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DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

U1313240530523

FACILITY: Bleistahl North America		**SRN / ID:** U13132405
LOCATION: 190 North Clark Street, Battle Creek		**DISTRICT:** Kalamazoo
CITY: Battle Creek		**COUNTY:** CALHOUN
CONTACT: Mark Dodd , Shift Leader		**ACTIVITY DATE:** 07/21/2015
STAFF: Rex Lane	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:**
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On July 21, 2015, Air Quality Division (AQD) staff (Rex Lane and Monica Brothers) arrived at Bleistahl North America (hereafter "facility") located at 190 North Clark Road, Battle Creek, MI at 3 pm to conduct an unannounced air quality inspection. The facility has not previously been inspected by MDEQ-AQD. Staff provided the receptionist with their business card and stated the purpose of their visit. Mr. Mark Dodd, Shift Leader came out shortly thereafter and along with Mr. Dan Coffman, Senior Process Engineer took staff to the employee break room for further discussion. Staff stated that they would like to conduct an unannounced air quality inspection and provided Messrs. Dodd and Coffman with their credentials, business card and a copy of the MDEQ's Environmental Inspection brochure.

Per Mr. Dodd, the facility is German owned and manufactures engine valve seats and guides for domestic automakers using a powder metallurgy process. The facility has two main areas; parts machining which went into operation approximately two years and powdered metal which commenced operations in late spring 2015. Mr. Dodd provided a facility layout map which is attached to this inspection report. Per Mr. Dodd, the facility has around 35 employees and operates three shifts per day, five days per week with an occasional sixth day of operation. According to Mr. Dodd, the facility was recently certified ISO 14000 by an outside consultant. Staff asked and the facility does not have any boilers and uses natural gas fired space heaters for building heat which are exempt from air use permitting under Rule 282(b)(i). The facility currently does not have any emergency generators.

Messrs. Dodd and Coffman then gave staff a tour of the facility. Information provided below is based on observations and discussions during the inspection and records requested and provided during and following the inspection:

Machining:

The machining area has three dry turning machines for valve seats and one dry turning machine for long valve guides that vent internally through filter box controls. There are also three surface grinding machines that use abrasive wheels and water to grind valve seat parts followed by electrically heated vibratory drums equipped with covers that are filled with corn cob fines that vent internally. The dry turning machines and surface grinding machines are exempt from air use permitting under Rule 285(l)(vi)(B).

In the maintenance room, staff noted a process water filtration system associated with the surface grinding equipment which is exempt from permitting under Rule 285(j). There was also a portable welder which is exempt under Rule 285(i).

A parts washer with an open lid was observed outside the maintenance room. Mr. Dodd indicated that it was maintained and serviced by Safety Kleen and contained a detergent based alkaline solution. Staff gave Mr. Dodd a cold cleaner label to post outside the unit in the event the cleaning solution was determined to contain any volatile organic compounds (VOCs) which would subject the unit to operational use restrictions under Rule 707. Note: On 7/22/15, Mr. Dodd left a voice mail message for staff that the cold cleaner used ArmaKleen 4-in-1 cleaning solution (MSDS attached) which contains between 0.51 – 2.04% VOC, by weight. Therefore, the cold cleaner is exempt from air use permitting under Rule 281(h) provided the unit complies with the requirements of Rule 707 as noted on the cold cleaner label. Mr. Dodd stated in his voice mail message that the cold cleaner label has been posted by the unit and that the lid will remain closed when not in use.

Powdered Metal:

The facility has two 70-ton presses to produce "green" valve seats and short valve guide parts from primarily iron powdered metal. The powdered metal is fed into the presses from super sacks located in the mezzanine above the machines. The green parts are then fed through an electrically fired eight-zone sintering furnace with a controlled atmosphere (80% N2; 20% H2) to heat treat the parts. These parts may then be fed through an electrically fired five zone annealing furnace with a controlled atmosphere (< 5% H2; N2 balance) for stress relief. The presses and furnaces are exempt from permitting under Rule 285(l)(v) and Rule 282(a)(i). The facility receives truck deliveries of liquid nitrogen and hydrogen and these atmospheric gases are stored in tanks on the northeast side of the facility. In the event the hydrogen tank over pressures, hydrogen emissions are vented to a stick flare. The storage tanks are exempt from permitting under Rule 284(j).

Summary:

At the time of the inspection, all installed process equipment is exempt from air use permitting requirements and the facility appears to be in compliance with state air pollution control rules. -RIL

NAME RIL DATE 8/10/15 SUPERVISOR MB 8/10/15