

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

B230325326

FACILITY: CHEM TREND LIMITED PARTNERSHIP		SRN / ID: B2303
LOCATION: 3205 E GRAND RIVER, HOWELL		DISTRICT: Lansing
CITY: HOWELL		COUNTY: LIVINGSTON
CONTACT: MARK ANTOSIAK , Sr Reg Affairs Compliance Specialist		ACTIVITY DATE: 05/29/2014
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

On 5/29/2014, the Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted a scheduled inspection of Chem-Trend LP's Grand River Avenue facility.

Facility environmental contacts:

Terry J. Lovell, M.S., Sr. Director Quality, Purchasing, HSE; 517-505-2629; tlovell@chemtrend.com

Mark Antosiak, Sr. Regulatory Affairs Manager; 517-545-7932; mantosiak@chemtrend.com

Kathryn Straccia, CHMM; Regulatory Affairs Manager; 517-545-7930; kstraccia@chemtrend.com

Emission unit	Former PTI #	PTI# or rule	EU description	Location	Control	Operating status
EU-790-80	790-80	374-06	5 vented vats for producing lubricants, release agents, and other specialty mixtures; tanks 140, 143	Plant 1, Area 5		Compliance
EU-791-80	791-80	374-06	6 vented vats for producing water-based lubricants, release agents, and other specialty mixtures; tanks 115, 120, 126, 127, 128	Plant 1, Areas 6,7, and 8		Compliance
EU-676-85	676-85	374-06	2,600 gal reactor for producing chemical specialty lubricants	Plant 1		Compliance
EU-717-91	717-91	374-06	180 gal vented vat for producing water-based specialty lubricants and release agents; tank 119	Plant 1		Compliance
EU-576-95A	576-95A	374-06, 285(a)	PB-1 powder blend powdered lubricant manufacturing process; PB-1 removed, Plymo Vent dust collector relocated	Plant 4	Plymo Vent, interior exh., relocated	PB-1 removed
EU-577-95	577-95	374-06	Equipment for producing chemical specialty lubricants; 1,000 gal process vat, tanks 405, 406, 407, and 408	Plant 4	Venturi scrubber	Not operating
EU-48-96	48-96	374-06	PB-2 Plow Blender (1,500 gal process vat for mold lubricant); to be removed; Modukleen baghouse to be relocated	Plant 4	Modukleen, interior exh., to be relocated	PB-2 to be removed
14 storage tanks	788-80A	284(l)	Storage tanks	Plant 1		Compliance
Tank 183	249-81	284(l)	Storage tank 183 (formerly #26)	Plant 1		Compliance
Tank 167	242-82	284(l)	Storage tank 167 (formerly #27, #22 gone)	Plant 1		Compliance
Tank 165	103-83	284(l)	Storage tank 165 (formerly #1)	Plant 1		Compliance
Tank 170	735-83	284(l)	Storage tank 170 (formerly #M-2)	Plant 1		Compliance
Tank 169	766-84	284(l)	Storage tank 169 (formerly #30)	Plant 1		Compliance
Tank 174	767-84	284(l)	Storage tank 174 (formerly #31)	Plant 1		Compliance
Tank 179	728-86	284(l)	Storage tank 179 (formerly #34)	Plant 1		Compliance
Tank 178	729-86	284(l)	Storage tank 178 (formerly #35)	Plant 1		Compliance
Tank 175	730-86	284(l)	Storage tank 175 (formerly #36)	Plant 3		Compliance
Nat. gas boiler	NA	282(b)(l)	150 horsepower natural gas fired boiler	Plant 1		Compliance
Nat. gas boiler	NA	282(b)(l)	60 horsepower natural gas fired boiler	Plant 1		Compliance
Nat gas boiler	NA	282(b)(l)	100 horsepower natural gas fired boiler	Plant 4		Compliance
Bulk bagging	NA	285(l)(vi)(B)	Bulk bagging process	Plant 4	Filter	Not operating

Facility description:

This facility manufactures water-based lubricants and specialty chemicals.

Regulatory overview:

This facility is classified as a minor source, not having the potential to emit to be a major source for criteria air pollutants, or for hazardous air pollutants. It has a single air use permit, Permit to Install (PTI) No. 374-06, which consolidated the multiple air use permits that previously existed for this site. After the consolidation, those air permits were voided, along with air permits for processes which are now considered exempt from the requirement to obtain a permit to install.

Location:

The Grand River site (including Plants 1, 3, and 4) is one of two Chem-Trend LP sites in Howell. This site is located in a commercial area, bordered by residential neighborhoods. There are residences approximately 500 feet to the north, and about 250 feet to the east. To the southeast, south, and west are other businesses.

Fee status:

This facility is not considered fee-subject, for the following reasons. Because it is not a major source for criteria pollutants, it is not classified as Category I. Additionally, because it is not a major source for Hazardous Air Pollutants (HAPs), and is not subject to federal New Source Performance Standards, it is not classified as Category II. Finally, because it is not subject to federal Maximum Achievable Control Technology standards, it is not classified as Category III. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Recent history:

This facility has not been the subject of any air pollution complaints, in AQD's files, going back to 1991. The facility is ISO 14000, ISO 9001, and OHSAS 18001 certified.

Arrival:

I arrived at 1:12 PM. I could not see any visible emissions from the facility, other than steam from Plant 4's steam generator. There were no odors detectable, other than the scent of flowering plants, in the vicinity. Weather conditions were mostly sunny, 73 degrees F, and moderately humid, with wind out of the southeast at 0-5 miles per hour.

I met with Mr. Michael Ward, Operations Director, North America, Mr. Terry J. Lovell, M.S., Sr. Director Quality, Purchasing, HSE, Mr. Mark Antosiak, Sr. Regulatory Affairs Manager, Ms. Kathryn Straccia, CHMM; Regulatory Affairs Manager, and with Mr. Richard Wordelman III, Engineering Manager. I provided Chem-Trend staff with a copy of the DEQ's "Environmental Inspections: Rights and Responsibilities" brochure, per AQD procedures. I was provided with a copy of Chem-Trend's Visitor Safety Guidelines, which is attached to this report, for future reference by AQD inspectors. Mr. Antosiak provided information on which tanks are currently assigned what identification numbers, as these have changed over time (attached for reference).

This was not an unannounced inspection. I had visited the plant, unannounced, on 5/21, when Chem-Trend staff already had a regulatory activity about to start. We agreed upon today's date and time.

Inspection:

It was explained to me that Plants 1, 3, and 4, here at the Grand River site, are all water-based, and use no volatile organic compounds (VOCs) in their manufacturing. Their raw materials include mineral oils and vegetable oils. They make a lot of general purpose lubricants at this site. Their McPherson Park site (Plant 2, State Registration Number N1862) focuses more on manufacturing of release agents, and uses some volatile organic compounds (VOCs).

Plant 1:

Plant 1 uses a lot of liquids and waxes as raw materials. In a large, lowered area in Plant 1, were tanks or vats for water-based emulsions, and a large vat for silicone products. The vat is under pressure, and has a seal which allows no emissions, until the particular product batch is finished. A chemical reaction takes place in this mixing vat, but mixes in most of their other vats produce no reaction, just a dispersion. In the recessed area, other vats included tire lubricants and die casting lubricants.

The liquids used at Plant 1 include waters and oils. Near the pit, there were three raw material storage tanks for mineral oils, each labeled, with product codes. Past them were tanks for surfactants, and additional mineral oils. Some of the mixing vats were fairly small, as demand for specialty chemicals can be limited. The smallest mixer I saw was a portable air mixer. Other mixers there, like a Cowles unit, are quite large, and are used because they have high shear. This allows them to break up raw materials, into emulsions.

They have a raw material storage area, where some of the materials stored are products or "bases" which they have made within the plant. These are used as a base, or starting point, for other products. Most tanks in Plant 1 are unheated, but two were jacketed/heated.

Plant 1's wastewater tank contains the water used in cleaning their equipment, in between batches of products.

I did not detect any visible emissions from the processes in Plant 1. The only odor I noticed was probably from a cleaning solution that is regularly used in the plant, company staff believed.

Just outside Plant 1 is their tank 176. It is a double walled tank, but is not currently in use, as they have tanks available for use indoors, in an environment which is climate controlled.

Plant 3:

Their tank 175 was once outside, but is now contained within a building. It is a silicone fluid storage tank. I did not detect any odors nor see any visible emissions from the tank.

Plant 4:

Plant 4 uses a lot of dry or powdered raw materials. Please see text for individual emission units, below. There is also a small, portable dust collector, not discussed below.

EU-576-95A; PB-1 process with Plymo vent dust collector, PTI No. 374-06:

The PB-1 process has been removed. Its purpose was to blend powdered lubricants. The Plymo Vent dust collector, which exhausts to the interior of the plant, has been relocated. This relocation satisfies the criteria for Rule 285(a), which allows for relocation of process equipment within the same geographic site.

EU-577-95; equipment for producing chemical specialty lubricants, with venturi scrubber; PTI No. 374-06:

There are two vessels which make tire mold release agents, using carbon black, for the outside of tires. The vessels are served by a venture scrubber which collects particulate emissions. Water as the scrubber solution. The vessels and the scrubber were turned off, as they finish operating fairly early in the day. Recordkeeping of scrubber flowrate is required on a daily basis by the PTI.

There are also two mixers for combining mica and talc, to make a tire release agent, for the inside of the tire. They are also served by the venturi scrubber. There is a wastewater tank inside Plant 4, for the scrubber wastewater.

After the inspection, on 6/10, I e-mailed to Mr. Antosiak a request for copies of their scrubber recordkeeping for January through May of 2014. The next morning, he e-mailed to me scanned copies of the Plant 4 Scrubber Daily Operating Checklist, for January through May, 2014, attached to this report for reference. Each day, the scrubber was within its normal operating range of 15-20 gallons per minute.

EU-48-96: PB-2 Plow Blender, with Modukleen baghouse; PTI No. 374-06:

The PB-2 Plow Blender will soon be removed, and the Modukleen baghouse it uses will be relocated.

They were not running, at the time of the inspection. The Plow Blender was used to put a liquid coating on powders. The relocation of the Modukleen is only 20 feet away, and is expected to be exempt, under Rule 285(a). The baghouse will exhaust into the plant interior atmosphere, as it does at present. A bulk bagging process which was also served by the Modukleen will be removed.

Bulk bagging process and fabric filter; Rule 285(l)(vi)(B)

The bulk bagging process which is controlled by a shared Modukleen baghouse will be removed, but the baghouse will be relocated, as discussed above.

There were emissions of steam from Plant 4, from a steam generator. AQD does not regulate uncombined water vapor.

Conclusion:

I did not find any instances of noncompliance, nor did I find any areas of concern. The facility appeared neat and well-maintained, and appears to be in compliance with PTI No. 374-06, and the Michigan Air Pollution Control Rules. Facility staff were very knowledgeable and professional. I left the site at 3:18 PM.

NAME



BS

DATE

6/11/2014

SUPERVISOR

