

M4403
MAWILA

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

M440333023

FACILITY: D N R INC	SRN / ID: M4403
LOCATION: 38475 WEBB DR, WESTLAND	DISTRICT: Detroit
CITY: WESTLAND	COUNTY: WAYNE
CONTACT: Guy Roberts , Vice President	ACTIVITY DATE: 01/14/2016
STAFF: Todd Zynda	COMPLIANCE STATUS: Compliance
SUBJECT: Scheduled Inspection	SOURCE CLASS: MAJOR
RESOLVED COMPLAINTS:	

REASON FOR INSPECTION: Scheduled Inspection
INSPECTED BY: Todd Zynda, AQD
PERSONNEL PRESENT: Guy Roberts, Vice President
FACILITY PHONE NUMBER: 734-722-4000
FACILITY FAX NUMBER: 734-710-9485
FACILITY WEBSITE: www.dnrparts cleaning.com

FACILITY BACKGROUND

DNR Parts Cleaning (DNR) operates two open top vapor degreasers for the purpose of cleaning and degreasing metal parts. DNR is located in the City of Westland, at 3875 Webb Drive in a commercial and industrial area. The nearest residential property is located approximately 0.25 miles to the south.

Currently the facility has approximately 30 employees. The facility operates 16 hours day (two shifts), five days a week, but hours may change depending on customer needs.

The facility is a Title V source as the potential to emit (PTE) hazardous air pollutants (HAPs) is greater than 10 tons on an individual HAP basis. The facility currently operates equipment under Renewable Operating Permit (ROP) MI-ROP-M4403-2012. The facility is subject to 40 Code of Federal Regulations (CFR) Part 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning.

PROCESS OVERVIEW

The facility operates two open top vapor degreasers. DNR degreases metal parts such as tubing, fittings, and stampings, primarily for the automotive industry. Each degreaser uses trichloroethylene (TCE) and has the following solvent tank capacity: boil - 127 gallons; rinse – 115 gallons. Both degreasers are equipped with a solvent sprayer (spray pump and spray lance). Each tank is equipped with a freeboard chiller and an idling-mode cover to control solvent emissions.

The facility operates a rust removal process line and a small metal deburring line.

COMPLAINT/COMPLIANCE HISTORY

There are no complaints for this facility on file.

During recent inspections on April 21, 2015, December 13, 2012, and August 22, 2011, the facility was determined to be in compliance with applicable permit conditions and regulations.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING VNs

None

INSPECTION NARRATIVE

On January 14, 2016 the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) inspector, Mr. Todd Zynda, conducted an inspection of DNR. During the inspection, Mr. Guy Roberts, provided information and a tour of facility operations relating to air quality permits and regulations. The inspection was conducted to determine the facility's compliance with the Natural Resources and Environmental Protection Act (NREPA), Act 451, Part 55, MI-ROP-M4403-2012, and 40 CFR Part 63, Subpart T.

At approximately 1:00 PM, AQD staff, Mr. Todd Zynda, arrived onsite and was greeted by Mr. Roberts. During the opening meeting the facility operations and permit requirements were discussed. At this time, some of the required records were reviewed. DNR agreed to provide all requested records via email. Additionally, it was discussed that some portions of 40 CFR Part 63, Subpart T are not included in MI-ROP-M4403-2012. Additional records were requested to demonstrate compliance with Subpart T requirements.

During the opening meeting, Mr. Roberts also discussed that DNR is planning to relocate the degreasers to a new location in the future. In addition, DNR is anticipating adding a third degreaser. DNR was notified that a permit to install (PTI) application would be required for the installation of the degreasers at a new location, and for adding a third degreaser.

Following discussion of record keeping requirements a walkthrough inspection was conducted of the facility. The tour began with observation of the small manual metal deburring line. Within the deburring line, metal parts are manually "deburred" by pushing the finished product through a metal cutting machine. Any emissions from the deburring line are released to the general in-plant environment.

The tour continued with observation of the rust removal process line. The rust removal process contains series of tanks (500 gallon totes with tops cut off) where the metal to have the rust removed is dipped in the tanks. The first tank contains 100 % Chemetall SCN-9194. The remaining tanks are filled with water that are used for dip cleaning after the initial treatment with the Chemetall product. Any potential emissions are released to the general in-plant environment.

Next, observation of the two open top vapor degreasers was conducted. During the inspection both degreasers were in operation. Within both degreasers, metal parts were contained in a basket and were in the process of being sprayed with solvent. During the inspection both degreasers were observed to be operating with chillers to liquefy TCE vapor. Both degreasers contain approximately 27 inches freeboard. Each degreaser is also equipped with solvent distillation equipment. The largest still has a capacity of 55 gallons, while the second still has a capacity of approximately 35 gallons.

APPLICABLE RULES/PERMIT CONDITIONS

ROP MI-ROP-M4403-2012 was renewed with an effective date of June 7, 2012. The ROP expiration date is June 7, 2017 with an application due date of December 7, 2016. The Special Conditions (SC) are listed as appropriate. For brevity, permit conditions and the language of federal and state rules have been paraphrased.

FGVAPORDEGREASERS

S.C.I. 1. **COMPLIANCE.** HAP emission shall not exceed 0.22 kilograms per hour per square meter (kg/hr/m²) or 0.045 pounds per hour per square foot (lb/hr/ft²) on an hourly basis during idle mode. On July 11 and 12, 1998 testing was conducted on EU-VD01 (vapor degreaser 1). At that time the idle emission rate was determined to be 0.009 lb/hr/ft². On October 7 and 8, 1999 additional testing was conducted on EU-VD01 (serial number [SN] 72966). The idle emission rate was determined to be 0.040 lb/hr/ft². The AQD does not have any records of idle emission testing for EU-VD02 (SN 71652). Per correspondence on February 18, 2016, EU-VD02 is the same make and size and EU-VD01 (see attached correspondence). AQD accepts the testing conducted on EU-VD01 as demonstration of compliance with the idling emission limit for both EU-VD01 and EU-VD02, per §63.468(d)(6)(iv)(B). During the ROP renewal process, it is recommended conditions be included that require the facility to conduct idle mode testing on both EU-VD01 and EU-VD02.

SC III.1 a and b. **COMPLIANCE.** Solvent cleaner shall be equipped with cover free of holes, cracks and other defects. During idling mode cover shall be in place and completely cover machine openings. The facility appears to be compliance with these requirements.

SC III. 2 a through I. **COMPLIANCE.** Work and operational practices as specified in 40 CFR 63.463(d)(1) through (d)(2). During the inspection SC III. 2. f, g, h, j, and k were not verified. The facility appeared to be in

compliance with the remaining work and operational practices.

SC III. 3. **COMPLIANCE.** Each batch vapor cleaning machine shall demonstrate compliance with the standards specified in 40 CFR 63.463(b)(1) or (b)(2). The degreasers are not subject to §63.463(b)(1) as the solvent air interface is greater than 13 square feet. The degreasers are subject to §63.463(b)(2) for solvent/air interface greater than 13 square feet. According to Mr. J.R. Roberts, the facility employs §63.463(b)(2)(ii) to demonstrate compliance. Citation §63.463(b)(2)(ii) requires that the solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kg/hr/m² (0.045 lb/hr/ft²). Citation §63.463(b)(2)(ii) references §63.465(a) for idling emission rate testing, which ultimately references Method 307 in Appendix A of Part 63. As described above under SC I.1, testing has not been conducted on EU-VD02. At this time AQD accepts the testing results for EU-VD01 to demonstrate compliance for EU-VD02 as they are the same model and size. As described above, it is recommended that testing conditions be added during the ROP renewal process.

While the facility could choose to demonstrate compliance with §63.463(b)(2)(i) instead of §63.463(b)(2)(ii), at the time of this report, the facility has not provided the control combination that would be applied to either vapor degreaser in lieu of complying with §63.463(b)(2)(ii).

On February 9, 2016, a phone call was held with facility contact J.R. Roberts. Mr. Roberts stated that the company could demonstrate compliance with one of the control combinations outlined in §63.463(b)(2)(i), but the company is choosing not to use that option as it would require additional record keeping. Mr. Roberts stated that the company will be conducting the idle mode test on EU-VD02 in the future. In a February 9, 2016 email correspondence, AQD provided DNR with a link to air quality consultants in Michigan.

SC III. 4. **COMPLIANCE.** Shall comply with the applicable requirements specified in 40 CFR 63.463(e)(1) through (e)(4). The facility appears to be in compliance with requirements as they pertain to the idling mode cover (§63.463(e)(2)(iv)).

SC IV. 1 a through g. **COMPLIANCE IN PART/UNDETERMINED INPART.** During the inspection both vapor degreasers appeared to meet the equipment standards defined in 40 CFR 63.463(a)(1) through (a)(7).

Covers appeared to be free of cracks and holes.

The freeboard ratio of each machine is 1.5.

According to the records provided the hoist speed is 9.5 feet per minute or less for both vapor degreasers.

During the inspection the device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils was not verified.

During the inspection the vapor level control device that shuts off the sump heat if the vapor level rises above the height of the primary condenser was not verified.

Each unit is equipped with a primary condenser.

The units are not equipped with a lip exhaust or carbon adsorber.

SC VI. 1 a and b. **COMPLIANCE.** On a monthly basis shall visually inspect cover and determine hoist speed.

The facility conducts inspections of the idle mode cover and determines the hoist speed monthly. 2015 monthly records for both machines were provided and are attached to this report.

SC VI. 2. Shall perform monitoring and keep records as specified in 40 CFR 63.467(a) and (b). The applicable portions of §63.467(a) and (b) are listed below.

- §63.467(a)(1) – **COMPLIANCE**- Owners manuals were available and observed during the inspection.
- §63.467(a)(2) – **COMPLIANCE** – The installation date of both degreasers are identified in the ROP as EU-VD01: 2/15/1998 and EU-VD02:10/01/1998.
- §63.467(a)(4) – **COMPLIANCE** - Records are maintained for EU-VD01. The AQD accepts the testing records for EU-VD02 as the model and size are the same for both units.
- §63.467(a)(5) – **COMPLIANCE** – Records of halogenated HAP solvent content used was provided within safety data sheet.
- §63.467(b)(1) and (2) – **COMPLIANCE** - The facility maintains cover inspection records as required.
- §63.467(b)(3) – **COMPLIANCE** – Estimates of annual solvent consumption are maintained.

SC VII. 4. **NOT IN COMPLIANCE.** Shall submit annual compliance report for batch vapor machines complying with either a control combination or an idling emission limit. Reports shall be submitted by February 1 of the year following the one for which the reporting is being made. Compliance reports shall include a signed statement

from the facility as defined in §63.468(f)(1) and an estimate of solvent consumption (§63.468(f)(2)).

Shall submit semi-annual exceedance reports for all batch vapor cleaning machines in accordance with 40 CFR 63.468(h) and (i). Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter.

At this time, the AQD does not have any record of annual compliance reports or semi-annual exceedance reports as defined in 40 CFR 63.468(f) and (h). The facility has been notified of this requirement and the requirement to submit the Subpart T compliance reports going forward (see attached correspondence). It should be noted that the facility has submitted ROP annual and semiannual certification reports to demonstrate compliance with SC VII. 1, 2, and 3.

40 CFR Part 63 Subpart T – National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning

Below are additional Subpart T requirements that are not included in MI-ROP-M4403-2012.

§63.471(b)(1) – **COMPLIANCE** – Shall maintain a log of solvent additions and deletions for each solvent cleaning machine. The facility maintains solvent additions and amount recovered from waste as presented in the attached TCE usage rate spreadsheet.

§63.471(b)(2) and (c) – **COMPLIANCE** – Shall calculate facility wide 12-month rolling emissions. For TCE, facility wide emission shall be less than 14,100 kilograms (kg) per year. The facility maintains the 12 month rolling emission records. The highest reported 12-month rolling emissions occurred during December 2015 at 12.57 tons (11,403.65 kg).

PERMIT TO INSTALL EXEMPT EQUIPMENT

Metal Deburring Line

The metal deburring line appears to be exempt from PTI requirements under the following rule.

R336.1285(l)(vi)(B): "The requirement to obtain a PTI does not apply to...equipment for carving, cutting, routing, turning, drilling, machining...etc. metal and emissions are released only to the general in-plant environment."

Rust Removal Process Line

The rust removal process line and associated tanks appear to be exempt from PTI requirements under the following rule.

R336.1285(r)(ii): "The requirement to obtain a PTI does not apply to...equipment used for any of the following metal treatment processes if the process emissions are only released to the general in-plant environment - pickling."

Solvent Distillation Equipment

The largest solvent still at the facility has a capacity of 55 gallons. The solvent distillation equipment appear to be exempt from PTI requirements under the following rule.

R336.1285(u): "The requirement to obtain a PTI does not apply to solvent distillation equipment that has a rated batch capacity of not more than 55 gallons."

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS

Not applicable.

MAERS REPORT REVIEW

MAERS submittal for 2014 was submitted and was complete.

FINAL COMPLIANCE DETERMINATION

The facility does not have any record of idle mode emission testing for EU-VD02. As described above, the AQD accepts the testing conducted on EU-VD01 to demonstrate compliance as the EU-VD01 and EU-VD02 are the

same model and size. However, it is recommended that during the upcoming ROP renewal, that testing conditions be included that will required idle mode testing on both EU-VD01 and EU-VD02. Additionally, the facility has not submitted annual and semi-annual Subpart T compliance reports as defined in §63.468(f) and §63.468(h). The company has been notified of the requirements to submit the Subpart T compliance reports and the requirement to submit compliance reports going forward.

NAME 

DATE 2/23/16

SUPERVISOR JK