

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

B648831356

FACILITY: DELTA TUBE & FABRICATING CORPORATION		SRN / ID: B6488
LOCATION: 4149 GRANGE HALL RD., HOLLY		DISTRICT: Southeast Michigan
CITY: HOLLY		COUNTY: OAKLAND
CONTACT: Gary Jackson , Plant Manager		ACTIVITY DATE: 08/06/2015
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection of a major source.		
RESOLVED COMPLAINTS:		

On Thursday, August 6, 2015, AQD Senior Environmental Engineer Sebastian Kallumkal and I conducted an unannounced, scheduled, level 2 inspection of Delta Tube & Fabricating Corporation (Delta Tube), located at 4149 Grange 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 No. MI-ROP-B6488-2012, and 40 CFR Part 63 Subpart Mmmm – National Emissions Standard for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63 Subpart Mmmm).

AQD staff arrived on site around 9:00 am. We met with Mr. Gary Jackson, Plant Manager; with Mr. Craig Mclean, Manufacturing Manager; and with Mr. Alex Welch, Estimator. Mr. Jackson and Mr. Mclean provided a site walkthrough and explained equipment and operations. Mr. Welch provided records. I provided Mr. Jackson with my contact information and a copy of the pamphlet "DEQ Environmental Inspections: Rights and Responsibilities."

### Opening Meeting

Delta Tube manufactures shipping containers and racks for the automobile industry to hold unique vehicle parts such as steering wheels, hoods, and fenders. The company has approximately 220 employees, and operates two eight-hour shifts Monday through Friday from 7:00 AM to 12:30 AM, with overtime on Saturdays.

The facility plans to transfer to a powder coating process that will likely be exempt from Permit -to-Install requirements per R 287(d). Delta Tube has broken ground on a facility for powder coating. Once powder production is running the facility plans to remove liquid coating operations, at which point they will request to have their ROP voided.

### Facility Walk-Through

#### *Material Storage Area*

New and waste materials are stored in closed containers. Containers range in sizes from 1 gallon to 55 gallons. No odors are present in the material storage area. Coatings are used as provided; the facility does not add thinner to any coatings. The facility uses several coatings repeatedly until containers are empty so that there is not much waste per FG-COATINGLINE Special Condition (S.C.) IX.1 , and according to the facility, none is considered hazardous waste. The facility does not have a burn-off oven and so they send racks off-site. No washing of racks occurs on site. Scrap metal is stored at machines where it is generated.

### *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 appear 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*

Parts travel on a conveyor through the primer paint booth and a two-section top coat paint spray booth. According to Mr. Jackson, natural-gas fired EUPARTSWASHER has not been used in over a year. This was verified from reviewing the Michigan Air Emissions Reporting System. Using this parts washer was a requirement for General Motors racks, but that is no longer the case.

Parts first travel through EUPRIMECOAT. This is a downdraft paint booth. Yellow mesh filters are in place in front of white sheet filters. Filters are replaced depending on gallons of coating used. Generally they are replaced one or two times per week. White sheet filters are changed approximately once per year. Extra filters are available on site. Filters appear to be operating properly per FGCOATINGLINE S.C. III.1. EUPRIMECOAT has one HVLP applicators per S.C. III.2.

Next, parts continue on the conveyor through EUTOPCOAT. This is a downdraft paint booth with two HVLP applicators per S.C. III.2. This paint booth has the same type of filters in place with yellow mesh filters in front of white sheet filters. Extra filters are available on site and filters appear to be operating properly per FGCOATINGLINE S.C. III.1. Parts are then air-dried.

A cold cleaner is used to clean the spray guns. The cold cleaner uses Safety-Kleen Premium Lacquer thinner and is maintained by Safety Kleen. The cold cleaner was closed at the time of the inspection. Its air/vapor interface appears to be less than ten square feet per EU-COLDCLEANERS S.C. IV.1(a), and operating instructions are located inside the cold cleaner. I provided MDEQ-AQD orange operating procedures to post in a conspicuous location near the cold cleaner per S.C. VI.3.

### *EU-MISC-COATING and EU-STENCILINK*

According to Mr. Jackson, the facility no longer conducts miscellaneous coating. Stencil ink is applied to finished racks by paint brush over stencil. This process is exempt from obtaining a Permit-to-Install per R290.

### Recordkeeping

#### *FGCOATINGLINE*

Mr. Welch provided sample daily and monthly hours of operation as recorded by hand per S.C VI.1, as well as daily records of coating usage per S.C. VI.2. Also provided were the VOC content of coating as applied for the 12-month period from July of 2014 through June of 2015

per S.C. VI.3. Coating is applied as received. According to records, the VOC content of the following coatings exceeds 3.5 lbs per gallon per S.C. II.1.

Month	Coating	Gallons	lbs VOC/gal
15-Apr	Industrial Enamel, Pure White	2	3.68
15-May	Industrial Enamel, Pure White	29	3.68
15-May	Industrial Enamel, Deep Base	10	3.7
15-Jun	SHER-KEM* Fast Dry Metal Finishing Enamel, Ultra Deep Base	25	4.71
15-Jun	SHER-KEM* Fast Dry Metal Finishing Enamel, Ultra Deep Base	35.5	4.37

On September 28, I received an email response explaining that these coatings were used for building maintenance purposes. On September 29, I spoke with Mr. Todd Campbell, Vice President, who explained that pure white and deep base coatings were only used for building maintenance purposes such as repainting the walls by the laser cutter discussed above. Sherwin Williams provides records of all paint ordered by the facility regardless of its use. Mr. Campbell discussed that the facility will continue to improve recordkeeping by separating paint used on the coating line from paint used for maintenance purposes.

Also provided were monthly records of Premium Lacquer thinner used for the spray guns per S.C. VI.4 and its VOC content per S.C. VI.5.

Annual VOC emissions and maximum hourly emission rate each month were provided from January 2012 through June of 2015. The maximum 12-month rolling VOC emissions in 2014 and 2015 were 20.34 tons VOC in June of 2015. This is well below the facility limit of 80 tons VOC per rolling 12-month time period per S.C. I.1. The maximum pounds (lbs) VOC per hour in 2014 and 2015 were 3.15 lbs VOC per hour in January of 2015, below the limit of 51.2 pounds per hour per S.C. I.1.

#### Method 24 Testing

The facility tests coatings for VOC content, water content, and density using US EPA Reference Test Method 24 per S.C. V.1 and V.2. The facility provided Method 24 results of two coatings tested in 2015 and of two coatings tested in 2014 per S.C. V.3.

While on site I asked Mr. Jackson to collect a sample of coating Quick Dry Enamel, ford m5j67 beige as applied for US EPA Method 24 Testing to check VOC reporting accuracy. Analytical results showed a VOC concentration of 3.32 lbs VOC per gallon of coating. The facility provided a Certified Product Data Sheet for the coating with a VOC content of 3.31 lbs VOC per gallon of coating. This appears to validate facility VOC reporting accuracy.

#### *FG-METALCOATMACT (Existing)*

The facility provided monthly hazardous air pollutant (HAP) records for the compliance period of July 2014 through June of 2015 per S.C. VI.3 and VI.5. These HAP records are also required per FGCOATINGLINE S.C. VI.7-9. MDEQ-AQD discussed with the facility that the

cleaning material used for the spray guns is a lacquer thinner comprised of organic HAPs. Additionally, three gallons of Quick Dry 350 Enamel, Forest Green were used in November of 2014 with a HAP content of 3.94 lbs per gallon of solids. Because of these exceedances, the facility cannot use the Compliant Material Option per S.C. I.2(a) to show compliance with emission limit in S.C. I.1.

Alternatively, the facility appears to be in compliance with the Emission Rate Without Add-on Controls compliance method per S.C. I.2(b). MDEQ-AQD calculated the Emission Rate Without Add-on Controls option for the compliance period of July 2014 through June of 2015 based upon monthly HAP records provided by the facility. The emission rate for this compliance period is 2.1 lbs of HAPs per gallon of 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 on its MSDS.

#### Odor Investigation

After the inspection, Mr. Kallumkal and I conducted odor observations upwind and downwind of Delta Tube. Wind was easterly at 5 mph according to wunderground.com. We traveled through Hawaii Gardens and Holly Village complexes. No odors were detected. We looped back to Grange Road and traveled around Apollo Circle and Apollo Drive. No odors were detected.

#### 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, and the conditions of MI-ROP-B6488-2012.

NAME Adam [Signature]

DATE 9/29/15

SUPERVISOR CJE