

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

N186224413

FACILITY: CHEM-TREND LP		SRN / ID: N1862
LOCATION: 1445 W MCPHERSON PARK DR., HOWELL		DISTRICT: Lansing
CITY: HOWELL		COUNTY: LIVINGSTON
CONTACT: Mark Antosiak , Sr. Regulatory Affairs Compliance Specialist		ACTIVITY DATE: 03/03/2014
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

On 3/3/2014, the Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted an unannounced, scheduled inspection of Chem-Trend L.P.'s McPherson Park 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

Richard Wordelman III, Engineering Manager; 517-546-4520; rwordelmaniii@chemtrend.com

Emission units:

Emission unit	Description	Control	Permit to install or exemption	Applicable federal regulations	Compliance status
EUCHEMLEASE	Chemlease process	Wet scrubber	Rule 290	NA	Not operating, at time
EUMAIN	Bulk tank farm; (9) 10,000 gal tanks (4) 7,700 gal tanks (1) 5,500 gal tank (4) 15,000 gal tanks Various smaller vats	Vapor balance system, and pressure/condensation vapor recovery system	550-88	40 CFR Part 60, Subpart Kb	Compliance
Waste storage tank	7,700 gal waste storage tank	Carbon adsorption	550-88B	NA	Compliance
EUTOTEWASH	Tote washing system	Two carbon drums for adsorption	89-91	NA	Removed
EUMINOR	Chemical mixing vessels: PJV-4 (30 gal vat) PJV-3 (45 gal vat) SV-1 (120 gal vat) RE-202 (440 gal vat)	Pressure/condensation control	1044-91	NA	Compliance
Boilers	(2) 4 million Btu natural gas-fired boilers		Rule 282(b)(i)	NA	Compliance
Solvent recycling	Solvent recycling process	Closed loop system	Rule 285(u)	NA	Compliance

Facility description:

This facility produces solvent-based and water-based mold release agents. It is one of two Chem-Trend L.P. plants in Howell.

Regulatory overview:

This facility is considered to be a true minor source, and has four Permits to Install (PTIs). A Title V applicability determination was prepared by a consultant in 2011, and it indicated that this facility was not subject to Title V.

It is subject to 40 CFR Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

Fee status:

This plant is classified as a Category II fee-subject facility, because it is subject to the New Source Performance Standard (NSPS) for 40 CFR Part 60, Subpart Kb. The company submits an annual Michigan Air Emissions Reporting System (MAERS) report each year.

Recent history:

AQD has no record of any complaints ever being received about this plant. It was constructed around 1987 or 1988.

Location:

This facility is in an industrial park, north of I-96, and south of Grand River Avenue. Immediately to the west is the main Thai Summit (formerly Ogihara) plant, and immediately to the south is a smaller Thai Summit building. Less than several hundred feet to the north and east are residences in a subdivision.

Arrival:

At 9:55 AM, I drove along McPherson Park Drive, and detected no odors from the Chem-Trend L.P. facility. Weather conditions were sunny and clear, and 5 degrees F, with winds at 5-10 miles per hour, out of the north.

I stopped at the office, to ask if Mr. Mark Antosiak was available, and was informed that he works out of their main office, at the Grand River Avenue plant, State Registration Number (SRN) B2303. I drove to the Grand River site, and met with Mr. Mark Antosiak, Sr. Regulatory Affairs Compliance Specialist, Mr. Richard Wordelman III, Engineering Manager, and Mr. Terry J. Lovell, M.S., Sr. Director Quality, Purchasing, HSE, Chem-Trend North America. Despite being quite busy, Mr. Antosiak and Mr. Wordelman devoted the remainder of the morning, and the early afternoon, to the inspection of the McPherson Drive plant. We decided to save the inspection of the Grand River plant for a different week.

I provided Mr. Antosiak with a copy of the DEQ brochure "Environmental Inspections: Rights and Responsibilities," per AQD procedure. He gave me a site map of the facility (attached for reference), showing all storage vessel/tank locations.

Inspection:

Mr. Antosiak explained that their 5,500 gallon outdoor storage tank for methylene chloride (one of the tanks covered by PTI No. 550-88) has been removed. Gene, their Production Supervisor, indicated that process equipment inside the plant which used methylene chloride is no longer in use. The company which owns Chem-Trend has an FFS7 procedure to eliminate hazardous waste from the production process, where possible. In 2012, there were 19,600 lbs of methylene chloride at the McPherson Drive site. At the end of 2013, this was down to 5,878 lbs. They plan on this amount being 0 lbs, by the end of 2014.

The plant has a closed loop system for handling certain liquid raw materials, which are stored outside the plant. This system of pipes eliminates opportunities for chemicals to be released to the environment. This was a voluntary installation on their part. The entire plant was built with secondary

environment. This was a voluntary installation on their part. The entire plant was built with secondary containment in mind, I was informed, in the event any chemical spills should ever occur. This was attributed to the proactive environmental practices of their founder.

EUCHEMLEASE: Chemlease process with wet scrubber; Rule 290:

This is a batch process, and the frequency of operation varies, depending on demand. It may be operated 3 times per month, or up to 3 times per week. It was installed during late 1999. It has been upgraded/enlarged. It produces a base which is used in other processes, within the plant. The scrubber uses a 10% sulfuric acid solution, with plastic balls as filter media. The acid is siphoned to the top of the scrubber and sprayed downwards, while amine emissions rise upwards, and are neutralized. The emission threshold of Rule 290 for controlled emissions is 500 lbs per month. Other processes at the plant which are related to the Chemlease process also exhaust to this scrubber. It did not appear to be in use, at the time of the inspection.

Pipes to a building for storing of gases associated with the Chemlease process have secondary containment, in the event damage ever occurs to a pipe.

EUMAIN (bulk tank farm) with vapor balance system, and pressure/condensation vapor recovery system; PTI No. 550-88:

This permit covers nine 10,000 gallon tanks, four 7,700 gallon tanks, one 5,500 gallon tank which once contained methylene chloride, but has been removed, four 15,000 gallon tanks, and a number of smaller vats. These are basically raw material storage tanks. A heptane replacement tank was added in 2012, as tank number 260. It is considered exempt under Rule 284.

Outside, I could not detect any odors from the tank farm, nor see any visible emissions. We were downwind of the tanks.

For the now removed tank (number 281), which contained methylene chloride, there was a vapor balance system installed and used during loading operations.

I asked if they keep specifications of tank dimensions and capacity onsite, as required by 40 CFR Part 60 Subpart Kb. I was informed that they have drawings and tank dimensions onsite, from the time the tanks were constructed. Tank capacity is quickly accessible onsite, by computer, I was informed.

Unlike the rest of the tank farm, the four 7,700 gallon tanks are located indoors. Three contain products, while one contains hazardous waste, and is referenced in PTI No. 550-88B (please see below).

7,700 gallon waste solvent storage tank with carbon adsorption control; PTI No. 550-88B:

This permit covers tank number 278. It is used to store hazardous waste which is generated from cleaning vats, and from scrap products. Emissions from this tank are vented to a two carbon canister system. They explained that because there is no practical way for them to monitor breakthrough, they change the canisters every couple of years. From experience, this has been adequate. In 1996, a consultant did testing, and believes they have nil emissions from this process. Carbon drums are returned to the supplier for recycling. They handled 51,827 gallons of hazardous waste in 2013.

They clean out their mixing vats when they change products, and recycle the cleaning solvents, wherever possible. If solvents cannot be recycled, they are handled as hazardous waste.

EUTOTEWASH; Tote washing system, with two carbon drums for control; PTI No. 89-91:

This process has been removed from the plant, and all totes are now sent offsite to be washed. The air use permit can now be voided.

EUMINOR: chemical mixing vessels PJV-4, PJV-3, SV-1, and RE202, with pressure/condensation control for methylene chloride and methyl chloroform; PTI No. 1044-91:

The PTI limits methylene chloride emissions to 70 lbs/year from these vessels, but that solvent is no longer used in them. When batches were once mixed containing methylene chloride, instead of being vented uncontrolled to the outside air, the emissions were routed to an adjacent pressure condensed

vapor recovery system. The waste collected in this system was disposed of as hazardous waste. The vessels may be used in the future, for products which do not contain methylene chloride.

Solvent recycling process (closed loop); exempt: Rule 285(u) exempts solvent distillation equipment that has a rated batch capacity of not more than 55 gallons. This process began operating in 2013. It is primarily for cleaning non-silicone rinses of mineral spirits. It is a closed loop system and has no air emissions, I was informed.

Boilers; Rule 282(b)(i):

There are two 4 million Btu natural gas-fired boilers, which provide steam to heat coil jackets within some process vats. They were installed in 1987 and 2009, and are considered exempt under the Rule 282(b)(i) exemption. They are reported in MAERS under the Reporting Group ID of RGHEAT.

Recordkeeping:

At the time of the inspection, on 3/3, they were gathering data for their consultant, who prepares their annual MAERS report for them. The MAERS report has since been received for the operating year 2013, and has been audited, see details below.

EUCHEMLEASE VOC emissions were 95.0 lbs for 2013. The monthly VOC emissions would therefore be well below the 500 lbs allowed by Rule 290 for controlled pollutants.

EUMAIN (tank farm) VOC emissions were 6,928.90 lbs, or 3.46 tons for 2013. This is below the permit limit of 4 tons per year VOC (excluding methylene chloride, methyl chloroform, and freon) allowed by PTI No. 550-88, Special Condition No. 14.

EUTOTEWASH VOC emissions were 3.0 lbs for 2013. This is below the limit of 0.02 tons or 40 lbs allowed by PTI No. 89-91. This process has been removed from the plant.

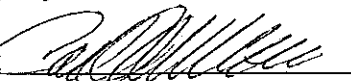
EUMINOR VOC emissions were 244.0 lbs or 0.12 tons, for 2013. The VOC permit limits (excluding methylene chloride, methyl chloroform, and freon) in PTI No. 1044-91 are 0.53 tons for vessel SV-1, 0.24 tons for the vessels PJV-3 and PJV-4, 0.54 tons for vessel RE-202, and 63.6 lbs for vessel SV-1. To verify that emissions for vessel SV-1 were below the permitted 63.6 lbs for 2013, it will be necessary to contact the plant, as SV-1 is not identified under EUMINOR in the supporting documentation for the company's MAERS calculations. The supporting documentation (attached for reference) identifies some vats within EUMINOR as having been removed from service, or replaced with new tanks and given a new identification number.

The company keeps records on each vat, and what amount of production takes place. During the inspection, I observed examples of these records, which list the various raw materials, including solvents, that are used.

Conclusion:

I could not detect solvent odors outside of the facility, nor inside. The McPherson Park Drive plant looked clean, neat, and orderly. Facility staff were very knowledgeable and helpful. I could not identify any instances of noncompliance, nor any areas of concern. I left the site at 12:53 PM. With the company's concurrence, PTI No. 89-91 for the removed tote washing system will be voided.

NAME



DATE

4/2/2014

SUPERVISOR

