

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

N368629202

FACILITY: BLUE WATER FABRICATORS INC		SRN / ID: N3686
LOCATION: 21482 CARLO DR, CLINTON TWP		DISTRICT: Southeast Michigan
CITY: CLINTON TWP		COUNTY: MACOMB
CONTACT:		ACTIVITY DATE: 04/16/2015
STAFF: Kerry Kelly	COMPLIANCE STATUS:	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On April 16, 2015 and May 1, 2015, AQD staff Joyce Zhu and I conducted an unannounced self-initiated inspection at Diversified Fabricators, Inc. (DFI) located at 21482 Carlo Drive, Clinton Township, Michigan. This facility is identified by the Air Quality Division with the State Registration Number (SRN) of N3686. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); Michigan's Air Pollution Control Rules; and the conditions of Permit to Install (PTI) No. 154-93.

#### ***General Information***

DFI fabricates metal machine guards to meet OSHA safety standards for machines with moving parts. Regular hours of operation are Monday – Friday 6:00 am to 4:00 pm and occasionally Saturday 6:00am - 11:00am. A Permit to Install, PTI No. 154-93, was issued in 1993 to Blue Water Fabricators, Inc. for one spray paint booth. Blue Water Fabricators has the same address as DFI, 21482 Carlo Drive, Clinton Township, Michigan. According to Michigan Department of Licensing and Regulatory Affairs, Blue Water Fabricators was dissolved September 23, 2010. The company name on permit No. 154-93 is currently listed as Blue Water Fabricators.

#### ***Pre-Inspection Meeting***

During the pre-inspection meeting I initially showed my credentials (ID Badge), stated the purpose of my visit, and gave a copy of the pamphlet "Environmental Inspections: Rights and Responsibilities" to Mr. Kevin Williams. Mr. Williams identified himself as the Account Director. During the pre-inspection meeting Mr. Williams informed me that DFI is performing the same processes and operating the same equipment as Blue Water Fabricators. I mentioned that the AQD requests DFI change the name on permit #154-93 and provided him with a copy of R 336.1219. Upon speaking with Mr. Williams further I learned there is still only one spray paint booth at the facility. At this time I informed Mr. Williams that DFI may be exempt from R 336.1201, showing him R 336.1287(c), and explained Permit No.154-93 can be voided. I asked Mr. Williams for VOC emission rate records, usage records, and VOC content for each coating used required by special conditions 15 and 17 of Permit No. 154-93. Mr. Williams accompanied us during the walk through inspection.

#### ***Metal Fabricating Process***

During the facility walk through, AQD staff Ms. Zhu and I observed metal fabrication activities such as cutting, routing, drilling, and machining. We observed two Bridgeport machines which are rarely used according to Mr. Williams, five drilling machines, two CNC laser cutting machines, and three Band Saws. The Bridgeport machines are used to perform precision metal cutting. The CNC machines use nitrogen to cut aluminum and stainless steel, and air to cut all other metals. One of the CNC's is externally

vented. The vent for this machine has shutters and a catch basin that may be considered a mechanical precleaner. There is no fabric filter connected to the ventilation for this laser cutter. Exemption R 336.1285(l)(vi) requires both a mechanical precleaner and a fabric filter. Joyce and I observed this laser cutter in operation. We saw no visible emissions while the CNC was in operation. There appeared to be rust around the CNC vent on the exterior wall. Mr. Williams explained that the rust was likely caused by cooler, moist air from the outside coming into contact with the metal from the cutting process that has settled on the shutters. Personal vehicles were parked under the CNC vent. All other machines observed exhaust to the general in-plant environment.

#### *Coating Operations*

Ms. Zhu and I observed one spray paint booth with two air-assisted spray guns. The paint booth was not in use during the inspection. The filters in the booth were properly installed as required by special condition 18 in PTI No. 154.93. Mr. Williams stated that the filters are changed on an as needed basis depending on production levels and pressure drop. Spray nozzles are cleaned using toluene for solvent-based paint and soap and water for water-based paints. Purged solvents are collected and stored in sealed 55 gallon drums. A waste hauler, Crystal Clean, collects the waste solvent for disposal. Paints are stored in a closed cabinet. The exit point of the stack for the paint booth appears to be 35.5 feet above ground level as required by special condition 19 in PTI No. 154-93.

#### *Conclusion*

On Friday May 1, 2015 Mr. Williams submitted the VOC emission rate records, usage records, and VOC content documentation for each coating used April 2013 – March 2015 required special conditions by Permit No. 154-93. Upon review I discovered the average hourly emission rate for April 2013 – March 2014 was exceeded. The permit limit is 2.48 lbs/hr and the calculated emissions were 3.28 lbs/hr. This is a violation of special condition 15 of PTI No.154.93. The 2013 – 2014 calculated yearly emissions (5.64 tons/yr) were within the permit limit (10 tons/yr). The 2014 – 2015 calculated hourly and yearly emissions, 1.68 lbs/hr and 2.76 tons/yr respectively, were both within permit limits.

There is currently no permit on file for the CNC laser cutting machine that is externally exhausted. This is a violation of R336.1201.

NAME Kenny Kelly DATE 5/6/15 SUPERVISOR CTE