

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

N565633156

FACILITY: NYLOK LLC		SRN / ID: N5656
LOCATION: 15260 HALLMARK Court, MACOMB		DISTRICT: Southeast Michigan
CITY: MACOMB		COUNTY: MACOMB
CONTACT: Martin Lewis, Business Unit Manager		ACTIVITY DATE: 01/06/2016
STAFF: Samuel Liveson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection of a Major source. Facility exceeds HAP emission rate of 2.6 lbs HAP/gallon of solids per 40 CFR Part 63 Subpart M. MDEQ-AQD is aware of this exceedance and issued a Violation Notice previously on January 6, 2015. A new violation notice will not be issued for this violation at this time. The facility is meeting milestone dates of its Schedule of Compliance.		
RESOLVED COMPLAINTS:		

On Wednesday, January 6, 2016, I conducted a scheduled, level 2 inspection of Nylok LLC (Nylok), located at 15260 Hallmark Court in Macomb, Michigan. Accompanying me on the inspection were Air Quality Division (MDEQ-AQD) Senior Environmental Engineer Rem Pinga, and Environmental Quality Analysts Mark Dziadosz and Tyler Salamasick.

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 (NREPA); Renewable Operating Permit (ROP) No. MI-ROP-N5656-2015a; Consent Order (CO) AQD No. 44-2014; CO AQD No. 28-2015; and 40 CFR Part 63 Subpart M – National Emissions Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63 Subpart M).

Background

Nylok is major for hazardous air pollutants (HAP) because the facility exceeded the major source threshold 10 TPY single HAP in August of 2012 for toluene. The facility received its ROP on May 4, 2015. The facility received CO AQD No. 28-2015 on October 13, 2015 because the facility exceed its emission rate of 2.6 pounds (lbs) HAP per gallon of coating solids for its initial compliance period. As a result of the exceedance, the facility agreed to a Schedule of Compliance in its ROP which includes construction of a regenerative thermal oxidizer (RTO) to limit HAP emissions. The facility plans to conduct stack testing on this RTO on January 19, 2016. CO No. 28-2015 Paragraph 9.A.2 requires the facility to fully comply with the Schedule of Compliance within the facility ROP.

Opening Meeting

MDEQ-AQD staff arrived on site around 9:30 AM. We met with Mr. Greg Rawlings, Operations Group Manager; Mr. Martin Lewis, Business Unit Manager; and with Mr. Ron Fitzpatrick, Consultant, RG Fitzpatrick & Associates, Inc. Mr. Lewis and Mr. Fitzpatrick provided a site walkthrough and explained operations. Ms. Mary Mello, Consultant, NTH Consultants, Ltd., provided facility records on January 11, 2016. I provided Mr. Lewis with my contact information and a copy of the pamphlet "DEQ Environmental Inspections: Rights and Responsibilities."

Nylok is a Tier III supplier of coatings to the automotive industry. The company operates two 10 hour shifts Monday through Friday with overflow Saturday. The facility coats externally threaded fasteners (bolts) and internally threaded fasteners (nuts). Coatings can be solvent or powder. Powder coating provides a nylon layer that prevents galvanic corrosion. Solvent coating provides a locking mechanism to keep bolts in place during vibration.

Facility Walk-ThroughEU-MIXING

Currently, mixing operations for the facility are performed offsite at a facility in Romeo. According to Mr. Lewis, mixing has not occurred at EU-MIXING in approximately three years. New coating containers are stored in EU-MIXING before being opened and stored inside the permanent total enclosure (PTE). Although the mixer is not used, MDEQ-AQD advised that EU-MIXING remain in the ROP because the mixer is still on site.

Because no mixing containers are in use, Special Conditions (S.C.) IV.1 and IV.2 do not apply. I did not ask for monthly volatile organic compound (VOC) emission records per S.C. VI.1 through VI.3 because mixing has not occurred in approximately three years.

FG-COATINGLINE

This flexible group consists of fourteen coating lines that may use HAP-containing coatings. Most of these coating lines apply a strip of solvent coating to bolts to provide a locking mechanism. According to Mr. Lewis, the solvent is dried using electric induction. EUDS1 is for a dip-spin mechanism that is rarely used.

We visited the mixing area where containers are agitated before being placed onto their respective coating line. The mixing area is located within the facility PTE. All containers were closed per S.C. III.1. According to Mr. Lewis, coatings are reused in this area until they are entirely used up. The facility uses toluene as a solvent to adjust viscosity. For water-based coatings, the facility may use water to adjust viscosity. According to Mr. Lewis, isopropanol is no longer used at the facility to adjust viscosity.

Per S.C. V.1, if Nylok receives notification from the MDEQ, the facility shall use federal Reference Test Method 24 to determine VOC content. At this time, MDEQ has not notified Nylok to determine VOC content for all coatings using Method 24. According to Ms. Mello, the facility has determined the VOC content of Precote-80 and Precote-85 via Method 24. For other coatings, VOC is determined from material safety datasheets (MSDS). The VOC emissions from all coating lines are limited to 30 tons per year. Therefore the facility is not subject to the requirements of Rule 621.

MDEQ-AQD observed collection of a sample of Precote-85 for Method 24 analysis as a spot-check to facility VOC records. Laboratory results provided a VOC content of 2.65 lbs/gallon. The facility VOC content of Precote-85 used in records is 2.72 lbs/gallon as provided by Ms. Mello.

FG-COATINGLINE Records

The facility provided monthly gallons of each coating used per line per S.C. VI.3.a. VOC content was provided for each coating used per S.C. VI.3.b. On January 15, 2016 I spoke with Mr. Faraz Mirza, Manufacturing Process Engineer, regarding recordkeeping for these lines. According to Mr. Mirza, the facility keeps inventory for total raw materials used each month. The facility also keeps inventory of what parts are produced on each line. The facility can divide monthly coating inventory among each coating line to determine VOC emissions for each coating line.

The facility provided monthly emissions per line per S.C. VI.3.c. According to records, the highest emissions for a month were in 923.89 lbs VOC/month for emission unit EUPR6. This is below the emission limit of 2000 lbs VOC/month per S.C. I.1.

The facility provided VOC emissions in tons per 12-month rolling time period for each coating line and the flexible group per S.C. VI.3.d. The highest emissions for a coating line were 4.27 tons VOC per 12-month rolling time period on EUPR8 in July of 2015. This is below the permit limit of 10 tons VOC per 12-month rolling time period per S.C. I.2. The highest emissions for FGCOATINGLINE were 17.52 tons VOC per 12-month rolling time period, below the emission limit of 30.0 tons VOC per 12-month rolling time period per S.C. I.3.

FG-MACT MMMM

The fourteen liquid coating lines in MI-ROP-N5656-2015a are subject to 40 CFR Part 63 Subpart MMMM. The facility appears to be an existing source per §63.3981 because it commenced construction before August 13, 2002. The facility plans to comply with its emission limit via Emission Rate With Add-On Controls Option per S.C. I.2.c once the facility has established RTO operating limits through a stack test. The facility plans to conduct stack testing on this RTO January 19, 2016. In the meantime, the facility demonstrates compliance using the Emission Rate Without Add-On Controls Option per S.C. I.2.b.

The following liquid coating lines are inside the proposed permanent total enclosure (PTE): EUDS1, EUPR5, EUPR6, EUPR7, EUPR8, EUPR9, EUPR10, EUPRB1, and EUPRN3. The following liquid coating lines are outside the proposed PTE: EUNTQ1, EUPB3, EUWN3, EUWN9, and EUHDN1. The lines outside of the PTE appear to use Nytorq, a wax-based lubricant, which is diluted with water. Per §63.3961(a), it appears that a facility may include both controlled and uncontrolled coating operations in a group for which they use the Emission Rate With Add-On Controls Option. MDEQ-AQD also observed powder coating lines NYBLT1, NYBLT3, WN7, and PB4. According to the MSDS of the most-used powder coating on site, the powder coating contains no HAPs. These coating lines where the facility uses no HAPs appear to be exempt from 40 CFR Part 63 Subpart MMMM per §63.3881(c)(1).

FG-MACT MMMM Records

Currently, the facility demonstrates compliance using the Emission Rate Without Add-On Controls Option per S.C. I.2.b. At the request of the MDEQ-AQD, Nylok currently submits a spreadsheet of its 12-month rolling HAP emission rate on a monthly basis. For the compliance period of December 31, 2014 through December 31, 2015, the facility has emitted 9.13 lbs organic HAP per gallon of coating solids. The facility is currently out of compliance with the emission limit of 2.6 lbs organic HAP per gallon of coating solids per 12-month rolling time period per S.C. I.1.

The MDEQ-AQD is aware of this violation. MDEQ-AQD issued a violation notice for this exceedance previously on January 6, 2015 and conducted escalated enforcement action regarding this exceedance. The facility is currently operating within the timeframe of its Schedule of Compliance in Appendix 2 of its ROP. A new violation notice will not be issued for this violation at this time.

Per S.C. VII.3 and VII.5, monthly HAP emission calculations were provided in the semiannual compliance report received September 15, 2015.

FG-COLD CLEANERS

According to Mr. Lewis and from the site walkthrough, there are no cold cleaners at the facility. The one cold cleaner that was previously on site has been removed.

Parts Washer

The facility has one natural-gas heated conveyerized parts washer on site. The parts washer has a stack leading to ambient air. Mr. Lewis provided the MSDS of the two solutions used in

the parts washer. The solutions are an aqueous, concentrated cleaner that is diluted with water for cleaning, and an anti-foam agent this is 100% petroleum distillates of CAS No. 64741-44-2 and 64742-52-5. The ITSL for these distillates are 36 ug/m³ and 50 ug/m³ respectively. According to Mr. Lewis, purchase records show that 15 gallons of anti-foam agent and 148 gallons of concentrated cleaner were used in 2015. This parts washer appears to be exempt from obtaining a Permit to Install per R 290(a)(1)(ii). According to Rule 215(4), a revision to the ROP is not required to include equipment subject to R290. Because the parts washer contains no organic HAPs, it appears to be exempt from 40 CFR Part 63 Subpart Mmmm per §63.3881(c)(1).

Boilers/Emergency Generators

According to Mr. Lewis and the facility walkthrough, the facility does not have boilers or emergency generators on site.

Compliance

Based on the AQD inspection and records review, Nylok appears to be in compliance with NREPA; ROP No. MI-ROP-N5656-2015a; CO AQD No. 44-2014; CO AQD No. 28-2015; and 40 CFR Part 63 Subpart Mmmm except for the HAP emission rate of 2.6 lbs HAP per gallon of solids over a 12-month rolling time period. MDEQ is aware of this violation, and the facility is currently operating within the timeframe of its Schedule of Compliance in Appendix 2 of its ROP.

NAME



DATE

2/26/16

SUPERVISOR

