

N5861

MANILA

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

N586133759

FACILITY: CUL-MAC INDUSTRIES INC		SRN / ID: N5861
LOCATION: 3720 S VENOY, WAYNE		DISTRICT: Detroit
CITY: WAYNE		COUNTY: WAYNE
CONTACT: William P. McLaughlin , Owner		ACTIVITY DATE: 01/08/2016
STAFF: Usama Amer	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Targeted Inspection of a Minor Source		
RESOLVED COMPLAINTS:		

On January 8, 2016, I conducted a targeted inspection of Cul-Mac Industries, Inc. (Cul-Mac), located at 3720 Venoy Rd., Wayne, Wayne County. The purpose of this inspection was to determine the facility's compliance with the state and federal air quality regulations. Mr. William P. McLaughlin, Owner, represented Cul-Mac during the inspection.

BACKGROUND

Cul-Mac Industries, Inc. established operations in 1981 making windshield washer solvent, gas line and Recreational Vehicle antifreeze. It became one of the largest manufacturers of automotive chemicals in the Midwest. In 1986, Cul-Mac expanded by joining forces with Kimco Janitorial. In 1991, under the name Tech Group, Cul-Mac Industries, Inc. expanded by introducing a comprehensive new line of car wash cleaning chemicals to the automatic car wash industry. In 1996, Cul-Mac added swimming pool chemicals manufacturing. In addition to the Cul-Mac Brands, Cul-Mac also makes private label cleaning chemicals. In 2007, Cul-Mac acquired Standhardt Chemical, a Grand Rapids, Michigan based company, which manufactured and sold car wash cleaning and detailing chemicals. Currently, Cul-Mac markets these chemicals under the Magic Finish name.

Cul-Mac currently occupies over 190,000 square feet of mixed manufacturing and warehousing. The facility is capable of manufacturing over 200 proprietary formulations packaged in sizes ranging for two ounces up to 500 gallons.

Cul-Mac runs one (1) 8-hour shift (6:00 am – 2:30 pm) per day for 5 days per week. It employs 45-50 employees.

Cul-Mac files show that Wayne County Pollution Control Division issued an air permit No. C-5418 to the facility in 1980 to cover a "HEPA Filter for Asbestos Mixer". This permit should be voided, as the equipment no longer exists.

PROCESS DESCRIPTION & APPLICABLE REGULATIONS

Cul-Mac blends raw materials to produce its cleaning chemicals and solvents in 7 different mixing tanks, which range between 2,000 to 4,000 gallons in capacity. All these tanks are exempt from the provisions of R 201(1), to obtain a PTI, pursuant to the provisions R 290(a)(ii)(A). See Attachment 1

There are three (3) 12,000 gallons tanks and one (1) 15,000 gallons tank for the storage of Sodium Hypochlorite (NaOCl) solution, and one (1) 100,000 gallons tank for the storage of Methanol (CH₃OH). The NaOCl tanks are exempt from the provisions of R 201(1), to obtain a PTI, pursuant to the provisions of R 284(h). The CH₃OH tank is exempt from the provisions of the NSPS, 40 CFR Subpart Kb, because it was installed in 1973. See Attachments A.1 & A.2. The provision of 40 CFR 60, §60.110b(a), exempts Volatile Organic Liquid (VOL) tanks from the Kb subpart if they were installed before July 23, 1984. On the other hand, this tank cannot be exempt from the provisions of R 201, to obtain a PTI, because the provisions of R 284(n) are not applicable. Therefore, Cul-Mac is in noncompliance with the provisions of R 201(1) for installing and operating a Methanol tank without obtaining a PTI. A Violation Notice (VN) shall be issued to Cul-Mac to mitigate this noncompliance.

There are three (3) boilers installed at the facility. Cul-Mac gained ownership of these boilers from the original owner, 3M Company, of the facility. Unlike 3M Company, who used the boilers for its processes, Cul-Mac dedicated these boilers for heating its plant and offices only. Two (2) of the three (3) boilers were decommissioned, by the previous facility owner (3M Company), prior to Cul-Mac's take over in 1988. The only operating boiler has an operating capacity of 1.84 MMBTU/HR and is used for space heating purposes.

Attachment B is a copy of an inspection and maintenance report, by McKenna Heating & Cooling, confirming the said operating capacity of its burner to be 1.84 MMBTU/HR. Therefore, this boiler is exempt from the provisions of R 201(1), to obtain a PTI, pursuant to the provisions of R 282(b)(i). Also, Cul-Mac "began an energy conservation project last fall and are in the process of installing infra red gas heaters throughout our buildings and we expect this project to be fully completed by March 15, 2016. Upon completion of this project, the three boilers will be dismantled and removed from the property".

On the other hand, Cul-Mac has kept up with the natural gas usage records. Attachment C shows that the maximum monthly natural gas consumption rate to be 3,145 MCF for January, 2014 and 13,699 MCF for 2014, and 2,745 MCF for February, 2015 and 10,485 MCF for 2015.

Cul-Mac also carries out a blow molding operation, where blowing air is used to produce different plastic bottles and containers for its products. The blow molding equipment and associated plastic resin handling, storage, and drying equipment are exempt from the provisions of R 201, to obtain a PTI, pursuant to the provisions of R 286 (c)(i).

CONCLUSION:

Cul-Mac is in noncompliance with the provisions of R 201(1) for installing and operating a Methanol tank without obtaining a PTI. Violation Notice (VN) shall be issued to Cul-Mac to mitigate this noncompliance.

NAME Sam Amer DATE 4/11/16 SUPERVISOR JK