

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

B648834507

FACILITY: DELTA TUBE & FABRICATING CORPORATION		SRN / ID: B6488
LOCATION: 4149 GRANGE HALL RD., HOLLY		DISTRICT: Southeast Michigan
CITY: HOLLY		COUNTY: OAKLAND
CONTACT: Todd Campbell, Vice President		ACTIVITY DATE: 04/27/2016
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection of a Title V source, and evaluation of whether facility ROP can be voided.		
RESOLVED COMPLAINTS:		

On April 27, 2016, I conducted an unannounced, scheduled, level 2 inspection of Delta Tube & Fabricating Corporation (Delta Tube), located at 4149 Grange Hall Road in Holly, Michigan. The purpose of this inspection was to determine the facility's compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; the conditions of Renewable Operating Permit (ROP) No. MI-ROP-B6488-2012; Permit to Install (PTI) No. 28-16; 40 CFR Part 63 Subpart Mmmm – National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63 Subpart Mmmm); and to evaluate the facility request to void its ROP.

I arrived on site around 9:40 AM. I met with Mr. Todd Campbell, Vice President; Mr. Bryan Campbell, Project Manager; and Mr. Alex Welch, Estimator. Mr. Todd Campbell and Mr. Bryan Campbell provided a walkthrough of the facility and Mr. Welch provided facility records.

Opening Meeting

Delta Tube manufactures and paints shipping containers and racks for the automobile industry. These containers and racks are used to hold unique vehicle parts such as steering wheels, hoods, and fenders. The company typically operates two eight hour shifts Monday through Friday with overtime on Saturdays.

Delta Tube recently switched to using powder coating at the facility. According to Mr. Todd Campbell, emission units associated with Rule 201 and Rule 210 (EUPARTSWASHER, EUPRIMECOAT, and EUTOPCOAT) were last used on December 22, 2015. The facility has since dismantled those emission units.

On February 19, 2016, Delta Tube received general PTI No. 28-16 for a natural gas-fired burnoff oven. The burnoff oven is on site but not yet installed.

Facility Walk-Through

EU-COLDCLEANERS

A cold cleaner is located in the warehouse building. According to Mr. Todd Campbell the cold cleaner is used for maintenance associated with the forklifts on site. The cold cleaner is in a separate building from powder coating operations. The cold cleaner uses Safety-Kleen Premium Solvent, which is 100% hydrotreated light petroleum distillates (CAS No. 64742-47-8) according to its material safety datasheet (MSDS). The cold cleaner was closed at the time of the inspection. I did not see cold cleaner operating procedures posted in a conspicuous location. I provided MDEQ-AQD orange operating procedures. The cold cleaner appears to be exempt from obtaining a Permit to Install per R 281(h).

Powder Coating Booth

Delta Tube has a new powder coating booth on site. The booth was operating during the facility inspection. A conveyor moves parts through an automatic spray area and a natural-gas fired oven. The spray guns and metal parts have an opposite electric charge to improve transfer efficiency. According to Mr. Bryan Campbell, transfer efficiency is designed to exceed 90%.

The booth is down-draft so that air travels through grates in the floor. Air travels through two cyclones in parallel followed by two baghouses in parallel, and is emitted back into the in-plant environment through two vents. Powder collected in the cyclones is reused by the facility. Each baghouse contains vertical cartridge collectors that are pulsed every 15 seconds or on demand. Extra cartridges are available on site. According to Mr. Bryan Campbell, the facility plans to replace cartridges once per year or as needed.

The parallel baghouses had pressure readings of 7 inches water and 2.9 inches water respectively. According to the manufacturer, baghouses should be replaced if pressure exceeds 5 inches water. Mr. Todd Campbell explained that the manufacturer came in to fix the baghouse last week, so the pressure is decreasing towards a value in line with manufacturer recommendations.

The powder coating booth and its associated oven appear to be exempt from obtaining a Permit to Install per R 287(d).

EU-BURNOFF – PTI No. 28-16

Delta Tube received general permit PTI No. 28-16 for a natural gas-fired burnoff oven on February 19, 2016. The burnoff oven is on site but I observed that it has not been installed, so compliance with PTI No. 28-16 cannot be determined at this time. According to Mr. Bryan Campbell, the burnoff oven will have an obstructed stack and its set point will be 1425 °F. The oven will be used to remove layers of powder coating from hooks on the conveyor line. Permitted construction of this equipment appears to be an off-permit change to MI-ROP-B6488-2012 per R 215(3).

EUSTENCILINK

Stencil ink is applied to finished racks by paint brush over stencil. The ink contains diacetone alcohol (CAS No. 123-42-2; 8-hr ITSL 2375 ug/m³) and dipropylene glycol methyl ether (CAS No. 34590-94-8; 24-hr ITSL 720 ug/m³) according to its MSDS. This process appears to be exempt from obtaining a Permit-to-Install per R 290.

Machining Equipment

An electrically-powered laser cuts shapes out of metal sheets. Exhaust vents to ambient air and appears to be properly controlled by filters which are changed as needed. The laser cutter appears to be exempt from obtaining a Permit-to-Install per R 285(l)(vi)(C).

Additional machining equipment onsite includes welding stations and robotic welding which appears to be exempt from Permit-to-Install requirements per R 285(i), a punch press, a brake press, and a plasma machine with a Camfil dust collector with filters changed once per year. This machining equipment appears to be exempt from obtaining a Permit-to-Install via R 285(l)(vi).

FGCOATINGLINE

FGCOATINGLINE (EUPARTSWASHER, EUPRIMECOAT, and EUTOPCOAT) appears to

have been removed from the facility. The building that used to house them is open and empty for future use as a storage area.

FGRULE287(c)

The facility does not appear to conduct miscellaneous coating operations per Rule 287(c).

Recordkeeping

VOC Records - FGCOATINGLINE

Delta Tube provided records of coating usage records per FGCOATINGLINE Special Condition (S.C.) VI.2; hours of operation per S.C. VI.1; VOC contents of the coatings per S.C. VI.3; records of clean up solvents used per VI.4 and VI.5; and VOC emission rates per S.C. VI.6 for January of 2015 through December of 2015, when the liquid coating line ceased operation.

The highest tons of VOC emissions per 12 month rolling time period were 25.92 tons VOC in November of 2015. This is below the facility limit of 80.0 tons VOC per 12 month rolling time period per S.C. I.1. Similarly, the highest hourly emission rate was 16.63 pounds VOC per hour in November of 2015. This is below the facility limit of 51.2 pounds VOC per hour per S.C. I.1. The highest VOC content of coatings used on FGCOATINGLINE appears to be Quick Dry 350 Enamel, SW 4085 SAFETY GREEN, which has a VOC content of 3.40 lbs VOC/gallon of coating. This is below the facility limit of 3.5 pounds VOC per gallon/gallon of coating per S.C. II.1.

Mr. Welch identified several coatings used for building maintenance, such as on the walls of the building that houses the powder coating line, where the VOC content exceeds 3.5 pounds VOC/gallon of coating. These coatings do not appear to be associated with FGCOATINGLINE, and appear to be exempt from obtaining a Permit to Install per R 287(j).

HAP Records – FG-METALCOATMACT & FGCOATINGLINE

Delta Tube provided monthly hazardous air pollutant (HAP) records for the compliance period of January of 2015 through December of 2015, when the facility ceased using HAP-containing coatings. These HAP records are required per FG-METALCOATMACT S.C. VI.3 and VI.5; and FGCOATINGLINE S.C. VI.7-10.

Because the lacquer thinner used on the spray guns appears to contain organic HAPs, the facility cannot use the Compliant Materials Option to demonstrate compliance with the emission limit in FG-METALCOATMACT S.C. I.1 per S.C. I.2(a). Alternatively, MDEQ-AQD calculated the Emission Rate Without Add-on Controls option for the compliance period of January of 2015 through December of 2015 based on HAP records provided by the facility. The emission rate during this compliance period appears to be 2.1 lbs of HAPs per gallon of coating solids. This is below the organic HAP emission limit of 2.6 lbs per gal of coating solids per S.C. I.1. A conservative lacquer thinner HAP content of 133% was used for this calculation based upon its MSDS.

40 CFR Part 63 Subpart M MMM Subjectivity

According to Delta Tube, operation of FGCOATINGLINE (EUPARTSWASHER, EUPRIMECOAT, and EUTOPCOAT) was ceased on December 22, 2015. On January 18, 2016, a regulatory applicability study was provided for the new powder coat line at the facility. The study provided that the coating line is exempt from obtaining a Permit to Install per R 287 (d). The study also provided that 40 CFR Part 63 Subpart M MMM does not apply to the

surface coating line because it uses only coatings, thinners, and other additives, and cleaning materials that contain no organic HAP per §63.3881(c). According to an email provided by Mr. Todd Campbell on January 25, 2016, powder spray guns are cleaned by blowing air through them, and racks will be cleaned by the facility burn off oven.

MDEQ-AQD reached out to the United States Environmental Protection Agency (USEPA) Region V for guidance regarding the applicability of the powder coating line to 40 CFR Part 63 Subpart M. Based on USEPA guidance, it appears that Delta Tube is no longer subject to 40 CFR Part 63 Subpart M because they no longer have the existing paint line on site, and the new powder coating line has no potential HAP emissions. The new line does not meet Subpart M's applicability provisions.

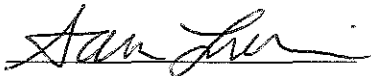
ROP Voidance

On March 8, 2016, Delta Tube provided a written request to void the facility ROP. MDEQ-AQD reviewed this request and determined that it appears the ROP can be voided, and that the remaining equipment on site in the facility ROP does not require a Permit to Install. MDEQ-AQD will continue steps to void the facility ROP.

Compliance

Based on the AQD inspection and records review, it appears that Delta Tube is in compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; the conditions of ROP No. MI-ROP-B6488-2012; PTI No. 28-16; and 40 CFR Part 63 Subpart M. MDEQ-AQD will continue steps to void the facility ROP.

NAME



DATE

5/13/16

SUPERVISOR

CJE