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manila  
Ingham

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

N719136768

FACILITY: Tecomet dba Symmetry Medical		SRN / ID: N7191
LOCATION: 5212 Aurelius Rd., LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: INGHAM
CONTACT: Tim Dawson, EH&S Manager		ACTIVITY DATE: 09/26/2016
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection of facility which was last inspected by AQD in 2012.		
RESOLVED COMPLAINTS:		

On 9/26/2016, the DEQ, AQD conducted a scheduled inspection of Tecomet, dba Symmetry Medical.

**Environment contact:**

Tim Dawson, EH&S Manager; 517-712-7957; [tim.dawson@symmetrymedical.com](mailto:tim.dawson@symmetrymedical.com)

**Emission units:**

Emission unit ID & description	Control equipment ID	Permit to Install or rule number	Location	Compliance status
EUPOLISHING1: Polishing operation cell consisting of 10 belt sanders and 3 double grinders.	Whirlwet #229, a wet dust control system with mist eliminator	213-08	Plant 4	Compliance
EUPOLISHING2: Polishing Operation cell consisting of 10 belt sanders and 3 double grinders	Uniwash #753, a wet dust control system with mist eliminator	213-08	Plant 4	No longer in use
EUpolishsand: Polishing operation cell consisting of two buffing machines and two belt sanders	Whirlwet #230? a wet dust control system including a mist eliminator	265-05?	Forge Plant 2	Compliance
EU_HighPolish: High Polish Cell; consists of 2 belt sanders and 2 buffers	Uniwash, #754, a Uniwash wet dust control system	185-14	Plant 4	Compliance
EU_NewPolishCell: New Polish Cell; consists of 14 belt sanders and 6 buffers	Wetrex #239, a Wetrex 10 wet dust control system	185-14	Plant 4	Compliance
EUMTLTRT: A metal chemical treatment line consisting of one pickling tank, one brightening tank, three chemical milling tanks, one transport tank, and associated water rinses.	Scrubber #1, a horizontal packed bed scrubber.	233-02A	Plant 2	Compliance
EUCEMMILL&PICKLE: A metal treatment line that consists of 3 tanks used for hydrofluoric acid chemical milling, nitric acid pickling or any combination of the two processes and several additional rinse tanks.	Scrubber #2, a Pro-Mec horizontal packed bed wet scrubber.	195-03A	Jet Dry building	Compliance

**Facility description:**

Tecomet dba Symmetry Medical is primarily engaged in the manufacturing of nonferrous forgings. Most of these forgings are used in the manufacturing of prosthetic joints for the medical profession, but they engage in some aerospace work. The alloys vary, but can contain amounts of titanium, zirconium, cobalt, nickel. Chromium and manganese may also be included in the alloy known as Hastelloy.

**Regulatory overview:**

This facility has a number of permits to install. They also have some miscellaneous metal working equipment which may be considered exempt under Rule 285(l)(vi).

This facility is considered to be a true minor source, rather than a major source of air emissions. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns. It is also considered a minor or area source for Hazardous Air Pollutants (HAPs), because it is not known to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

**Fee status:**

This facility is not a Category I fee subject source, because it is not a major source for criteria pollutants. It is not a Category II fee-subject source because it is not a major source for Hazardous Air Pollutants (HAPs), nor is it subject to federal New Source Performance Standards. Additionally, it is not Category III fee-subject, because it is not subject to federal Maximum Achievable Control Technology standards. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

**Location:**

The facility is located south of Lansing, on Aurelius Road, near Holt. The surrounding area is light industrial and commercial, with few residences. A soccer park is to the south.

**Recent history:**

The facility was most recently inspected by AQD on 1/20/2012, and was found to be in compliance.

**Arrival:**

No odors or visible emissions were detected when I parked, at 9:07 AM.

I met with Mr. Tim Dawson, Environmental Health & Safety Manager for Tecomet. I presented my credentials, and provided a copy of the DEQ brochure *Environmental Inspections: Rights and Responsibilities*, per AQD procedures. I was informed that the previous environmental contact, Ms. Heather Monaghan, is no longer with the company.

**Inspection:****Drop forges; Rule 285(l)(i):**

They have 10-15 presses, I was informed, with 4 being mechanical/direct, and the rest being screw presses. AQD has described these as drop forges, in prior activity reports. A number of units were seen in operation, during the inspection. They appear to be exempt from the requirement of Michigan Air Pollution Control Rule 201 to obtain a Permit to install under Rule 285(l)(i).

From the previous inspection report by AQD's Brian Culham (now retired) it appears that the furnaces used to heat the metal for the presses/drop forges were on wheels. B. Culham was informed then that a furnace could be relocated to a press/forge that was in operation. The furnaces were identified in a Rule 201 applicability spreadsheet in 2002 as exempt from Rule 201 under Rule 282(a)(I), because they were electrically heated.

I was informed that they will be installing filters on each forge to catch a spray of graphite lubricant, and that the filters will be changed as needed, roughly every 1-3 shifts. I was advised that they have recently installed the first filter.

EUPOLISHING1 with Whirlwet #229; PTI No. 213-08:

Whirlwet #229 is a Tri-mer wet dust collector. At 10:20 AM, I observed the unit, and saw that there were no visible emissions from the exhaust stack. The water sight window showed agitation of the liquid inside. The pressure drop of the unit ranged from 15.19-15.37 inches, w.c. I was advised that the low and high set points for the pressure drop range are 13.5 and 19 inches, respectively.

I observed their daily log of pressure drop, and low and high level alarms. The alarms looked to be no more than a few per month. It is my understanding that a new system will be installed at the plant to e-mail designated personnel of any low or high level alarms, for this and other air pollution control devices.

EUPOLISHING2 with Uniwash #753; PTI No. 213-08:

It is my understanding that this process and control device are no longer in use.

EUPOLISHSAND, with Whirlwet #230, PTI No. 265-05"

Whirlwet#230 was operating, with no visible emissions from the exhaust stack. The pressure drop was fluctuating, from about 8.36 to 10.62 inches of water column (w.c.). We observed the watersight glass on the side of the unit, which showed the agitation taking place of the scrubber solution. I observed their recent recordkeeping on a daily log form, showing pressure drop, and also low and high level alarms.

EU HIGHPOLISH, with Uniwash #754; PTI No. 185-14

The polishing room, which is small and enclosed, uses a finishing, or buffing, compound for polishing, I was informed: Most of the collected sludge which we observed in a 55 gallon drum was actually the captured particles of buffing compound, rather than metal particulates, I was advised.

The polishing room is served by Uniwash #754, a Uniwash wet dust control system which exhausts outdoors. The pressure drop was 0.8 inches, w.c. The set points for the acceptable range were -1.0 to 1.7 inches w.c. Mr. Dawson informed me that the high polish room and Uniwash #754 had not been run since 8/25/2016, until this morning, as there had not been any activity in the polishing room. The daily log forms showed that the Uniwash #754 had not been used since 8/25.

EU NEWPOLISH, with Wetrex #239, PTI No. 185-14:

The Wetrex #239, a Wetrex 10 wet dust control system, is in a small gable roof building attached to Plant 4. There were no visible emissions from the control device at 10:55 AM. Pressure drop was presently 8.8 inches, w.c., and the set point range was from 5.0 inches to 9.0 inches w.c. The solution flow rate was 8.14 gallons per minute. The operations manual was kept adjacent to the collector.

EUMLTREAT, with scrubber #1, PTI No. 233-02A:

Emissions from their Acid Room are controlled by a Tri-Mer scrubber, scrubber #1, I was informed. It is my understanding that the scrubber solution consists of water and a caustic (soda). The pH was currently 8.4, scrubber solution flow rate was fluctuating from 84.1 to 100.1 gallons per minute, and

pressure drop was 3.5 inches, w.c. I was advised that the low and high points for scrubber #1 are 0 and 9 inches, respectively.

EUCEMILL&PICKLE, with scrubber #2, PTI No. 195-03A:

Scrubber #2 is a Pro-Mec unit . It controls a metal treatment line consisting of 3 tanks used for hydrofluoric acid chemical milling, nitric acid pickling or any combination of the two processes and several additional rinse tanks. Scrubber drop was 2 inches, w.c. at this time, with the set points for the range being at 0 and 5.0 inches, w.c. The pH of the scrubbing solution was 8.5, and the scrubber solution flow rate was 32.5 gallons per minute. The pressure drop for the scrubber's fan was 5.0 inches, w.c. The packing was visible through a large window on the side of the unit. I was advised that pro-Mec will soon be changing out the packing materials.

I observed their alarm form, which showed no alarms for pH or for pressure drop readings, back to the start of the current log form on 8/22/2016.

Miscellaneous; Rule 285(l)(vi)(B):

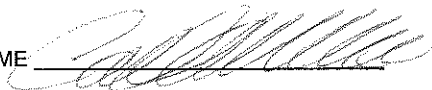
Plant 1 has a tool room, and it appeared that the metal working equipment here could be exempted under Rule 285(l)(vi)(B), for metal machining equipment which exhausts into the general, in-plant environment. I also observed a few small sandblasting booths, which had a particulate control device that exhausted indoors. These could also be considered exempt , under Rule 285(l)(vi)(B).

I left the site at 11:24 AM.

**Conclusion:**

No instances of noncompliance could be found.

NAME



DATE

9/30/2016

SUPERVISOR

