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

B648824963

FACILITY: DELTA TUBE & FABRICATING CORPORATION		**SRN / ID:** B6488
LOCATION: 4149 GRANGE HALL RD., HOLLY		**DISTRICT:** Southeast Michigan
CITY: HOLLY		**COUNTY:** OAKLAND
CONTACT: Joe Ignace , Plant Manager		**ACTIVITY DATE:** 03/24/2014
STAFF: Usama Amer	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Inspection of a Major Source		
RESOLVED COMPLAINTS:		

On March 19 & 24, 2014, I conducted a scheduled inspection at Delta Tube & Fabricating Corp. (Delta), located at 4149 Grange Hall Rd, Holly, Oakland County. The purpose of the 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), the Renewable Operating Permit (ROP) No. MI-ROP-B6488-2012, and the requirements of the National Emission Standards for Hazardous Air Pollutant (NESHAP) Emissions for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR Part 63, Subpart MMMM. Mr. Joseph (Joe) Ignace, Plant Manager, and Mr. Todd Campbell, Vice President, represented Delta during the inspection.

PROCESS DESCRIPTION & BACKGROUND

Delta manufactures metal tubing for metal racks used in the auto industry. It operates 20 hours per day and 5 - 6 days per week.

Delta is comprised of two buildings. The south building is where the metal is formed and welded. The north building is where the manufactured racks are cleaned and painted. The paint system is on a conveyer. The conveyer starts with a part washer using a phosphate solution. The washed racks are air dried prior to entering the paint spray booth.

The racks are coated with primer and topcoat. The primer is gray in color, while the topcoat has 3 main colors: NAO Blue, Laser Blue and Ford Sign Blue. Technical Data Sheets, prepared by Sherwin Williams, are used to calculate the VOC emissions. Dry filters are installed in the down draft floor (Condition #III.1 of FGCOATINGLIN Table of ROP No. MI-ROP-B6488-2012). The paint booth operates under a down draft system. High volume low pressure (HVLP) spray guns are used in the paint spray booth (Condition #III.2 of FGCOATINGLIN Table of ROP No. MI-ROP-B6488-2012). The painted racks are dried off at ambient temperature. The coatings used are high solids solvent based coating. The coatings are used as received without solvent reduction.

Final assembly is done after the painting process. For identification purposes, a stencil marker is applied to the racks during final assembly.

Delta has two cold cleaners. One cold cleaner is located in the paint area and used to clean the paint spray guns. The cold cleaner was covered. The second cold cleaner is located in the maintenance area and used to clean various types of tools. Safety Kleen is responsible for disposal of the used solvent. The solvent used in the cold cleaners is called "Multi Use Lacquer Thinner".

VICINITY INSPECTION

- Started at Hawaiian Trailer Park, located on Mauna Loa Lane, just west of Delta at. As I was driving at a slow speed of about 3 – 5 mph with the car windows open, I noticed that the wind was blowing to the east and north east at an estimated speed of about 2 mph. I drove toward the north on Mauna Loa Lane, which is just east of the complainant's residence. I made a right-hand turn onto Aloha and headed north. I didn't notice any changes in the wind conditions. As I reached Hawaii Dr., I turned left and went into the western direction, just north of Delta. At the end of Hawaii Dr., I turned around and drove toward Aloha, then tuned right to head south on Aloha, just east of Delta. I stopped for about 3 minutes across from the complainant's residence.

I looked at Delta's stacks but did not notice any Visible Emissions (VEs).

The duration of the above events was about 12 - 15 minutes.

No odors were detected during this drive.

ROP STATUS

- ROP No. MI-ROP-B6488-2006 has expired on 9/13/11. Delta was subject to the conditions of this ROP during the year 2011.

- ROP No. MI-ROP-B6488-2012 was issued on 1/3/12.

THE INSPECTION

Conditions of ROP No. MI-ROP-B6488-2012

FGCOATINGLINE:
The coating line consists of a non-solvent based parts washer, primer paint booth, and two-section top coat paint spray booth.

Emission Units:

1) EUPARTSWASHER: Solvent less Part Washer. Parts washing equipment using hot water and a non-solvent based cleaner

2) EU- PRIMECOAT: Primer coat dry filter downdraft booth. Primer paint spray booth. Spray gun purge and clean up operations are included in this emission unit.

3) EU- TOPCOAT: Top coat dry filter downdraft booth. Top coat paint spray booth. Spray gun purge and clean up operations are included in this emission unit.

POLLUTION CONTROL EQUIPMENT:

Dry Filters for Particulate Matter Control

* Condition #I.1 – stipulates that the VOC emission rates not to exceed 51.02 lb/hr, based on monthly averaging, or 80.0 tpy based on a 12-month rolling time period.

- The highest average hourly VOC emission rate of 26.33 lb/hr was reported for 7/13
- The highest annual VOC emission rate of 21.38 tpy was reported for the first quarter in 2013. Attachments A.1 – A.3

* Condition #II.1 – stipulates that the VOC content in the coatings used not to exceed 3.5 lb/gal of coating, minus water.

- VOC contents were verified by Delta pursuant to the following Analytical Lab Reports (on File):

1. NAO Blue – Sample submitted to the lab on 4/14/12
   VOC Content = 3.39 lb/gal

2. High Solids Primer – Sample submitted to the lab on 4/14/12
   VOC Content = 3.44 lb/gal

3. 350 Gloss Black – Sample submitted to the lab on 1/4/12
   VOC Content = 3.18 lb/gal

- Coating Samples of Gray Primer, NAO Blue, and Beige will be collected, and analyzed for VOC content by AQD. The analytical report is on File.

* Condition #III.1 – stipulates that the primer paint spray booth and topcoat paint spray booths shall not operate unless their respective dry particulate filtration systems are installed and operating properly.

- As reported by Joe, the dry particulate filtration systems are installed and operating properly.

* Condition #V.1 – stipulates that the VOC content, water content, and density of the coatings shall be determined.

- VOC content, water content, and density of the coatings were verified by Delta pursuant to the Analytical Lab Reports provided in the File.

* Condition #V.2 – stipulates that USEPA Reference Test Method 24 or equivalent shall be used to determine the VOC content, water content and density of any coating material, as applied. Upon prior written approval by the AQD, the VOC content may be determined from manufacturer's formulation data. If the Method 24 and the formulation values should differ, Method 24 results shall used to determine compliance.

- VOC content, water content, and density of the coatings were verified by Delta pursuant to USEPA Reference Test Method 24. Attachment B

* Conditions #VI.1 - 9 – stipulate the following recordkeeping requirements:

· Actual daily and monthly hours of operation of the FG-COATINGLINE

- Attachments A.1 – A.3

· Daily records of the coating usage, in gallons, with water, as applied.

- Attachments A.1 – A.3

· Calculations of the VOC emissions from the coatings and purge/clean-up solvents: hourly emission rate, in pounds/hour, based on a monthly average; monthly emission rates, in ton/month; annual emission rates, in ton/year, based on a rolling 12-month time period as determined at the end of each calendar month.

- Attachment C

· Monthly records of the VOC content of the purge/clean-up solvent, in pounds per gallon.

- Delta does not use purge/clean-up solvents.

· Monthly records, in gallons of the purge/clean-up solvents used and reclaimed.

- No reclamation of solvents is carried out.

· Daily records of the VOC content of the coating, in pounds per gallon, with water and minus water, as applied.

- Attachment B

· Monthly records of the calculations of individual and aggregate HAP emissions, in tons per year, based on a rolling 12-month time period as determined at the end of each calendar month.

- Attachment D

· Monthly records of the calculations of individual and aggregate HAP emissions, in tons per month.

- Attachment D

- Monthly records of the hazardous air pollutant (HAP) content, in pounds per gallon of each coating and purge/clean-up solvent.

- Attachment D

FG-METALCOAT MACT

DESCRIPTION:

Each new, reconstructed, and existing affected source engaged in the surface coating of miscellaneous metal parts and products, identified within each of the five subcategories listed in 40 CFR Part 63, Subpart MMMM,63.3881(a)(2) to (6). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment. Surface coating is defined by 40 CFR 63.3881 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating.

Delta is considered an existing affected source; therefore, its compliance date with this MACT was January 2, 2007.

* Condition #I.1 – stipulate that the HAP emission rate not to exceed 2.6 lb/gacs, based on a 12-month rolling time period.

- The Technical Data Sheets in Attachments E.1 – E.6 show HAP contents as follows:

1) 350 Sign Blue = 1.99 lb/gacs
2) 350 Enamel, M-315 Precaution Blue = 2.15 lb/gacs
3) 350 Enamel, NAO Teal Blue = 1.99 lb/gacs
4) 350 Enamel, Ford Sign Blue = 1.99 lb/gacs
5) 350 Enamel, Laser Blue = 4.51 lb/gacs

Note: 350 Enamel, Laser Blue has a HAP emission rate of 4.51 lb/gacs, which exceeds the 2.6 lb/gacs limit. Therefore a VN shall be issued to Delta.

* Condition #VI– stipulates the Monitoring/Recordkeeping requirements.

- Attachment D contains the Monitoring/Recordkeeping requirements.

FG-RULE 287(C)

Description: Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c)

Emission Unit: EU-RULE287(c), EU-MISC-COATING

* Condition #II.1 – stipulate that the coating usage rate not to exceed 200 gal/month, as applied, minus water, per emission unit.

- Delta uses a small quantity of spray cans (24 cans in March of 2010), and some maintenance on as needed basis; but due to low production rates for the last two years, they have not done any maintenance painting in.

FG-RULE 290

Description: Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290

Emission Unit: EU-RULE290, EU-STENCILINK

- Samples of Stencil Ink usage is reported as 0.25 gal per month for 2013. Attachment F

CONCLUSION

Delta appeared to operate in compliance with the requirements of ROP No. MI-ROP-B6488-2012, except for the HAP emission rate specified in Condition #I.1 of ROP No. MI-ROP-B6488-2012. Therefore a VN shall be issued to Delta.

NAME U. Sam Ansar DATE 4/22/14 SUPERVISOR CTE