

M4458

M.W.L.H.

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

M445840729

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| FACILITY: RAY LAETHEM PONTIAC BUICK | | SRN / ID: M4458 |
| LOCATION: 17677 MACK AVENUE, DETROIT | | DISTRICT: Detroit |
| CITY: DETROIT | | COUNTY: WAYNE |
| CONTACT: Jeff Parks Sr., Body Shop Manager | | ACTIVITY DATE: 07/03/2017 |
| STAFF: Terseer Hemben | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Paint Spray Booths | | |
| RESOLVED COMPLAINTS: | | |

SCHEDULED INSPECTION: RAY LAETHEM PONTIAC (RLP)

SRN M4458

PERMIT # C- 8461 & C-8462

17677 Mack Avenue, Detroit, MI 48224

Present: Richard L. Osgood Manager

Terseer Hemben MDEQ

Facility Phone: 313-886-1700; Fax: 313-886-9322

Background:

The Ray Laethem Pontiac (RLP) operates a collision shop with two car paint spray booths and body workshop. The Company has been in active business spray paint since 1989. The facility repairs automobile body part surfaces and paint-sprays auto parts using a high transfer efficiency nozzle or equivalent. Painted parts are kept in the paint spray booth area for curing. The booth has a down draft system lined with filters that controls odors and aerosol particulates. The booth is registered consistent with Rule 201(1). The company registered a relatively low amount of paint usage per month. The facility operates a Batch Cold Cleaning machine (Identification number: 2330, IMC16 Immersion Cleaner) in which metal parts are immersed, and covered with a layer of water. The product type cleaner and degreaser is concentrated and removes grime and dirt without scrubbing. The liquid product works fast on grease. IMC16 is bleach free, and fast removes industrial heavy grease and oil build-up. The solvent is water based. The cold cleaner has an inbuilt 505 solvent recycler that heats the solvent cleaner temperature to less than 230 F at which the solvent is filtered and recycled. Solid grease is claimed and disposed. The cold cleaner meets exempt status under Rule 281(2)(K): "Aqueous based parts washers". Hence the equipment met the exempt status through use of air tight cover and water layer solution-mixture.

Inspection Narrative:

I arrived at the facility address on July 25, 2017 at 1030 hours. Purpose of the visit was to conduct a scheduled regulatory compliance inspection of the paint spray booth usage and metal surface polishing operation. Temperature at the hour was 72 F with wind speed 8 mph coming from the NE, and humidity was 53%. I met Mr. Scot Lewis, the manager, who welcomed my visit. We settled down to a pre-inspection interview. Mr. Lewis informed nothing had changed at the facility with regards to operating conditions. We examined the equipment, stack, records, and concluded my visit with a post inspection conference. Mr. Lewis promised to send copies of paint spray booth and maintenance records and purchases to AQD. I left the area at 1140 hours. Records were sent as pledged.

Process Description:

The RLP is located on an auto dealership facility and serves the dealership that conducts auto body repair business. RLP provides body repairs and paint touch up for vehicles that involve in minor collision or damaged auto body. The paint shop has an indoor surface polishing work area. Particulates generated from the sanding/polishing operation fall into the work area. Regulatorily, this sanding process is exempt under Rule 285(2)(l)(vi)(B). Finished auto parts are spray painted in the booth equipped with downdraft exhaust and dry filters. The dry filters are regularly replaced. This facility is regulated under Wayne County Permit Numbers C-8461 and C-8462.

Equipment Controls:

The controls for the spray booth operation are built in the equipment itself. For example, the high transfer efficiency quality of paint nozzle, the specifications on filters used for capturing particulate matter, the draft-pull capability and the auto control of booth built in for malfunction abatement add to an effective control of the system. Filters are regularly changed by a contracting company that replaces and disposes the waste off-site. The water based paint reduces the contents of pollutants such as VOC cum HAPs. The air exiting from filters is discharged to the ambient through the stack set to discharge at 35 feet from the gradient.

Compliance History:

There has not been any complaint attributed to RLP operations

Regulatory Summary:

Permit # C-8461 & C-8462 considerations:

Rule 201 (1): The facility stated there has not been any modification or change to the process or equipment since installation was completed consistent with Rule 201(1).

Condition SC. 16: There was no visible emissions from the operation of paint spray booth equipment at the time of inspection.

Condition SC. 17: Site inspection observed the permittee did not operate the paint spray booth unless all exhaust filters were installed and operating properly. Records of booth and filter maintenance submitted by RLP confirmed the equipment was adequately maintained in regular manner [Attachment # D].

Condition SC. 18: The allowable particulate emissions for each paint spray booth did not exceed 0.02 pounds per 1000 pounds of exhaust, 0.12 pounds per hour, nor 0.08 tons per year. The controls for this condition were built in the filters specification. Filters were maintained and replaced regularly as listed in Attachment D.

Condition SC. 19: Allowable emissions of volatile organic compounds (VOCs) for each booth did not exceed 2.52 pounds per hour nor 1.57 tons per year. Records submitted by RLP showed emissions from Booth A were less than 0.12 pounds per hour. Records submitted by RLP showed VOC emissions per hour was estimated to be 0.77 pounds per hour and 0.80 tons per year [Attachment A]. VOC emissions from Booth B were estimated at 0.64 pounds per hour and 0.66 tons per year [Attachment B]. These emissions were below the permitted limits.

Condition SC. 20: The maximum paint usage did not exceed 390 gallons per year and maximum solvent usage did not exceed 195 gallons per year [SC. 20]. Records submitted by RLP for the period August 1, 2016 through July 31, 2017 showed that RLP purchased 267 gallons of paint for Booth A, and 109 gallons for Booth B. The total purchase for the facility amounted to 376.6 gallons per year and compared less than the limit value 390 gallons per year for usage [Attachments Booth A and Booth B]. Records submitted by RLP covering the operation period from August 1, 2016 through July 31, 2017 showed the facility purchased 205.0 gallons of solvent for the two booths [Attachment C]. This number does not tell the actual amount of solvent used, however based on amount of paint purchased within the same period, compliance is estimated as falling below the limit.

Condition SC. 20: Staff verified on site the exhaust from the paint spray booth was discharged vertically upward from a stack not less than 20 feet above ground level.

Condition SC. 21: Not applicable. There was no determination by and written notification from the Division Supervisor that emissions from the paint spray booth operation were causing unreasonable interference with common public right to live free from foul or noxious odors requiring the applicant to take immediate action to abate the source of odors; and caused the applicant to submit an abatement program for permanent resolution of this problem within 10 days of notification by the Division.

Rule 301, 901 and Rule 910: the installation of the 2 paint spray booths with down draft filters operation and maintained in a satisfactory manner ensured compliance with the rules.

Rule 370 (1): This rule states in part: "Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner to minimize the introduction of contaminants to the outer air". RLP maintains the filters by regular replacement and disposal in appropriate manner. Maintenance records are attached [Attachment D]

Compliance Determination:

The inspection of Ray Laethem Pontiac collision shop located at 17677 Mack Avenue operated in compliance with Permits C-846 and C-8462 requirements.

NAME

flr

DATE

9/26/2017

SUPERVISOR

JK