

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

N725633002

FACILITY: UNIVERSAL COATING INC.		SRN / ID: N7256
LOCATION: 5204 ENERGY DR., FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Julie Taylor , Risk Manger - Q.M.R.		ACTIVITY DATE: 11/24/2015
STAFF: Robert Byrnes	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection.		
RESOLVED COMPLAINTS:		

Permitted Emission Unit Identification : 96-03B

Emission Unit ID	Emission Unit Description	Compliance
EU-SANDBLAST	Sandblast cabinets using a variety of blast media, and a polisher, used to pre-treat metal parts. All units have control.	Yes
EU-METALREPAIR	Welding units, metal punch, grinder, drill press, etc. all used to repair metal parts.	Yes
EU-HEATING	Nat. gas-fired furnaces at 0.2 MMBtu/hr & air make-up units rated at 2.5 MMBtu/hr used for indoor air heating and ventilation.	Yes
EU-BURNOFF	A batch type nat. gas-fired burnoff oven w/ an afterburner	Yes
EU-DEGREASER	Vapor degreaser w freeboard refrigeration device and working-mode cover.	Yes
EU-POWDERCOAT	1 manual powder coating booth with a filtration control system.	Yes
EU-PHOSPHATE1	A phosphate pre-treatment line for metal parts consisting of 16 tanks and one steam heated dryer. The tanks are heated by electric coils or steam heated by 2 shared natural gas-fired boilers.	Yes
EU-PHOSPHATE2	A phosphate pre-treatment line for metal parts consisting of 14 tanks and 2 steam heated dryers. The tanks are heated by electric coils or steam heated by 2 shared natural gas-fired boilers.	Yes
EU-PHOSPHATE3	A proto-type phosphate pre-treatment line for metal parts consisting of 10 tanks and one dryer. The tanks are heated by electric coils or steam heated by 2 shared natural gas-fired boilers.	Yes
EU-DIPSPIN1	1 dip spin unit to coat metal parts.	Yes
EU-DIPSPIN2	1 dip spin unit to coat metal parts.	Yes
EU-DIPSPIN3	1 dip spin unit to coat metal parts.	Yes
EU-H1	1 manual misc. metal parts spray booth with 4 associated ovens. (The ovens are shared with EU-H2 and EU-H3).	Yes
EU-H2	1 manual misc. metal parts spray booth with 4 associated ovens.	Yes
EU-H3	1 manual misc. metal parts spray booth with 4 associated ovens.	Yes
EU-T1/T2	2 automatic misc. metal parts spray booths (T1,T2) w/ 2 IR ovens connected by a chain-on-edge conveyor and controlled by a catalytic oxidizer.	No
EU-T3/T4	2 auto. misc. metal parts spray booths (T3,T4) with 2 IR ovens connected by a chain-on-edge conveyor and controlled by a c.o.	No
EU-S1	1 man/auto misc. metal parts spray booth w electric oven connected by a chain-on-edge conveyor & controlled by a c.o.	Yes
EU-S2	1 man/auto misc. metal parts spray booth w electric oven connected by a chain-on-edge conveyor & controlled by a c.o.	Yes

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Compliance
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FG-PHOSPHATELINES	Yes
FG-DIPSPINS	Yes
Yes	
FG-CATOX	No
All process equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment.	Yes

This inspection completes a "Full Compliance Evaluation" for this Opt-Out Source. The Opt-Out is for HAP which has been restricted to 22.5/9.0 tpy for the entire source. The total of all VOC limits for the source is 30.6 tpy. There is not a facility wide restriction for VOC. The company also operates an Area Source MACT Subpart T subject batch vapor degreaser.

Universal Coating processes include phosphate, color, and adhesive coatings. Some of the processes at the source are used on an "as needed" basis and are always used in production. The plant typically operates 7a.m. – midnight 4 days a week with 1 8hr shift on Friday.

This was an unannounced inspection. I met with Julie Taylor, Management Representative for Universal Coating.

The last submittal of records was for the first half of 2015 and was received on September 25, 2015. Records are required semi-annually by June 30th for the first half, January 30th for the second half of the year. The last received report was 55 days late.

EU-TUMBLESPRAY The two Tumble Spray units are cement mixers with a hot air feed and an air spray gun set up in the mixer mouth. The pre-heated parts are spray coated as they tumble, then allowed to tumble dry. Installed in 2010 under exemption Rule 287(c). Records indicate 3.45 tons of emissions for the 12 month rolling time period ending December 2015.

EU-ROLLCOATER It is an automated system for coating metal sleeves of about 2 inches in diameter and up to about 5 inches in length. Installed in 2010 under exemption Rule 287(c). Records for the end of 2015 show emissions from EU-ROLLCOATER was

EU-SANDBLAST Approx. five blasting units share common duct work exhausting through two bag house control devices. The bag houses are contained in a separate room connected to the main building. The units exhaust into the room. Several smaller tumbling, blasting, and polishing units are installed and vent directly into the main blasting room.

Note: Hearing protection should be used in this area as the unloading and loading of parts creates noise. Some of the units were in operation during my inspection. I did not witness any visible emissions and the room containing the units was very clean.

EU-BURNOFF The burn-off oven was not operating. The cycle is preset so that the primary chamber does not initiate until after the afterburner reaches temperature. The oven prints a temperature map on a circle disk. J. Taylor maintains a file of these disks. The oven is used primarily for removing coatings from tooling used on the applicator lines and occasionally it is used to remove coating from parts. The oven is used approx. for two batches per week.

EU-DEGREASER A single vapor degreaser unit exists. It is subject to MACT Subpart T. It was not in use during my inspection. Instructions are posted on the unit. MACT reports are sent in twice a year. See file records for MACT Subpart T compliance information. Unit is in compliance and well below the emission and usage limits.

EU-POWDERCOAT The powder coat unit is small and designed to be moved about the facility as needed. It was not in use during the inspection. However Julie Taylor did state the powder coating was conducted in a spray booth. EU-Powdercoat requires that exhaust gases be released only into the general in-plant environment (SC VIII.1). The company may be sent an additional VN for this and be required to amend their PTI.

FG-PHOSPHATELINES Two phosphate lines are installed. Both lines were in operation during the inspection. A new building addition has been added as well as footings and foundation work for a new phosphate line. Although installation of the third did not occur during the 18 month construction window of PTI 96-03c, further information will be requested as for which exemption this will be installed under. Note: Hearing protection should be used in this area as the unloading and loading of parts creates noise. Records indicate that VOC has been eliminated from material used in the phosphate lines. A demonstration was requested via e-mail on November 30, 2015 as to how the no VOC determination was made. The limit is 5.5 tons per year. Combined phosphate material use for the 12-month period ending June 2015 totaled 39,677 gallons. The limit is 100,000 gallons.

FGDIPSPIN Total VOC emissions from the dip spin operations for the 12-month period ending in June 2015 was 1.92 tons. The limit is 5.0 tons. VOC emissions reported for June were 391 pounds. The limit is 2000 pounds/month. Xylene is limited to emissions of 72.0 pounds/day and 5.2 pounds/hour. For June 2015 xylene emissions peaked at 19.4 pounds/day.

Compliance for the 5.2 lb/hr limit is gen condition 13 but it appears that the limit is being met based on the daily emissions and hours of operation at the facility. Dibasic Ester is no longer being emitted.

FGH1/H2/H3 Three booths are installed. A shared exhaust header feeds all three booths to a common stack. The stack appeared to be of the appropriate height and diameter. Filters were in place.

Total VOC emissions from the hand spray booths for the 12-month period ending in June 2015 were 0.68 tons. The limit is 5.0 tons. VOC emissions reported for June were 63 pounds. The limit is 2000 pounds/month. Xylene is limited to emissions of 72.2 pounds/day and 5.5 pounds/hour (general condition 13 comp. method). For June 2015 xylene emissions peaked at 12.3 pounds/day.

FGCATOX EUT1/T2 and EUT3/T4 are installed and were operational. Both T-lines are ducted to the Cat-Ox. Each line has two booths. The booths supposedly had overspray filters installed. The overspray media is supposed to be a nylon mesh which can be swept, or beat free of the adhesive overspray and reused. Universal Coating was trying to save filters and/or increase air flow by placing cardboard boxes across the filter and only directing a portion of the air through a smaller opening.

EU-S1 has been installed and is operational. It is installed in a manner similar to the two T-lines. Exhaust is to the T-line manifold which runs to the Cat-Ox. The other S-line (EU-S2) in the permit was never installed.

From the previous inspection (VOC laden air, at about 150 °F, enters the Cat-Ox. The unit has a supplemental heater which raises the inlet air temperature so that it will sustain the catalytic conversion of the VOC. The conversion generates additional heat.)

The thermocouple readout located in the main plant indicated an oxidizer temperature of 550 °F. The PTI 96-03 requires a minimum catalyst inlet temperature of 600 °F. A circular chart located in the Cat-Ox control room was not operational. There appeared to be new digital recording instrumentation, however Julie Taylor could not provide any real time temperature data during the day of the inspection. The follow up e-mail information requested on November 24, 2015 for oxidizer temperature data information has not been received as of the writing of this report.

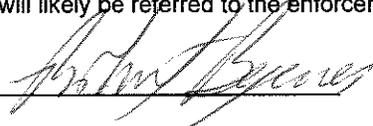
The stack exhibited no opacity and appeared to meet the permitted height and diameter requirements of the permit. Total VOC emissions from FG-CATOX for the 12-month period ending in June 2015 were 16.05 tpy based on the permitted destruction efficiency of 80.75%. The permit limit is 13.5 tons. Xylene is limited to emissions of 155 pounds/day and 11.2 pounds/hour (gen cond. 13 compliance method). On May 6 xylene emissions from the CAT-OX peaked at 48.44 pounds/day.

FGFACILITY For the period ending October 2015, the HAP emitted in the greatest quantity was at 9.53 tons per 12-month period. The single HAP limit is 9.9 tons. The total HAPs emitted for the 12-month time period ending in October 2015 was 22.89. The limit is 24.9. As mentioned above the facility is looking into controlling emissions from another process to give them some more room to stay under the 24.9 tpy. Ethyl Benzene is limited to 6.0 tons per year and had emissions of 2.11 tpy for the month ending October 2015.

I did not witness any visible emissions outside off the plant. I did however notice level 1 and 2 paint fume smell around the plant. The facility has multiple compliance concerns as of the writing of this report. Information was requested via e-mail on November 30, 2015. On January 5, 2016 a follow up call was placed to Julie Taylor and the e-mail was resent about the information requested. She stated she had not received the information request. An additional phone call was placed on January 6, 2015 to confirm she had received the e-mail. At the time of conclusion of the site inspection I thought it was apparent she was supposed to get oxidizer temperature data as the strip chart was not working and they had switched to a new electronic data logger (which she was not aware and did not have access yet). When I left the facility she stated the IT person would get her access to the data the next day.

As of January 21, 2016 no information or contact has been received from Universal Coating Inc., and a VN was sent for Oxidizer temperature being too low, for not using HVLP spray equipment and for exceeding the FG-CATOX VOC emission limit of 13.5 tpy. The VN also stated the response should include all information requested in the November 20, 2015 and January 5, 2016 e-mails. On Friday January 22, 2016 I was contacted by Rhiana Dornbos of NTH Consultants who had some questions regarding the November 2015 inspection. She stated she would be working on the Universal Coating list of follow up questions I had sent to them. On February 11, 2016 the violation notice response was received but did not adequately address the violations. On February 12, 2016 the new emission report showed single HAP emissions greater than 9.9 tons for 2015. This resulted in a second violation notice sent on February 15, 2016. Due to the latest violation, this facility will likely be referred to the enforcement section for resolution to the outstanding violations.

NAME



DATE

3/14/16

SUPERVISOR

