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

M402740844

FACILITY: OIL CHEM INC	SRN / ID: M4027
LOCATION: 711 W 12TH ST, FLINT	DISTRICT: Lansing
CITY: FLINT	COUNTY: GENESEE
CONTACT: Robert Massey , President	ACTIVITY DATE: 07/26/2017
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance
SUBJECT: Unannounced, scheduled inspection.	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

On 7/26/2017, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted a scheduled, unannounced inspection of Oil Chem, Inc. This was also a multi-media inspection, as AQD was joined today by Mr. Bryan Grochowski of the DEQ's Waste Management and Radiological Protection Division (WMRPD)

Environmental contact:

Robert (Bob) Massey; President; 810-235-3040; rmoci@oilcheminc.com

Facility description:

At present, as described on their website, Oil Chem is a specialty lubrication manufacturer, and specializes in the formulation and custom blending of metal working lubricants, industrial cleaning chemicals, and maintenance oils.

Emission units:

Emission unit*	Emission unit description	Permit to Install No.	Compliance status
Removed centrifuges	Removed centrifuges, once used for oil recovery	436-89A	Permit already voided
Equipment presently covered under PTI 125-91A	Tanks T-190, T-191, T-101, and T-102	1197-90	Voided
T-81 through T-84	Building A: Tanks T-81 through T-84 still in use, but a centrifuge has been removed	1196-90	Compliance
Removed oil drying system and removed T-25 and T-26	Building A: oil drying system and Tanks T-25 and T-26 have been removed	1195-90	Permit to be voided
T-190 through T-192, and T-104 and T-105, plus wastewater treatment system	T-190 through T-192, and T-104 and T-105, plus a wastewater treatment system includes T-101, T-102, and scrubber	125-91A	Not operating
3 dry mixers, with dust collection system	3 dry mixers have been rendered incapable of operation.	292-88A	Permit to be voided
6 removed bulk storage tanks	Tanks T-381 through T-384, and 2 unnamed storage tanks, all removed	291-88A	Permit to be voided

*An emission unit is any part of a stationary source which emits or has the potential to emit an air contaminant.

Regulatory overview:

This facility is considered to be a true minor source, rather than a major source of air emissions. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns.

It is also considered a minor, or *area source*, for Hazardous Air Pollutants (HAPs), because it is not known to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for

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combined HAPs.

There are a number of active permits to install remaining for this facility. Some of the equipment may satisfy permit exemption criteria, but the company would like to keep these permits active, so they will not be voided. However, where permits are active but the originally permitted equipment has been removed or rendered incapable of ever operating again, those permits will be voided, in keeping with AQD policy.

Because the source is a minor source of HAPs, it is not subject to 40 CFR Part 63 Subpart DD, *National Emission Standards for Hazardous Air Pollutants from Off-site Waste and Recovery operations*. Also because it is a minor source, it is subject to 40 CFR Part 63 Subpart DDDDD, *National Emissions Standards for Hazardous Air Pollutants from Industrial, Commercial, and Institutional boilers and process Heaters*. Because the facility's waste water treatment process is privately owned, it is not subject to 40 CFR Part 63, Subpart VVV, *National Emissions Standards for Hazardous Air Pollutants Publicly Owned Treatment Works*.

Fee status:

This facility is not a Category I fee subject source, because it is not a major source for criteria pollutants. It is not a Category II fee-subject source because it is not a major source for Hazardous Air Pollutants (HAPs), nor is it subject to federal New Source Performance Standards. Additionally, it is not Category III fee-subject, because it is not subject to federal Maximum Achievable Control Technology standards. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Location:

Oil Chem is located just south of downtown Flint. A rail line borders the property on its south side, and a road commission garage is to the immediate north, followed by I-69. A branch of the Flint River flows between the road commission property and I-69. To the north and west are commercial properties. The closest residences are to the east. A number of residences which were immediately east of the Oil Chem site have reportedly been purchased by the company and removed.

History:

Oil Chem originally recycled waste oils (sludge) by recovering and blending the petroleum portions into a line of saleable products for cooling, cleaning, and lubricating industrial processes. The recent decrease in availability of waste oil products has reportedly forced them to use virgin materials in their product blending processes, as noted in the 8/2/2012 inspection report by AQD's Brian Culham.

It is my understanding that this facility started up in 1978. From 1989-1991, a number of air permits were issued, with subsequent revisions. During the 1990s, AQD received a number of odor complaints related to Oil Chem. Odor nuisances were cited on occasion by AQD staff, including myself. The most recent complaint AQD has received about this source was in 2013. Prior to that, the most recent complaints AQD received were a single complaint in 2005, and several complaints in 2003.

In 1991, Oil Chem entered Consent Order APC No. 20-1991 to resolve allegations of nuisance odors, and the installation of equipment without first obtaining required permits to install. The order was terminated on 9/26/2009.

Note: some of the originally permitted equipment can now qualify as exempt, under permit exemption rules which had not yet been written, as of 1991.

Arrival:

No odors were detected east of the plant, on Oak Street, at 9:45 AM. Weather conditions were overcast, humid, and 70 degrees F, with winds out of the south southwest at 0-5 miles per hour.

In the parking lot, immediately north of the office building, I detected an odor by Building A, which was too faint to identify. This odor was not sufficient to cause a violation of Rule 901(b), which prohibits unreasonable interference with the comfortable violation of life and property. No visible emissions were seen coming from the plant. Inside the plant's lobby were distinct and definite odors that appeared to me to be reminiscent of chemicals as well as petroleum.

I provided my identification/credentials to office staff, per AQD procedure. We were advised that Mr. Robert J. Massey, President, was in Brighton at the moment, but would drive here to meet us. We were informed that he would arrive in about an hour, so we conducted another environmental inspection in the nearby area, while waiting for Mr. Massey's arrival.

We returned to Oil Chem at 11:01 AM. As we approached from the north on foot, I detected a distinct and definite oily odor, corresponding to a level 2 on the 0 to 5 odor scale used by AQD. This odor was not sufficient, in and of itself, to constitute a violation of Rule 901(b), however. Winds were now 10-15 miles per hour out of the south southeast, or south.

We met with Mr. Massey, and explained that we were here to conduct an unannounced inspection, for compliance purposes. Mr. Massey briefed us on the changes to Oil Chem since I had last been here in the early 2000s. He explained that with the General Motors bankruptcy in 2008, most of the plants that generated the wastewater for Oil Chem to treat closed. Since then, he informed us they have been working on creating new products, some of which are proprietary in nature. He advised us that the nature of their business changes almost daily, as the jobs they do change from one day to the next.

We were told that since 2012, the year of the last AQD inspection here, there has been no new installation of equipment. They have also removed old equipment.

Mr. Massey asked if some of the new products they are developing would require air use permits. It was not possible to say at this time, during our very brief discussion on this subject, so I provided Mr. Massey with a copy of *The Permit to Install Exemption Handbook*, January 2017 edition. I explained that they would need to review the exemptions to determine which, if any, apply to them. I encouraged him to contact the district AQD for questions on exemptions, and also advised him it may be beneficial for Oil Chem to contact AQD's Permit Section, to discuss processes which might require permits to install. Rule 283 may apply to pilot projects that they are working on. Further follow up on this is needed.

B. Grochowski discussed issues related to waste regulations and past enforcement actions with Mr. Massey. We were informed that they treat no wastewater here, but that they do receive sludge, and ship the water from the sludge to landfills, for disposal. We were advised that after dewatering, the sludge itself is then sent to landfills, for disposal.

Inspection:

It was difficult to tell if the source is in compliance at this time. The nature of the work they do on a daily basis has changed a great deal, from their description, over the last decade. The company is not certain if much of the work they do now would require air permits, or if it would fall under exemption rules. I provided a copy of the *Permit to Install Exemption Handbook*. I drew their attention to Rule 284 for containers, relating to their storage tanks. For their pilot processes, I drew their attention to Rule 283, which addresses pilot processes, as this may be very relevant.

An Overview of recent permits, both active and voided is provided below. Please see attached map, for reference. The map is copied from a 1990s-vintage Oil Chem PTI application.

PTI No. 436-89A: voided.

PTI No. 1197-90: voided. The equipment covered under this PTI is currently covered under PTI No. 125-91A. This includes Tanks T-190 and T-191, as well as T-101 and T-102. T-101 and T-102 are part of the wastewater treatment system, and are located at the north end of the east tank farm.

PTI No. 1196-90: Tanks T-81 through T-84 are still in use. However, a centrifuge once covered by this PTI

has been removed. The storage tanks have closed tops with passive venting and are now used for raw material storage and product blending. The equipment may be able to satisfy permit exemption criteria, but Mr. Massey would like to keep it active, so the permit will remain active. The equipment covered by this PTI is in Building A. There were light, in-plant odors which I would rate as distinct and definite.

PTI No. 1195-90: This permit was issued for an oil drying system and two storage tanks. The oil drying system has been removed, and the tanks, T-25 and T-26, are gone. Mr. Massey expressed interest in keeping the permit active, but with the equipment that the permit was issued for removed, the permit should be voided, in keeping with AQD policy. T-25 and T-26 had been located inside Building A.

PTI No. 125-91A: This permit is still active, and the equipment is still in use. This permit contains the majority of still-permitted equipment at the site. The equipment covered includes one 13,000 gallon stainless steel tank and 4 additional storage tanks. The five tanks are identified as T-190, T-191, T-192, T-104, and T-105. The permit also covers the wastewater treatment system which includes T-102 (originally for oil separation), and T-101 (water treatment), along with a packed bed scrubber.

The packed bed scrubber was not being operated at the time of the inspection. Mr. Massey explained that they do not use the scrubber when they are treating waste that is not likely to be odorous. He informed me that they were not processing right now. Therefore, there was no pressure drop to read on the magnahelic gauge. There was a strong odor inside the building which houses the scrubber, but I could not detect this odor outdoors.

Note: If they are operating the oil recovery system, the scrubber must be operated, as required by Special Condition (SC) No. 16 of PTI No. 125-91A. I will convey this to the company. If they are dewatering sludge, it is not clear to me if that would be considered to be operating the oil recovery system. Further follow up is needed, in order to clarify this.

PTI No. 292-88A: This permit applies to 3 dry mixers controlled by a dust collection system, which are no longer in use, and have been rendered incapable of operating. I verified that they appeared to be non-operational, as scaffolding and electrical components had been removed. We were told that they no longer work with powders. The PTI will be voided, in keeping with AQD policy.

PTI No. 291-88A: This permit was issued for 6 bulk storage tanks, which have been removed. These tanks were T-381, T-382, T-383, T-384, and 2 others which were unnamed. Mr. Massey expressed interest in keeping the PTI active. However, because the originally permitted equipment has been removed, the permit will be voided, in keeping with AQD policy.

Miscellaneous:

We walked around the east tank farm, some portions of which were not being utilized at this time. For that area, it was explained that piping had not been completely installed, and retention had not been completed, as the tanks are not used. For other parts of the tank farm, which had been completely installed, there were no visible emissions from those tanks. The tanks did not appear to show any signs of leakage. I did not detect any odors from the east tank farm.

Conclusion:

No instances of noncompliance were observed. However, the company is not certain if the new products they are working on will require air use permits, or if they qualify for some of the permit exemption rules. AQD will follow up with the company, and attempt to determine what exemptions, if any, may apply. Rule 283 for pilot processes may apply to some of their new product development efforts.

Note: AQD will also follow up, to determine if dewatering sludge is considered the same as operating the oil recovery system, under PTI No. 125-91A. SC No. 16 of that permit requires the scrubber to be operated whenever the oil recovery system is operating.

NAME *[Handwritten Signature]*

DATE *9/30/2017* SUPERVISOR *[Handwritten Signature]*