

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

N059924154

FACILITY: Universal Bearings, LLC		SRN / ID: N0599
LOCATION: 205 INDUSTRIAL PARKWAY, ITHACA		DISTRICT: Lansing
CITY: ITHACA		COUNTY: GRATIOT
CONTACT: Chad DesRochers, Plant Superintendent		ACTIVITY DATE: 01/23/2014
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	
SUBJECT: Scheduled, unannounced compliance inspection		SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Chad DesRochers, Plant Superintendent (cdesrochers@univbrg.com)

**Purpose:** Conduct an unannounced, scheduled compliance inspection by determining compliance with Universal Bearings' Permits to Install (PTI) Nos. 406-, 407-, 408-, 409-, 410-, 411-, 412-83; 20-84 and 123-93A.

**Facility Background/Regulatory Overview:** Universal Bearings is a minor source that was previously named Precision Plastic & Die and is involved in bulk molding. A component of the bulk molding compound used at Universal Bearings is styrene.

**Inspection:** This was an unannounced compliance inspection. At approximately 10:00 a.m. on January 23, 2014 I met with Chad DesRochers, Plant Superintendent. I explained to C. DesRochers what occurs during an inspection and provided him with a DEQ "Environmental Inspections: Rights and Responsibilities" brochure to illustrate a typical inspection procedure, as well as a May 2012 Permit to Install Exemption handbook.

Only 3 of the presses were operating during the inspection. Universal Bearings has a total of 7 injection molding processes, 2 of which are permitted, the other 5 exempt per rule 286(b). There were no visible emissions from any of the stacks during the inspection. Universal Bearings is in compliance with all opacity limitations, specified at 20% for each permit's special condition. Currently Universal Bearings has an operating schedule of four 10-hour days.

PTI No. 406-83 (175 ton injection molding press); 407-83 (2 Britain 300 ton Mold Injectors); and 410-83 (3 Lawton 300 ton compression molding)

C. DesRochers said that the units permitted under these 3 permits are no longer at the site and have been scrapped. A request was made to Sue Thelen on 3/5/14 to void these permits.

PTI No. 408-83: 3 Grieve electrically heated air circulating ovens

C. DesRochers said there are 2 of the 3 ovens remaining onsite and that they are used for curing parts made of conventional plastic, a phenolic molding compound, at 350°F for 8 hours at a time. Permit conditions limit the amount of ammonia from these ovens, and restricts opacity from the stack to 20%. There were no visible emissions from the stack. Hexamethylenetetramine composes a maximum of 7% of the molding compound and has the potential to release ammonia gas when subjected to heat (see attached MSDS). I did not verify that emissions from this process exceeded the permit limits of 2.6 lb/hr and 8.94 tons/year; however, records of material usage are not required to be kept per the permit. C. DesRochers said that since Universal Bearings has taken over the business these ovens haven't been used much. *This process would currently be exempt under Rule 285(r)(iv).*

PTI No. 409-83: 2 Lawton 500 ton compression molding presses

This equipment is used for molding "bulk molding compound" (BMC), which contains no more than 17% styrene (see attached for MSDS provided by C. DesRochers). Universal Bearings labels these presses #63 and #22. C. Desrochers said that press #63 can produce approximately 40,000 lbs/week and press #22 can produce approximately 20,000 lbs/week See attachment for production records, which show daily combined production output for both presses. These two presses mold balls of the BMC into sheets for various applications. *This process would currently be exempt under Rule 286(b).*

PTI No. 411-83: 3 Lawton 350 ton compression transfer molding presses

According to C. DesRochers, 2 of the 3 presses are still present onsite, and approximately 5000 lbs of plastic has been used in this process within the past year, according to C. DesRochers.

*This process would currently be exempt under Rule 286(b).*

PTI No. 412-83: Wheelabrator tumblast w/ wheelabrator dust collector

This equipment uses walnuts as a de-flasher: it removes residual plastic (flash) from products generated by the 375 ton Cincinnati injection molding press. I did not verify with C. DesRochers if a stack test had ever been done to show compliance with condition 10 in the permit. I did not verify that the dust collector bags were installed properly. C. DesRochers explained that the particulate from the dust collector is collected in a plastic bag that is removed from the collector and thrown away, which happens approximately once per week, or when it is noticed that there is dust remaining on the finished products.

*This process would currently be conditionally exempt under Rule 285(l)(vi)*

PTI No. 20-84: Cincinnati 375 ton injection molding

This piece of equipment is used to mold what Universal Bearings calls "conventional plastic" and has the ability to produce approximately 25,000 lbs/year, according to C. DesRochers. C. DesRochers also identified that there is another Cincinnati 375 ton injection molding onsite, but is exempt from a permit to install via 286(b).

PTI No. 123-93A: 2 paint booths

The original PTI 123-93 was for the installation of one paint booth, 123-93A was issued to include an additional paint booth. C. DesRochers explained that the paint booths have not been used since roughly 2008 and would like to keep the permit for these units in case Universal Bearings ever develops a market for painting parts again (formerly Precision Plastic & Die had done painting with water-based coatings). The paint booths also have 2 associated, electrically heated ovens that are vented outside and which were not included in the permit application for the paint booths. The surface coating line (booths + ovens) is currently exempt from a permit to install because the coating usage is less than 200 gallons/month.

Other Exempt Units

There is a 17" x 29" Safety Kleen cold cleaner that is exempt per 281(h) because its air/vapor interface is less than 10 square feet. C. DesRochers said that the cold cleaner was installed approximately 10 years ago, which is considered to be a "new cold cleaner" which is subject to Rule 707.

Rule 707 requires that operating procedures be kept in a conspicuous location near the cold cleaner. While Universal Bearings did not have this near their cold cleaner, I provided C. DesRochers with an MDEQ "Cold Cleaner Operating Procedures" stickers to adhere to the cold cleaner. C. DesRochers took the procedure, but said he would look into a better operating procedure provided by SafetyKleen rather than attach the operating procedures to the cold cleaner during the inspection. However, 3/13/14 C. DesRochers provided me with a photo showing that Universal Bearings decided to use the DEQ-provided operating procedures (see attachment) as well as a list of all personnel trained and responsible for following the operating procedures on the cold cleaner.

Rule 707 also requires that the Reid Vapor Pressure of the solvent not be more than 0.6 psia. Safety-Kleen solvent, 30 – 60% of which contains petroleum naphtha, has a Reid Vapor Pressure of less than 0.1 psia. Universal Bearings is in compliance with all state rules for cold cleaners.

Based on this inspection, Universal Bearings is in compliance with all state and federal regulations at this time.

NAME Murray M. Lydon

DATE 3-14-14

SUPERVISOR M. J. [Signature]