

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

N065670119

<b>FACILITY:</b> Drug & Laboratory Disposal, Inc.		<b>SRN / ID:</b> N0656
<b>LOCATION:</b> 331 Broad Street, PLAINWELL		<b>DISTRICT:</b> Kalamazoo
<b>CITY:</b> PLAINWELL		<b>COUNTY:</b> ALLEGAN
<b>CONTACT:</b> Brent Walter ,		<b>ACTIVITY DATE:</b> 11/29/2023
<b>STAFF:</b> Cody Yazzie	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b>
<b>SUBJECT:</b> Self-Initiated Inspection		
<b>RESOLVED COMPLAINTS:</b>		

On November 29, 2023 Air Quality Division (AQD) Staff (Cody Yazzie and Jared Edgerton) arrived at 331 Broad Street, Plainwell Michigan at 9:00 AM to conduct an unannounced air quality inspection of Drug & Laboratory Disposal (hereafter DLD) SRN (N0656). This AQD inspection was conducted in conjunction with the Material Management Division (MMD) Staff (Todd Zynda and Wade O'Boyle) inspection. Staff made initial contact with the office receptionist and stated the purpose of the visit. Steve Barker, DLD, Director of Logistics and Customer Service, arrived shortly thereafter and took AQD and MMD Staff to a conference room for further discussions.

DLD is a hazardous waste treatment and disposal facility. The facility takes in a variety of waste either liquid or solid and comingling the waste before storing and eventually being sent off to the appropriate disposal facility. Liquids are comingled in the hoods and the solids are comingled with the use of the shredders.

DLD was last inspected by the AQD on August 14, 2007 and appeared to be in Compliance at that time with PTI No. 772-83, PTI No. 759-83A, and PTI No. 708-83A. Staff asked, and Mr. Baker stated that the facility does not have any boilers or cold cleaners.

Mr. Barker along with Elba Fernandez, DLD, Chemist Supervisor and Kyle Perrin, DLD, DLS-5 Supervisor gave Staff a tour of the facility. Brent Walter, DLD assisted with the records request associated with the facility's current air permits. Required personal protective equipment are safety glasses, steel toe boots, and long sleeves. Staff observations and review of records provided during and following the inspection are summarized below:

**PTI No. 239-10:**

**EU-DLS-5-DUST:**

This emission unit was permitted for a process that takes glass containers that are packed in vermiculite for transport to prevent breakage. During the inspection this emission unit was not observed. Talking with Mr. Barker and Mr. Perrin the emission unit appears to never have been installed. No records were requested for this emission unit.

**FG-DLS-5-HOODS:**

The facility permitted 5 DLS waste processing area fume hoods. These hoods process a variety of organic and inorganic wastes. Each fume hood is controlled by a separate single stage activated carbon system. It appears naming conventions may have changed as the permit refers to these emission units as EU-DLS-5-FH3, EU-DLS-5-FH4, EU-DLS-5-FH5, EU-DLS-5-FH6, and EU-DLS-5-FH7.

During the inspection the fume hoods were identified with numbers 1 – 5. Fume hoods 1, 2, and 5 were located in DLS-3 and fume hoods 3, and 4 were located in DLS-5.

Entering the facility while it is operating requires wearing additional sanitary/safety equipment. To avoid needing these the process shut down during Staff's walkthrough so actual operation of the process was not observed.

During the inspection Staff did note that they could smell a faint "fishy" odor around hoods 1, 2, and 5 process area. Staff was told that the odor was due to the facility recently processing amine through hood 5. Smelling the faint odor made Staff think there could be a possibility for odor complaints due to the odor lingering when the amine was no longer currently being processed. This was later confirmed as a possibility when walking around the perimeter of the facility and Staff noticed the same "fishy" odor on the walk outside the facility. No complaints appeared to be logged in MACES regarding odors. From observations noted Staff does think there is a possibility for complaints.

This emission unit is required to be equipped with a single stage activated carbon system that is maintained and operated in a satisfactory manner. Staff was shown the activated carbon filter during the inspection for the hoods.

Special Condition III.1 requires that the facility not operate FG-DLS-5-HOODS unless an OMP has been submitted within 60 days of the permit issuance. Based on the District Office's records the facility appears to not have submitted a OMP plan for FG-DLS-5-HOODS. During the inspection Staff was shown maintenance and operation procedures that may be included in the OMP, but not enough detail for sampling plan, testing procedures, method of analysis, frequency of testing, or emission calculations were provided. The facility appears to be violating Special Condition III.1

Special Condition V.1 requires that the facility test the breakthrough of the activated carbon system at least once a month. The facility maintains records of the date of the last breakthrough test and the date of the last replacement of the activated carbon filters on the "Monthly Inspection Sheet". From these records the facility appears to be testing the breakthrough of the carbon once a month as required. Staff was not provided with the records of the breakthrough readings. These records are needed to determine if the facility is changing the activated carbon as they should.

Special Condition VI.1 requires the facility to maintain records for inspections and maintenance conducted in accordance with the OMP. There appears to be no OMP on file and the no maintenance records were provided. The facility appears to be in violation of this condition.

Special Condition VI.3 requires that the facility maintain records of the waste category and amount of each waste category processed in FG-DLS-5-HOODS for each calendar month. These were not provided to Staff in the records request. The facility appears to be in violation of this condition.

Special condition VI.6 requires the facility to keep and maintain monthly and 12-month rolling emission calculations to demonstrate compliance with the VOC, acetone, methylene chloride, and tetrachloroethylene emission limit. This limit restricts the facility to emitting 600 pounds total of these pollutants on a 12-month rolling basis. Staff was not provided with these emission calculations during the records request.

Staff indicated to Brent Walter that not providing these records by the requested deadline are a violation of their special conditions. Staff indicated that a violation would be sent for not being able to provide the requested records.

**FG-DLS-5-SHRED:**

The facility permitted 4 DLS shredders that are used to shred containers and their contents, consisting of hazardous and non-hazardous waste. Each shredder is controlled by a two-stage activated carbon system. It appears naming conventions may have changed from the permitting process as the permit refers to these emission units as EU-DLS-5-SHRED1, EU-DLS-5-SHRED2, EU-DLS-5-SHRED3, and EU-DLS-5-SHRED4. During the inspection the shredders were identified with number 2 – 4. Shredder 3 and 4 were located in DLS 5. One shredder is used for hazardous waste and the other is used for non-hazardous waste. During the inspection Staff was told there used to be another shredder in DLS 5 but had been removed. Shredder 2 is located in DLS-2. These shredders appear to be the originally permitted shredder units.

Special Condition III.1 requires that the facility not operate FG-DLS-5-SHRED unless an OMP has been submitted within 60 days of the permit issuance. Based on the District Office's records the facility appears to not have submitted a OMP plan for FG-DLS-5-SHRED. During the inspection Staff was shown maintenance and operation procedures that may be included in the OMP, but not enough detail for sampling plan, testing procedures, method of analysis, frequency of testing, or emission calculations were provided. The facility appears to be violating Special Condition III.1

Special Condition V.1 requires that the facility test the breakthrough of the activated carbon system at least once a month. The facility maintains records of the date of the last breakthrough test and the date of the last replacement of the activated carbon filters on the "Monthly Inspection Sheet". From these records the facility appears to be testing the breakthrough of the carbon once a month as required. Staff was not provided with the records of the breakthrough readings. These records are needed to determine if the facility is changing the activated carbon as they should.

Special Condition VI.1 requires the facility to maintain records for inspections and maintenance conducted in accordance with the OMP. There appears to be no OMP on file and the no maintenance records were provided. The facility appears to be in violation of this condition.

Special Condition VI.3 requires that the facility maintain records of the waste category and amount of each waste category processed in FG-DLS-5-SHRED for each calendar month. These were not provided to Staff in the records request. The facility appears to be in violation of this condition.

Special condition VI.6 requires the facility to keep and maintain monthly and 12-month rolling emission calculations to demonstrate compliance with the VOC, acetone, methylene chloride, and tetrachloroethylene emission limit. This limit restricts the facility to emitting 500 pounds total of these pollutants on a 12-month rolling basis. Staff was not provided with these emission calculations during the records request.

Staff indicated to Brent Walter that not providing these records by the requested deadline are a violation of their special conditions. Staff indicated that a violation would be sent for not being able to provide the requested records.

**PTI No. 236-10:**

This permit is for the hammermill process that is used to break or crush glass containers contaminated with a variety of organic and inorganic waste. Staff was told that this emission unit does get operated.

This emission unit is required to be equipped with a two-stage activated carbon system that is maintained and operated in a satisfactory manner. In addition to the two-stage activated carbon system the unit must also be equipped with a particulate control filter. Based on the facility's Operation and Maintenance Plan (OMP) these required control devices appear to be installed.

Special Condition III.1 requires that the facility not operate EU-DLS-2-MILL unless an OMP has been submitted within 60 days of the permit issuance. The AQD District Office has record of this plan being submitted as of May 10, 2011. The plan appears to adequately address a sampling plan for testing breakthrough on the activated carbon control, method of analysis, frequency of testing, emission calculations, operations of the unit, and maintenance/inspections conducted on the unit.

Special Condition V.1 requires that the facility test the breakthrough of the activated carbon system at least once every 16 hours of operation. The facility maintains records of the date of the last breakthrough test and the date of the last replacement of the activated carbon filters on the "Monthly Inspection Sheet". From these sheets it appears that the two most recent replacements of the activated carbon occurred on 9/20/2022 and 9/11/2023. The facility maintains record of the amount of hours that each emission unit is operated. Based on the hours of operation for that time period the facility operated EU-DLS-2-MILL a total of 6 hours during that time. During 2022 the facility operated EU-DLS-2-MILL a total of 9.5 hours and 3.5 hours in 2023.

Special Condition VI.1 requires the facility to maintain records for inspections and maintenance conducted in accordance with the OMP. Some records regarding when activated carbon filters are tested/changed were provided as stated above. The OMP has daily inspection check list for Flaps, Integrity of Air Ducts, the Fan working, and the particulate control filter replacements which were not provided.

Special Condition VI.5 requires that the facility maintain records of the waste category and amount of each waste category processed in EU-DLS-2-MILL for each calendar month. These were not provided to Staff in the records request.

Special condition VI.7 requires the facility to keep and maintain monthly and 12-month rolling emission calculations to demonstrate compliance with the VOC, acetone, methylene chloride, and tetrachloroethylene emission limit. This limit restricts the facility to emitting 500 pounds total of these pollutants on a 12-month rolling basis. Staff was not provided with these emission calculations during the records request.

Staff indicated to Brent Walter that not providing these records by the requested deadline are a violation of their special conditions. Staff indicated that a violation would be sent for not being able to provide the requested records.

**PTI No. 759-83A:**

This permit is for the 6-storage tanks that are installed with carbon adsorbers. This permit requires that every 6-months the facility shall perform either testing of the vent gases from each carbon adsorber for breakthrough and replace the carbon adsorber if breakthrough occurs. Breakthrough is defined as when the methylene chloride emissions from any one carbon adsorber exceeds 0.05 pph. The facility can also elect to replace the carbon adsorbers every 6-months in place of testing.

The facility keeps monthly inspections sheets that include the date of the last breakout test and the date of the last replacement. The facility appears to be either replacing the carbon or testing it for breakthrough. The records do not include the breakthrough reading from the test. Staff would need the breakthrough reading recorded to determine compliance with Special Condition 2.1.

Results from this breakthrough test are required to be kept on file for a period of 5 years. These were not provided to Staff. It appears that the facility is in violation of Special Condition 2 of PTI No. 759-83A. A violation notice will be sent to the facility for the recordkeeping violation.

#### PTI No. 708-83A:

This permit was noted in the previous inspection as two separate tables that are work surfaces used for emptying of waste containers and mixing of liquid materials to treat them prior to placing them into the storage tanks. During the inspection Staff did not observe any emission units that fit this description at the facility. It appears the emission unit may have been removed. Staff is unable to determine compliance after the inspection as the emission unit was not observed. If the facility determines that the originally permitted emission units are no longer in operation then the facility can request that the permit be voided.

#### Rule 290 exempt emission units:

From the previous inspection report it was noted that the facility was utilizing the Rule 290 exemption for two different processes. The first is the Gas Neutralization process. This process is a machine that punctures and withdraws cylinder gases into a packed bed scrubber of sorts. The gases are absorbed into whatever liquid or solid medium is needed for the specific gas. Staff was told that this process as not been used in about 5 years. Due to the facility not utilizing the process in about 5 years and are not currently using the process no records were requested. If the facility were to resume operation of the unit monthly recordkeeping would be required.

The previous inspection report indicated that the shredders were operating under Rule 290. There were no indication of the amount of shredders that were operating under Rule 290. These shredders do appear to be permitted under PTI No. 239-10. No records appear to be needed for the now permitted shredders.

#### Conclusion:

At the time of the inspection and based on a review of records obtained during or following the inspection, the facility appears to be in non-compliance with PTI No. 239-10, PTI No. 239-10, and PTI No. 759-83A for the recordkeeping and OMP related issues identified in the above inspection report. Staff stated to Mr. Walter that a report of the inspection would be sent to the facility for their records. Staff concluded the inspection at 12:30 PM. - CJY

NAME Cody Young

DATE 12/14/2023

SUPERVISOR Monica Brothers