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

N659344997

FACILITY: Monroe Truck Equipment		**SRN / ID:** N6593
LOCATION: 2400 Reo Dr, FLINT		**DISTRICT:** Lansing
CITY: FLINT		**COUNTY:** GENESEE
CONTACT: Jeff Stevens , Assistant General Mgr./Project Engineer		**ACTIVITY DATE:** 07/02/2018
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Partial Compliance Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FCE): 1.) scheduled inspection; and 2.) review of facility recordkeeping		
RESOLVED COMPLAINTS:		

On 7/2/2018, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an unannounced, scheduled inspection of Monroe Truck Equipment. At a subsequent date, AQD reviewed facility recordkeeping. These were Partial Compliance Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FCE). AQD is required to inspect synthetic minor/opt-out facilities such as this one once every 5 years, under the Compliance Monitoring Strategy of the U.S. Environmental Protection Agency (EPA), which AQD follows.

Environmental contact:

Jeff Stevens, Assistant General Manager/Project Engineer; 810-853-6848; jstevens@monroetruck.com

Facility description:

Monroe Truck Equipment installs custom bodies to medium duty truck chassis and cab assemblies. There a number of options for coatings which may be applied.

Emission units:

Emission Unit ID	Emission Unit description	PTI or exemption rule	Compliance status
EUBOOTH1	Large surface coating booth/curing oven	368-98	Compliance; not operating
EUBOOTH2	Small surface coating booth/curing oven	368-98	Compliance; not operating
EUBOOTH3	Bed liner and undercoat paint booth; installed before prior to 12/20/2016 revisions to exemptions	Rule 287(c)	Compliance; not operating
EUDISTILL	Solvent distillation unit; installed prior to 12/20/2016 revisions to exemptions	Rule 285(u)	No longer used
Metal machining processes	Various machining processes; installed prior to 12/20/2016 revisions to exemptions	Rule 285(l)(vi)(B)	Compliance
Welding processes	Welding units	Rule 285(2)(i)	Compliance

Regulatory overview:

This facility has an opt-out permit, Permit to Install (PTI) No. 368-98, to limit its potential to emit for volatile organic compounds (VOCs) to keep it from becoming a major source for criteria pollutants. A *major source* has the Potential to Emit (PTE) of 100 tons per year (TPY) or more of any one of the *criteria pollutants*, that is, those for which a National Ambient Air Quality Standard exists. These include carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO2), VOCs, lead, and particulate matter smaller than 10 microns (PM-10) and particulate matter smaller than 2.5 microns (PM2.5).

The facility's opt-out permit also limits its PTE for Hazardous Air Pollutants (HAPs), to keep it from becoming a major HAP source. The PTE is limited to 5 TPY for any single HAP and 15 TPY for aggregate HAPs, to stay below the major source threshold of 10 TPY and 25 TPY, respectively. It is therefore considered a minor or *area source* for HAPs.

When Monroe Truck Equipment accepted PTI No. 368-98, they accepted restrictions on the large and

small coating booths in order to be exempted from the limits of Michigan Air Pollution Control Rule 621 for the metal parts painting part of their coating operation. Special Condition No. 1 of the PTI is a VOC emission rate of 12.3 lbs/hr, and 2,000 lbs/month, and 9.9 TPY. This is the restriction on emissions accepted in order to be exempt from the limits of Rule 621 which would otherwise be applicable through Rule 702(a).

It is my understanding that there is no boiler on site, just a hot water heater of less than 120 gallon capacity for the plant restrooms. A hot water heater at a minor or *area source* of HAPs would not be subject to 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers, Area Sources,* under Section 63.11195(f).

Fee status:

Because Monroe truck Equipment is not considered a major source for criteria pollutants, it is not Category I fee -ubject. Because it is neither a major source for Hazardous Air Pollutants, nor is it subject to a federal New Source Performance Standard, it is not Category II fee-subject. Lastly, because it is not subject to a federal National Emissions Standards for Hazardous Air Pollutants/Maximum Achievable Control technology Standard, it is not Category III fee-subject.

Location:

The facility is south of I-69, but just north of Hill Road, and just west of US-23. It is immediately east of a residential area. The nearest houses are about 525 feet west of the plant. To the east are light industrial and commercial businesses, and US-23. To the north is undeveloped land, and to the south are commercial businesses.

Recent history:

There are no complaints for this facility in the AQD Lansing District file for Monroe Truck Equipment, which goes back to April 2003. Older records are not included in this file, and may have been sent to the State of Michigan Records Center.

Stack testing:

There are no records of any stack testing being required of this facility, as far back as the April 2003 start date of the district file.

Required safety equipment:

Safety glasses with side shields are required.

Arrival:

AQD was represented today by Ms. Samantha Braman, the AQD Lansing District's newest inspector, and by myself.

We approached the facility from Hill Road, and turned north onto Hill 23 Drive, and then west onto Reo Drive. We neared the site at about 11:14 AM. An odor was barely detectable, but it was so faint that I could not identify any characteristics of the odor. I could not confirm that this odor was associated with Monroe Truck Equipment. The odor was determined to be insufficient to constitute a violation of Rule 901(b), which prohibits unreasonable interference with the comfortable enjoyment of life and property. Weather conditions were partly sunny and 81 degrees F, with winds out of the west at 5 miles per hour, and moderate humidity.

There were no odors in the plant parking lot, next to the office. No visible emissions could be identified coming from the facility roofline.

Upon entering the office, we provided our identification/credentials, per AQD procedures, and explained the reason for our visit. We met with Mr. Jeff Stevens, Assistant General Manager/Project Engineer. The previous environmental contact, Mr. Andy Knake, is no longer with the company, we were informed. His duties are being carried out by Mr. Stevens. We provided a copy of the *Permit to Install Exemption Handbook*, January 2017 edition.

PCE activity number 1: Inspection:

The facility customizes trucks for their customers by assembling parts onto tpre-painted chassis, such as snow plows, hydraulic dump bodies, and running boards. The facility's permit allows them to apply coatings in a large or a small booth. However, most of the coating done at the plant now is undercoating, we were told. This is applied in a third booth, exempt under Rule 287(c). Spray-on bedliners may also be applied in this exempt booth. They are not doing a lot of painting in the large and small paint booths because many of the parts that they receive onsite have already been powder coated, we were told. This is said to be done by a Monroe Truck Equipment plant based in Wisconsin, or by one of their other part suppliers. Mr. Stevens indicated that there have been no changes to equipment at the plant since the 2014 inspection by AQD, and they still use the same coatings.

EUBOOTH1; PTI No. 368-98:

The large permitted paint booth, EUBOOTH1, was not operating, at the time of the inspection. It is a downdraft design, with mat type filters. We were told that the original high volume low pressure (HVLP) paint guns are still used. Painting is done mostly for repairs, we were advised. utility truck bodies are painted white, and black is for flat beds and dump bodies. Chassis and many parts arrive at the site pre-painted, now, as discussed earlier in this report. On the rare occasion that they paint a truck body here, they use the booth as a curing oven. It is heated by natural gas.

Please see PCE 2, review of facility recordkeeping, later in this report, for discussion of the booth related to VOC limits from the PTI.

EUBOOTH2; PTI No. 368-98:

The small permitted paint booth, EUBOOTH2 , was not operating, at the time of the inspection. It is also a downdraft booth with mat type filters. As mentioned above, we were informed that the original HVLP paint guns are still used. This booth can also be used as a natural gas-fired curing oven.

Please see PCE 2, review of facility recordkeeping, later in this report, for discussion of the booth related to VOC limits from the PTI.

EUBOOTH3; Rule 287(c):

Installation of this booth was done prior to 12/20/2016 revisions of AQD's exemption rules. It is therefore covered by Rule 287(c), rather than Rule 287(2)(c). Rule 287(c) exempts:

(c) A surface coating line if all of the following conditions are met:
(i) The coating use rate is not more than 200 gallons, as applied, minus water, per month.
(ii) Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
(iii) Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.

EUBOOTH3 is used for applying an undercoating, or truck bed liners. For liners, they use products by Durabed, Line-X, or Rhino Line, we were told. Undercoating is said to be pumped out of a drum, while Durabed is pumped out of two drums, and run through a mixer, as it is a two-part coating. We observed a pickup truck with masking tape applied, being prepared for undercoating. This booth has no exhaust. They close the doors when they paint, we were told, and afterwards, the doors are opened, into the general, in-plant environment.

Mr. Stevens provided year to date (YTD) recordkeeping for EUBOOTH3. the records showed that April 2018 was the busiest month so far this year, with 140 gallons of coatings used. This is below the 200 gallon maximum allowed by Rule 287(c). This complied with Rule 287(c)(i). Rule 287(c)(ii), which is for an exhaust system serving only coating spray equipment, is non applicable for this booth, which only exhausts into the general, in-plant environment. Lastly, coating use records are being maintained, and were made available to AQD upon request. The facility appears to be satisfying the criteria for Rule 287 (c)(iii).

EUDISTILL, Rule 285(u):

The waste solvent still is not being used anymore, but is still onsite. It is not used any more, as they don't paint much. In their paint room, we saw that waste solvent goes into a 55 gallon drum, via a funnel with a closed lid.

Metal machining processes; Rule 285(l)(vi)(B):

Some cutting of metal takes place here. Metal machining processes installed prior to 12/20/2016 are subject to Rule 285(l)(vi)(B). This rule exempts from the requirement of Rule 201 to obtain a permit to install::

(l) The following equipment and any exhaust system or collector exclusively serving the equipment:
(vi) Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:
(A) Equipment used on a nonproduction basis.
(B) Equipment that has emissions that are released only into the general in-plant environment (emphasis added).
(C) Equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner.

For any metal machining processes installed on or after 12/20/2016, they could qualify for exemption under Rule 285(2)(l)(vi)(B), providing they met the criteria, which are functionally unchanged.

Welding; Rule 285(2)(i):

Welding activities within the plant may be considered exempt under Rule 285(2)(i), which pertains to brazing, soldering, and welding equipment. It is my understanding that welding is done to attach dump truck bodies and flat bed to truck chassis, while utility truck bodies are bolted to the chassis.

Miscellaneous:

Occasionally, they may use a torch cutter, to cut a rusty bolt. The emissions are released into the general in-plant environment, and therefore would meet the new torch cutting exemption, Rule 285(2)(j), which went into effect on 12//20/2016. No torch cutting was being done at the time of the inspection.

PCE activity number 2: review of facility recordkeeping:

Mr. Stevens explained that a consulting firm, Foth & Van Dyke, assists with their recordkeeping. He e-mailed copies of their recordkeeping for 2018 year to date (YTD) to AQD; please see attached.

Review of PTI No. 368-98 Special Conditions, including discussion of recordkeeping:

PTI No. 368-98 refers to the large paint booth, EUBOOTH1 and the small paint booth, EUBOOTH2 as "the

coating process." They are limited for the coating of metal parts to the following under Special Condition (SC) No. 1 of PTI No. 368-98:

- 12.3 lb/hr VOC for both booths combined. *Inspection finding: The attached April spreadsheet for April 2018 of Paint Usage and VOC Emissions for April 2018 shows that hourly emissions were tracked over a 12-month rolling period. For EUBOOTH1, lb/hour paint VOC emissions over the 12-months were 1.6 lbs/hr, below the 12.3 lb/hr limit. For EUBOOTH2, lb/hr paint VOC emissions over the 12-month period were 2.1, below the 12.3 lb/hr limit.*
- 2,000 lbs VOC per month for each booth. *Inspection finding: Attached spreadsheet for April 2018 of Paint Usage and VOC Emissions shows that monthly VOC emissions were 1.76 lbs, far below the limit of 2,000 lbs/month.*
- 9.9 TPY VOC, for both booths combined, over a 12-month rolling time period. *Inspection finding: MAERS indicates that for operating year 2017, yearly VOC emissions for EUBOOTH1 and EUBOOTH2 were 0.13 TPY and 0.02 TPY, respectively, and 0.15 TPY combined. This is below the limit.*

The total VOCs from the non-metal coating parts painting of the process, presumably from both booths combined, as the permit does not specify, is limited by SC No. 2 of the PTI to:

- 12.3 lbs/hr VOC. *Inspection finding: They generally do not coat non-metal parts, we were told.*
- 2.4 TPY VOC, over a 12-month rolling time period. *Inspection finding: As mentioned above, we were told they generally do not coat non-metal parts.*

SC No. 3 of the PTI limits VOCs from the undercoating portion of the process, but we were told that the undercoating is currently done in the exempted paint booth under Rule 287(c). SC No. 3 limits emissions to:

- 10.3 lbs/hr VOC. *Inspection finding: The attached April spreadsheet for April 2018 of Paint Usage and VOC Emissions for April 2018 shows that hourly emissions of VOCs undercoating were tracked over a 12-month rolling period. The lb/hour undercoating use over the 12-months was 7.42 lb/hr, below the 10.3 lb/hr limit. Note: Undercoating use and emissions are also tracked in the monthly spreadsheet titled, Other Materials Emissions. .*
- 2.0 TPY VOC, based on a 12-month rolling time period. *Inspection finding: The April 2018 spreadsheet shows that over a 12-month rolling time period, undercoating VOC emissions were 0.74 TPY, below the 2.0 TPY limit. Note: Undercoating use and emissions are tracked in the monthly spreadsheet titled, Other Materials Emissions.*

SC No. 4 limits emissions from line-purge and cleanup portion of the coating process to:

- 16.8 lbs/day VOC. *Inspection finding: The attached April 2018 spreadsheet identifies that over a 12-month rolling time period, VOC on a daily basis from cleanup solvents averaged out to be 3.31 lbs/day, below the 16.8 lbs/day limit.*
- 2.6 TPY VOC, based on a 12-month rolling time period. This SC is necessary to assure compliance with BACT which has been established pursuant to Rule 702a and the emission limits which have been established pursuant to Rules 205 and 225. *Inspection finding: The spreadsheet for April 2018 shows that the cleanup solvent rolling 12-month time period emission rate for VOC was 0.118T PY, far below the 2.6 TPY limit.*

SC No. 5 limits HAP emissions for the coating processfrom the coating process to:

- <5 TPY for any individual HAP. *Inspection finding: The attached April 2018 spreadsheet identifies that over a 12-month rolling time period, the maximum HAP emissions for a single HAP were 0.16 TPY for MIBK.*
- 15.0 TPY for any combination of HAPs, based on a 12-month rolling time period. *Inspection finding: The attached April 2018 spreadsheet identifies that over a 12-month rolling time period, the maximum HAP emissions for total HAPs were 0.17 TPY.*

SC No. 6 prohibits the operation of either coating booth unless all exhaust filters are in place and operating properly. *Inspection finding: The exhaust filters appeared to be in place in the booths, and*

looked to be properly maintained.

SC No. 7 requires EUBOOTHS and EUBOOTH2 to be equipped with HVLP spray guns or equivalent technology with comparable technology. This condition is necessary to assure compliance with BACT, which has been established pursuant to Rule 702. ***Inspection finding: We were told that the original HVLP guns are still used.***

SC No. 8 sets detailed requirements for:

A. For each of the two paint spray booths and both booths combined:

1. For each coating, the identification and category. *Inspection finding: Attached monthly usage records for May and June 2018 indentify each coating used.*
2. The amount, in gallons, of each coating used (with water). *Inspection finding: Attached monthly usage records for May and June 2018 identify the amount, in gallons, of each type of coating used.*
3. The VOC content, in lbs/gal of coating, minus water and with water, as applied. *Inspection finding: Attached monthly usage records for May and June 2018 list the VOC content in lbs/gal, both minus water and with water.*
4. VOC emission calculations determining monthly emissions in tons per month for metal and non-metal coating processes. *Inspection finding: Attached monthly usage records for May and June 2018 identify monthly VOC emissions.*
5. VOC emission calculations determining a 12-month rolling time period for the metal and non-,metal coating processes. *Inspection finding: An attached spreadsheet shows that in April 2018, 12-month rolling emissions for EUBOTH1 were 0.118 tons.*

B. For the undercoating part of the process.

1. The identification of (each) undercoating used. *Inspection finding: The April 2018 monthly spreadsheet for Other Materials Emissions identifies each type of undercoating product used.*
2. The amount, in gallons, used. *Inspection finding: The April 2018 monthly spreadsheet for Other Materials Emissions shows the amount in gallons used of each undercoating product.*
3. The VOC content of (each) undercoating used. *Inspection finding: Their spreadsheet for Other Materials Emissions lists the VOC contents of each undercoating.*
4. VOC emission calculations determining monthly VOC emission rates in tons per month. *Inspection finding: The April 2018 monthly spreadsheet for Other Materials Emissions shows that monthly VOC emissions from undercoating were 0.14 lbs.*
5. VOC emission calculations determining monthly VOC emission rates in TPY. *Inspection finding: The April 2018 monthly spreadsheet for Other Materials Emissions shows that the 12-month rolling value for undercoating VOC emissions was 0.74 TPY, below the 2.2 TPY limit.*

C. For the booth clean-up and line purge operations.

1. The identification of each cleanup/purge solvent used. *Inspection finding: Attached monthly usage records for May and June 2018 identify the solvents used.*
2. The lbs/gal VOC of solvent used. *Inspection finding: Attached monthly usage records for May and June 2018 indicate VOCs emitted. Lbs/gallon VOC can easily be back-calculated from this.*
3. Actual gallons of cleanup/purge solvent used. *Inspection finding: Attached monthly usage records for May and June 2018 indicate amount of each solvent used in gallons.*
4. Gallons of cleanup/purge solvent reclaimed. *Inspection finding: 0 gallons of cleanup solvent were reported reclaimed.*
5. VOC emission calculations determining monthly VOC emission rates in tons per month. *Inspection finding: the attached April 2018 spreadsheet indicates that the monthly cleanup solvent VOC emissions for April were 66.60 lbs, or 0.03 tons.*
6. VOC emission calculations determining a 12-month rolling time period emission rate in TPY. *Inspection finding: The attached April 2018 spreadsheet shows 12-month rolling emission rates of cleanup VOC were 0.52 TPY in April.*

SC No. 9 requires:

1. Monthly calculations of HAP emissions in tons per month by process. *Inspection finding: The attached April 2018 spreadsheet identifies that for April 2018, the maximum monthly HAP emissions for a single HAP were 23.6 lbs, or 0.01 tons for MIBK.*
2. Monthly calculation of aggregate HAPs in tons per month for all processes at the facility. *Inspection finding: The attached April 2018 spreadsheet identifies that for April 2018, the total HAP emissions were 38.31 lbs, or 0.02 tons.*
3. Monthly calculations of individual HAPs determining a 12-month rolling time period emission rate in TPY. *Inspection finding: The attached April 2018 spreadsheet identifies that over a 12-month rolling time period, the maximum HAP emissions for a single HAP were 0.16 TPY for MIBK.*
4. Monthly calculations of aggregate HAPs determining a 12-month rolling time period emission rate in TPY. *Inspection finding: The attached April 2018 spreadsheet identifies that over a 12-month rolling time period, the maximum HAP emissions for total HAPs were 0.17 TPY.*

SC No. 10 requires the exhaust gases from the metal and non-metal painting to be exhausted unobstructed vertically upwards from stacks (one per booth) each with a maximum diameter of 30 inches at exit points not less than 32 feet above ground level. ***Inspection finding: The stacks appear to exhaust unobstructed vertically upwards. It was difficult to gauge the heights of the stacks, but they appear to be of the proper dimensions.***

SC No. 11 requires all wipe rags used for parts-wipe to be stored in closed containers when not in use and disposed of in an acceptable manner. This condition is necessary to assure compliance with BACT which has been established pursuant to Rule 702, as well as Rules 225 and 901. ***Inspection finding: AQD will contact the company to inquire as to storage and disposal pf any wipe rags that they use.***

SC No. 12 requires all purge solvent used in the coating process to be captured in purge cups and disposed of in an acceptable manner. This condition is necessary to assure compliance with BACT which has been established pursuant to Rule 702, as well as Rules 225 and 901. ***Inspection finding: We observed a 55-gallon drum of waste solvent in their paint room, awaiting proper disposal.***

SC No. 13 requires the applicant to recover and reclaim a minimum of 55%, by weight, of the purge and cleanup solvent used in the coating process. ***Inspection finding: The waste solvent distillation unit is no longer used, as they do not do much painting, we were informed. We observed a 55-gallon drum of waste solvent awaiting proper disposal, in the paint room. it is unknown if this involves being recycled/reclaimed. AQD will contact the company, to discuss this requirement of the PTI.***

End of review of PTI Special Conditions.

Rule 287(c) records review for EUBOOTH3:

EUBOOTH3 is considered exempt under Rule 287(c). For EUBOOTH3, 2018 YTD records showed that the month with the highest amount of undercoating used was April, with 110 gallons used. There were also 10 gallons of Durabed Side A used, and 10 gallons of Durabed Side B used, plus 10 gallons of solvent. This adds up to a toatl of 140 gallons of coating used, below the 200 gallons per month of coatings allowed by Rule 287.

We left the site at 12:34 PM.

Conclusion:

There were no instances of noncompliance. AQD will contact the company to inquire as to storage and disposal pf any wipe rags that they use. The PTI requires that they be stored and disposed of properly, and AQD did not approach this topic during the inspection. AQD will also contact the company to inquire if any of the waste solvent from purge/cleanup operations is recycled after it is sent offsite. AQD did not approach this topic during the inspection.

NAME [signature] DATE 9/21/2018 SUPERVISOR [signature]