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DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

B342730921

FACILITY: PVS TRANSPORTATION, INC.		SRN / ID: B3427
LOCATION: 11001 HARPER AVE, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Peter Onyskiw, Environmental Manager		ACTIVITY DATE: 08/26/2015
STAFF: Jonathan Lamb	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Compliance Inspection, FY 2015		
RESOLVED COMPLAINTS:		

INSPECTED BY: Jonathan Lamb, MDEQ-AQD
PERSONNEL PRESENT: Peter Onyskiw, Environmental Manager; Brian Wodetski, General Manager; Christina Litten, Safety & Regulations Manager
FACILITY PHONE NUMBER: (313) 921-1200
FACILITY FAX NUMBER: (313) 921-2335
CONTACT PHONE NUMBER: (313) 921-1200, ext. 5174 (Mr. Onyskiw)
CONTACT EMAIL: ponyskiw@PVSCchemicals.com
FACILITY WEBSITE: www.pvschemicals.com

FACILITY BACKGROUND:

PVS Transportation was formed in 1996 as a wholly-owned subsidiary of PVS Chemicals, Inc. PVS Transportation is a chemical trans-load and transportation facility, servicing both PVS and non-PVS facilities. PVS-Nolwood Chemicals previously operated at this address prior to 1996; PVS Chemicals submitted a letter, dated June 17, 2015, to formally request that the facility name be changed to PVS Transportation. This facility generally operates 6 AM – 6 PM, Monday through Friday, and has around 36 employees.

The facility is located adjacent to PVS Technologies (10875 Harper, SRN B2371) and tanker trucks owned by PVS Transportation may be used to transport ferric chloride produced at PVS Technologies to customers off-site; however, there is no common control of the two facilities (separate ownership), they do not share the same SIC major group code, and the transport of chemicals produced at PVS Technologies is less than 50% of the business operations of PVS Transportation. Based on this information, the facilities are considered separate stationary sources.

PVS Chemicals, Inc. is headquartered across the street at 10900 Harper. PVS Chemicals was established in Detroit in 1945 as Pressure Vessel Services, Inc., and has been at the current address since 1991. The company has various divisions and facilities throughout North America and worldwide.

COMPLAINT/COMPLIANCE HISTORY:

There have been no complaints lodged against this facility, nor have any Violation Notices been issued in the past 10 years.

PROCESS DESCRIPTION/EQUIPMENT:

PVS Transportation is a loading and transportation facility dealing with liquid chemicals, mainly acids and caustics. Chemicals are mainly received via railcar and are unloaded into storage tanks; tanker trucks may also be used to deliver chemicals. From these storage tanks, chemicals are loaded into PVS tanker trucks and transported to customers. There is no processing of the chemicals, only bulking and storage. The facility unloads 2-4 railcars per day, with each railcar containing approximately 20,000 gallons. It takes about 45 minutes to unload a railcar.

The chemical storage tanks are located in an outdoor tank farm which runs along rail tracks. From these storage tanks, tanker trucks owned and operated by PVS Transportation are filled and then transport the material to various PVS and non-PVS clients.

Wayne County Permit No. C-10424 covers five tanks, which are controlled by a scrubber. The scrubber is

operated at all times. (Note: the permit was issued for seven tanks, but two of the tanks were never installed):

Tank 32: 200,000 gallon HCl storage tank
Tank 38: 287,000 gallon HCl storage tank
Tank 39: 200,000 gallon HCl storage tank
Two 15,000-gallon vertical HCl storage tanks

The HCl concentration of the scrubber effluent is monitored continuously, and an alarm goes off if the concentration reaches 6% HCl. During the inspection, the HCl concentration of the effluent measured 3.88% with a flow rate of 43 gpm.

There are several other tanks in the tank farm which are not permitted. There are no controls on these tanks. Technical Data Sheets for chemicals in these tanks can be found in the facility file:

Tank 4: 10,000-gallon storage tank for nitric acid (67% concentration; non-carcinogenic, 0.93 psia). Exempt per R 284(i).
Tank 9: 9,400-gallon diesel fuel storage tank for on-site use. Exempt per R 284(d).
Tank 10: 6,000-gallon additive inhibitor storage tank (non-carcinogenic, low vapor pressure). Exempt per R 284(i).
Tank 12: 20,000-gallon hydrofluorosilicic (HFS) acid (23% concentration; non-carcinogenic, 0.44 psia) storage tank. Exempt per R 284(i).
Tank 14: 24,000-gallon hydrofluorosilicic (HFS) acid (23% concentration; non-carcinogenic, 0.44 psia) storage tank. Exempt per R 284(i).
Tank 40: 37,000-gallon sodium hydroxide (50% concentration; non-carcinogenic, 0.06 psia) storage tank. Exempt per R 284(i).
Tank 41: 37,000-gallon sodium hydroxide (50% concentration; non-carcinogenic, 0.06 psia) storage tank. Exempt per R 284(i).
Tank 47: 30,000-gallon sulfuric acid (93% concentration) storage tank. Exempt per R 284(h)(i).
Tank 48: 30,000-gallon sulfuric acid (93% concentration) storage tank. Exempt per R 284(h)(i).
Tank 49: 30,000-gallon phosphoric acid (75% concentration) storage. Exempt per R 284(h)(ii).
Tank 50: 30,000-gallon phosphoric acid (75% concentration) storage. Exempt per R 284(h)(ii).

APPLICABLE RULES/ PERMIT CONDITIONS:

PVS Transportation operates under Wayne County Permit No. C-10424, which was issued to PVS-Nolwood Chemicals at this address on June 6, 1994.

C-10424, Special Conditions:

17. IN COMPLIANCE. Scrubber is used whenever the HCl storage tanks are in use.
18. NOT EVALUATED. Testing to determine HCl emission rate during railcar unloading has not been performed. This condition is assumed to be in compliance with proper operation of the scrubber.
19. NOT EVALUATED. Testing to determine HCl emission rate during storage tank loading has not been performed. This condition is assumed to be in compliance with proper operation of the scrubber.
20. IN COMPLIANCE. Scrubber is equipped with flow meter. During the inspection, the flow was 43 gpm, in compliance with the permit minimum of 30 gpm.
21. IN COMPLIANCE. Facility does not unload railcars for more than 4 hours per day. A review of records show that the facility unloads no more than four railcars per day, with each railcar taking approximately 45 minutes to unload.
22. IN COMPLIANCE. Facility performs regular monitoring and maintenance of the scrubber to assure proper operation.
23. IN COMPLIANCE. HCl concentration of the scrubber effluent does not exceed 6% by weight. Scrubber effluent is continuously monitored and an alarm is set if HCl concentration reaches 6%.
24. IN COMPLIANCE. Facility stays well below the permitted limits of 60,000 gallons/hour and 400,000 gallons/day for HCl unloading. At maximum unloading, the facility can only unload one 20,000-gallon HCl railcars in an hour, and only four 20,000-gallon railcars per day.
25. IN COMPLIANCE. Scrubber stack appears to meet the permit specifications of a maximum diameter of 12 inches and minimum height of 36 feet.
26. NOT EVALUATED. Testing to verify HCl emission rate has not been requested by AQD.

