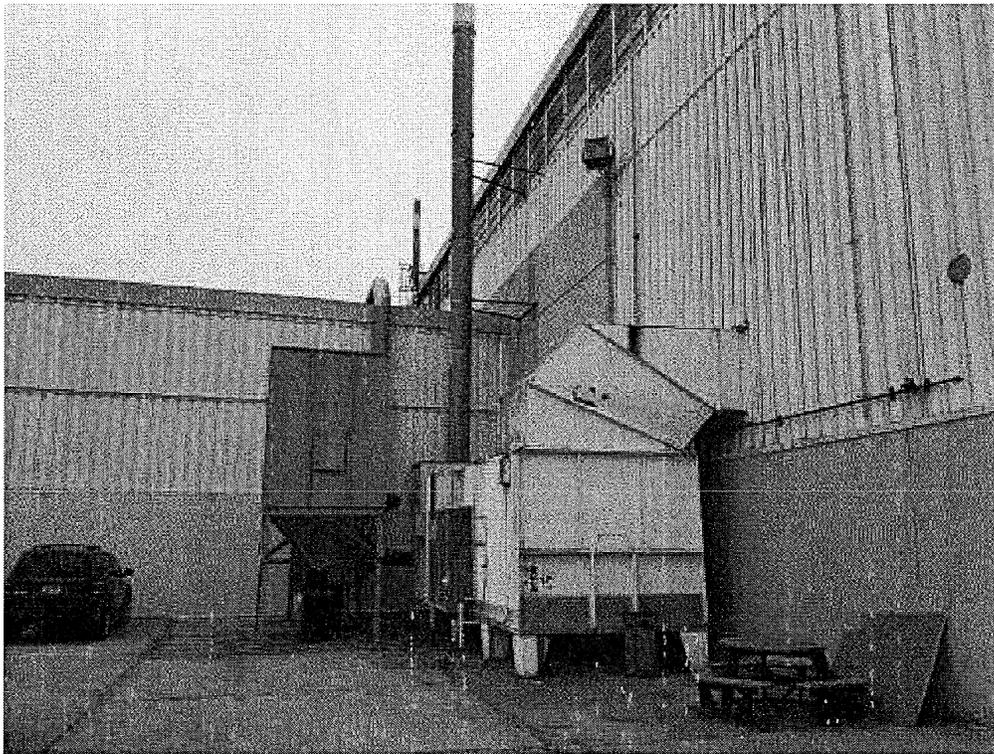


Image 3(Dust collector) : Dust collector and associated stack.

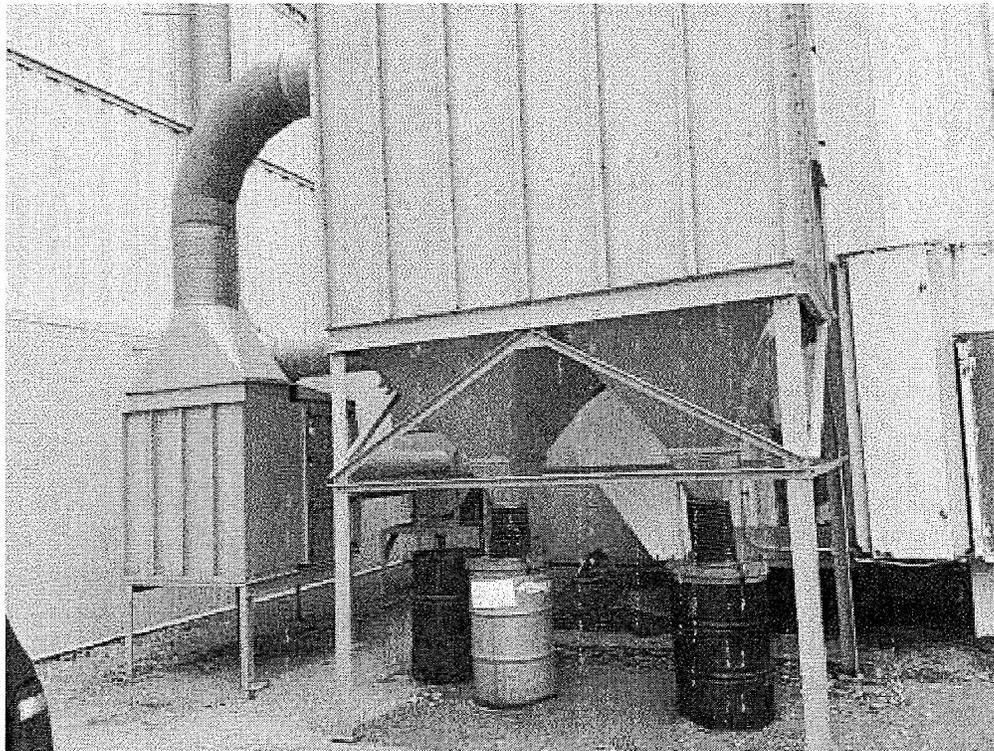


Image 4(Dust collector) : Hepa dust collector on the left with the primary dust collector on the right. Note the two barrels under the primary dust collector. (Left most barrel contained general trash.)

NAME M. Kovalchuk

DATE 2/17/2017

SUPERVISOR 