

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

N073155178

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| FACILITY: Nortru, LLC | | SRN / ID: N0731 |
| LOCATION: 421 LYCASTE, DETROIT | | DISTRICT: Detroit |
| CITY: DETROIT | | COUNTY: WAYNE |
| CONTACT: Ed Burk , Permitting Compliance Manager | | ACTIVITY DATE: 09/24/2020 |
| STAFF: Jonathan Lamb | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: Scheduled inspection FY 2020 | | |
| RESOLVED COMPLAINTS: | | |

DATE OF INSPECTION: September 24, 2020

INSPECTED BY: Jonathan Lamb, AQD-Detroit; Sam Liveson, AQD-Detroit

FACILITY PERSONNEL PRESENT: Ed Burke, Permitting Compliance Manager; Melanie Frohriep, Manager Facility Plant Operations; Angie Ebejer, Environmental Health and Safety.

SAFETY EQUIPMENT REQUIRED: Hard hat, steel-toed boots, and hi-visibility vest.

FACILITY BACKGROUND:

Clean Earth Environmental Solutions, LLC (“Clean Earth”), formerly Stericycle Environmental Solutions, is a waste processing and fuel blending facility located at 421 Lyncaste St. (operations) and 515 Lyncaste St. (offices) in Detroit, Michigan. The facility is licensed to transfer, store, and process hazardous and non-hazardous wastes, including solvents, waste fuels, paints, and household hazardous wastes. The facility was purchased by Clean Earth, Inc., a subsidiary of Harsco, Inc., in May 2020, at which time the name was changed from Stericycle Environmental Solutions to Clean Earth Environmental Solutions; previous facility names also include Nortru and Petro-Chem.

COMPLAINT/COMPLIANCE HISTORY:

The facility was found to be in noncompliance with several permit conditions during the most recent full compliance evaluation by AQD, completed on September 14, 2018, resulting in the issuance of a Violation Notice on June 11, 2019. The violations included failure to maintain accurate records and failure to perform negative pressure testing. At this time, the violations cited in the June 11, 2019 Violation Notice are considered to be resolved.

Based on its inspection on March 28, 2018, U.S. EPA issued a Finding of Violation (FOV) to “Stericycle, Inc.” on June 18, 2018, for violations of 40 CFR Part 63, Subpart DD, 40 CFR Part 61, Subpart FF, and Renewable Operating Permit No. MI-ROP-N0731-2009. These violations included: failure to properly operate the vapor balance system, pressure relief valves, and sampling ports; failure to correctly calibrate VOC monitoring equipment and meet the performance criteria of Method 21 while monitoring; and failure to maintain vapor tight seals on delivery vessels. A copy of this FOV can be found in the facility file. At the time of writing, these violations remain unresolved. Based on a conversation with U.S. EPA Region V staff on November 17, 2020, U.S. EPA is currently in active enforcement negotiations with Clean Earth to resolve these violations.

Clean Earth is required to perform ambient air monitoring per its Part 111, Hazardous Waste Management operating license. The ambient monitoring results have shown periodic spikes of various compounds, including trichloroethylene (TCE), xylene, toluene, and methylene chloride. This issue is ongoing and is currently under evaluation by EGLE - Materials Management Division.

OUTSTANDING CONSENT ORDERS:

There are currently no outstanding consent orders. Facility entered into Consent Agreement and Final Order (CAFO) Docket No. CAA-05-2002-0020 with U.S. EPA on September 30, 2002 and operated under this CAFO until the CAFO was terminated by U.S. EPA on June 24, 2009.

PROCESS DESCRIPTION AND EQUIPMENT:

Clean Earth primarily performs fuel blending of solvent-based wastes, including paint solvents and solvent flush waste. The blended solvents are then sold to cement manufacturers to be used as fuel for cement kilns. The facility also performs waste consolidation for off-site disposal.

Waste solvents are delivered to the facility via trucks, either in tankers or in containers (i.e., drums or totes). The offloading of wastes from tankers is performed in the TS1 and TS2 Transfer Pads, permitted under the flexible group FG-TruckTransfer. Drums and totes are unloaded using vac trucks, which are also unloaded in the TS1 and TS2 Transfer Pads. All offloading in the TS1 and TS2 Transfer Pads is performed using vapor balance to control emissions.

During the unloading of tankers and vac trucks, the waste solvents are pumped directly to blending tanks located in the TS1 and TS2 Tank Farms, which are permitted under FG-BlendingTanks. TS1 Tank Farm consists of fifteen 30,000-gallon vertical tanks (EU-TS1Tank 16 through EU-TS1Tank 30) and TS2 Tank Farm consists of six 30,000-gallon vertical tanks (EU-TS2Tank35 through EU-TS2Tank40). The individual tanks as well as the two tank farms are all connected with piping; the materials are transferred between tanks within the two tank farms so that all tanks contain approximately the same quantity and composition of blended material. All tanks in the TS1 and TS2 Tank Farms are equipped with agitators for blending and are controlled with an interconnecting vapor balance system, which equalizes the vapor pressure throughout the tank farms. The tanks are not heated and there is no treatment of material within the tanks, only blending. The contents of the tanks are sampled daily to determine the Btu content, halogen content, percent water, and specific gravity of the materials in the tanks; the tanks are also sampled monthly to determine the VOC and HAP content of the material. Facility personnel perform a daily visual inspection of the tanks to check the structural integrity, corrosion, leaks, valves/connectors, and secondary containment. The facility is also required to perform Leak Detection and Repair (LDAR) monitoring monthly to assure there are no fugitive emissions from equipment leaks.

The TS3 Tank Farm consists of four vertical tanks (two 13,277-gallon tanks and two 10,201-gallon tanks) which are subject to the Resource Recovery and Conservation Act (RCRA) and eight vertical 8,000-gallon tanks which are not subject to RCRA; these tanks are permitted as FG-TS3RCRATANKS and FG-TS3NONRCRATKS, respectively. The tanks are controlled by a vapor balance system. The TS3 Tank Farm had been idled for years but was reconditioned a couple years ago and re-permitted with the issuance of Permit to Install (PTI) No. 6-19; however, the TS3 Tank Farm has not yet been put into operation since the issuance of PTI No. 6-19 and therefore was not evaluated for compliance during this inspection.

The Container Management Building includes a drum segregation/storage area and a lab pack area. The lab pack area is used consolidate compatible small-quantity wastes, often from labs or retail stores, into larger quantities to ship off site for disposal; the facility is operating the lab pack area as exempt from permitting per Rule 284(2)(i). The facility previously operated a pump room located within the Container Management Building, but the pumping operation and associated storage tanks have ceased operation and are no longer permitted, though the tanks currently remain onsite (located outside the east wall of the Container Management Building).

The facility has a natural gas-fired boiler with a heat input of 12.6 MMBtu which is used for building and process heating; this boiler is exempt from permitting per Rule 282(2)(b)(i). There are two other boilers on site that are currently not in use; I was unable to obtain the heat input rating from the boiler plate, but the boilers appear to be similar in size or smaller than the 12.6 MMBtu boiler, so they should also meet the Rule 282(2)(b)(i) exemption.

APPLICABLE RULES/ PERMIT CONDITIONS:

The facility was issued Permit to Install (PTI) No. 6-19 on June 18, 2019, which set limits on emissions of hazardous air pollutants (HAPs) below major source thresholds. The facility had previously been determined

to be a major source of HAPs and subject to the federal standards at 40 CFR 63, Subparts DD and EEEE; therefore, the facility was also subject to the Title V permitting program. Due to the rescission of U.S. EPA's "once in, always in" policy in 2018, the issuance of PTI No. 6-19 reclassified the facility as an area source of HAPs and a synthetic minor source (opt-out) with respect to the Title V program. Renewable Operating Permit (ROP) No. MI-ROP-N0731-2009 and PTI Nos. 84-04B, 84-04C, and 184-13 were voided upon issuance of PTI No. 6-19.

Clean Earth is also subject to the following federal standards:

- 40 CFR Part 61, Subpart FF – National Emission Standards for Benzene Waste Operations;
- 40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Note: The facility is no longer subject to the following federal standards as an opt-out source under PTI No. 6-19:

- 40 CFR Part 63, Subpart DD – National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations;
- 40 CFR Part 63, Subpart EEEE – National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).

For this inspection, records from June 2019 through August 2020 were reviewed in determining compliance with the applicable conditions of PTI No. 6-19. Copies of some of these records can be found in the facility file; other records were reviewed on site during the inspection:

PTI No. 6-19, Special Conditions

FG-BlendingTanks: Waste fuel storage tanks – all subject to 40 CFR Part 60 Subpart Kb and 40 CFR Part 61 Subpart FF. All material transfers are conducted using vapor balance. This includes the following emission units: EU-TS1Tank16, EU-TS1Tank17, EU-TS1Tank18, EU-TS1Tank19, EU-TS1Tank20, EU-TS1Tank21, EU-TS1Tank22, EU-TS1Tank23, EU-TS1Tank24, EU-TS1Tank25, EU-TS1Tank26, EU-TS1Tank27, EU-TS1Tank28, EU-TS1Tank29, EU-TS1Tank30, EU-TS2Tank35, EU-TS2Tank36, EU-TS2Tank37, EU-TS2Tank38, EU-TS2Tank39, EU-TS2Tank40

II. MATERIAL LIMITS

1. NOT EVALUATED. There have been no tank cleanouts performed since the last inspection, so this condition was not evaluated.

IV. DESIGN/EQUIPMENT PARAMETERS

1. IN COMPLIANCE. Based on the results of monthly inspections and monitoring, the conservation vents and vapor balance system for all tanks in FG-BlendingTanks appear to be properly installed, maintained, and operated in a satisfactory manner.
2. IN COMPLIANCE. Each tank is installed with high level alarms, pressure/vacuum relief valves, and pumps with automatic cut-off systems.

VI. MONITORING/RECORDKEEPING

1. IN COMPLIANCE. Facility performs inspections and monitoring of the tanks in FG-BlendingTanks in accordance with 40 CFR Part 60, Subparts A and Kb.
2. IN COMPLIANCE. The facility monitors the vapor pressure of the tanks in FG-BlendingTanks every six months, as required.
3. IN COMPLIANCE. The facility maintains all records of inspections and operating information for FG-BlendingTanks in accordance with 40 CFR Part 60, Subparts A and Kb.
4. IN COMPLIANCE. The facility maintains records of the dimensions and capacity of each tank, in accordance with 40 CFR Part 60, Subparts A and Kb.

5. IN COMPLIANCE. The facility maintains records of the vapor pressure of each tank. These records were reviewed on site during the inspection.
6. NOT EVALUATED. Past records indicate that the facility maintains the required records for all tank cleanouts; however, no tank cleanouts have been performed during this compliance period, so this condition was not evaluated during this inspection.

IX. OTHER REQUIREMENTS

1. IN COMPLIANCE. The facility appears to be in compliance with the applicable provisions of 40 CFR Part 60, Subparts A and Kb.

FG-TruckTransfer: Two tanker truck load/unloading pads, each with a vapor balance system. This includes the following emission units: EU-TS1TransferPad, EU-TS2TransferPad

II. MATERIAL LIMITS

1. IN COMPLIANCE. The facility did not exceed the permitted limit of 43,404,000 gallons of material transferred through FG-TruckTransfer per 12-month rolling time period. The highest amount of material transferred during the compliance period was 12,700,018 gallons for the 12-month time period ending December 2019. The total amount transferred at the time of inspection was 10,272,782 gallons for the 12-month rolling time period ending August 2020.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. IN COMPLIANCE. The vapor balance system for FG-TruckTransfer is installed, maintained, and operated as required.
2. IN COMPLIANCE. The facility implements and maintains a malfunction abatement plan (MAP) for the loading rack and vapor balance system, as approved by AQD. The MAP has not required a revision since originally submitted. A copy of the MAP can be found in the facility file.
3. IN COMPLIANCE. The MAP was submitted to AQD within 90 days of issuance of PTI No. 6-19.

IV. DESIGN/EQUIPMENT PARAMETERS

1. IN COMPLIANCE. The facility does not load or unload any vessel unless the vapor balance system is installed and operated as described in this condition. The facility maintains these written procedures in an accessible location where transfers are performed.

VI. MONITORING/RECORDKEEPING

1. IN COMPLIANCE. The facility maintains records of the quantity of material, in gallons, transferred through FG-TruckTransfer on a monthly basis.
2. IN COMPLIANCE. All records are maintained in an acceptable format and made available by the 15th day of each calendar month.
3. IN COMPLIANCE. The facility maintains records of the total amount of each specific product transferred through FG-TruckTransfer on a monthly and 12-month rolling basis. A spot check of these records was performed on site during the inspection.
4. IN COMPLIANCE. The facility maintains records of all monitoring data and actions taken required by the MAP. These records were reviewed on site during the inspection.

FG-TS3NONRCRATANKS: Eight 8,000-gallon oil/oily water storage tanks in Tank System 3. All material transfers are conducted using vapor balance. These tanks are not subject to RCRA. These include the following emission units: EU-TS3TANK61, EU-TS3TANK62, EU-TS3TANK63, EU-TS3TANK64, EU-TS3TANK65, EU-TS3TANK66, EU-TS3TANK67, EU-TS3TANK68

NOT EVALUATED. This flexible group is currently not been in operation during this compliance evaluation period.

FG-TS3RCRATANKS: Four waste fuel storage and blending tanks (two 13,277 gallon and two 10,201 gallon) in Tank System 3. All material transfers are conducted using vapor balance. These tanks may also store alkaline wastes. These tanks are subject to RCRA. These include the following emission units: EU-TS3TANK69, EU-TS3TANK70, EU-TS3TANK71, EU-TS3TANK72

NOT EVALUATED. This flexible group has not been in operation during this compliance evaluation period.

FG-2019: All storage and blending tanks and all transfer pads as of PTI No. 6-19. These include the following emission units: EU-TS1Tank16, EU-TS1Tank17, EU-TS1Tank18, EU-TS1Tank19, EU-TS1Tank20, EU-TS1Tank21, EU-TS1Tank22, EU-TS1Tank23, EU-TS1Tank24, EU-TS1Tank25, EU-TS1Tank26, EU-TS1Tank27, EU-TS1Tank28, EU-TS1Tank29, EU-TS1Tank30, EU-TS2Tank35, EU-TS2Tank36, EU-TS2Tank37, EU-TS2Tank38, EU-TS2Tank39, EU-TS2Tank40, EU-TS3TANK61, EU-TS3TANK62, EU-TS3TANK63, EU-TS3TANK64, EU-TS3TANK65, EU-TS3TANK66, EU-TS3TANK67, EU-TS3TANK68, EU-TS3TANK69, EU-TS3TANK70, EU-TS3TANK71, EU-TS3TANK72, EU-TS1TransferPad, EU-TS2TransferPad

I. EMISSION LIMIT

1. IN COMPLIANCE. The facility did not exceed the permit limit of 6.9 tons of volatile organic compounds (VOCs) per 12-month rolling time period. The highest 12-month rolling total VOC emissions during the compliance period was 1.79 tons for the 12-month rolling time period ending in April 2020. The 12-month rolling total VOC emissions at the time of inspection was 1.75 tons for the 12-month rolling time period ending August 2020.

II. MATERIAL LIMIT

1. IN COMPLIANCE. The facility did not exceed the permit limit of 21,702,000 gallons of material received by tanker truck per 12-month rolling time period. The highest 12-month rolling total material received was 6,350,009 gallons in the 12-month time period ending December 2019. The 12-month total material received at the time of inspection was 5,136,391 gallons for the 12-month time period ending August 2020.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. IN COMPLIANCE. The facility maintains and implements an approved malfunction abatement plan (MAP) for all vapor balance equipment in FG-2019, in accordance with this condition. The facility has not been required to revise the MAP since it was submitted to AQD.
2. IN COMPLIANCE. The facility implements and maintains an approved Leak Detection and Repair (LDAR) program for FG-2019, which contains the requirements listed in this condition.

VI. MONITORING/RECORDKEEPING

1. IN COMPLIANCE. All records and calculations are maintained in an acceptable manner and made available to AQD by the 15th day of the calendar month.
- 2a and b. IN COMPLIANCE. The facility calculates VOC emissions on a monthly and 12-month rolling time period basis. VOC emission calculations are based on throughput activity, transfer activity, and tank cleanout activity, as required.
3. IN COMPLIANCE. The facility maintains records of the amount of material received by tanker truck on a monthly and 12-month rolling time period basis.
4. IN COMPLIANCE. The facility maintains all monitoring data and actions taken under the MAP. These records were reviewed during the onsite inspection.
5. IN COMPLIANCE. The facility maintains records of all monitoring and corrective actions as specified in the LDAR program. These records were reviewed by AQD during the onsite inspection.
6. NOT EVALUATED. Based on previous inspections, the facility maintains records of all tank cleanouts, including identity of the tank, date(s) cleanout occurred, and composition/vapor pressure of the material in the

tank at time of cleanout. however, no tank cleanouts have been performed during this compliance period, so this condition was not evaluated during this inspection.

VII. REPORTING

1. IN COMPLIANCE. The facility submitted a MAP to the AQD District Supervisor on September 4, 2019, within 90 days of issuance of PTI No. 6-19. The MAP was reviewed and approved by AQD staff. A copy of the plan can be found in the facility file.

2. IN COMPLIANCE. The facility submitted an LDAR program to the AQD District Supervisor on September 4, 2019, within 90 days of issuance of PTI No. 6-19. The LDAR program was reviewed and approved by AQD staff. A copy of the plan can be found in the facility file.

FGFACILITY: The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

I. EMISSION LIMITS

1. IN COMPLIANCE. No individual HAP exceeded the permit limit of 8.9 tons per 12-month rolling time period. The highest 12-month rolling total for any individual HAP during the compliance period was 0.64 tons of toluene in the 12-month rolling time period ending April 2020. The highest 12-month rolling total for any individual HAP at the time of inspection was 0.63 tons of toluene in the 12-month rolling time period ending August 2020.

2. IN COMPLIANCE. Aggregate HAP emissions did not exceed the permit limit of 22.4 tons per 12-month rolling time period. The highest 12-month rolling total HAP emissions during the compliance period was 1.6 tons in the 12-month rolling time period ending April 2020. The 12-month rolling total HAP emissions at the time of inspection was 1.57 tons in the 12-month rolling time period ending August 2020.

II. MATERIAL LIMITS

1. IN COMPLIANCE. The facility did not process more than 10 megagrams of benzene per 12-month rolling time period in FGFACILITY. The highest 12-month rolling total amount of benzene processed during the compliance period was 0.83 megagrams in the 12-month rolling time period ending December 2019. The 12-month rolling total benzene processed at the time of inspection was 0.30 megagrams in the 12-month time period ending August 2020.

VI. MONITORING/RECORDKEEPING

1. IN COMPLIANCE. All records and calculations are maintained in an acceptable manner and made available to AQD by the 15th day of the calendar month.

2a and b. IN COMPLIANCE. Individual and aggregate HAP emissions calculations maintained on a monthly and 12-month rolling time period basis.

2c. IN COMPLIANCE. HAP Emission calculations are based on actual throughput, composition/sample data of the waste processed, storage tank emission calculations, transfer line clearing activity, and tank cleanout activity.

3. IN COMPLIANCE. The facility monitors the total benzene processed in FGFACILITY on a monthly and 12-month rolling time period basis, in accordance with the Benzene Waste Monitoring Plan.

4. IN COMPLIANCE. The facility monitors emissions and operating and maintenance information in accordance with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 61, Subparts A and FF. The records were reviewed by AQD staff during the onsite inspection.

5. IN COMPLIANCE. The facility maintains records of the total benzene processed in FGFACILITY on a monthly and 12-month rolling time period basis.

6. IN COMPLIANCE. The facility maintains records identifying each waste stream subject for 40 CFR Part 61, Subpart FF. All benzene waste processed in FGFACILITY is controlled by the vapor balance system.

7. IN COMPLIANCE. The facility maintains records of emission information and operating and maintenance information in accordance with the requirements of 40 CFR Part 61, Subparts A and FF. This information was reviewed by AQD staff during the onsite inspection.

VII. REPORTING

1. NOT APPLICABLE. The total annual benzene throughput did not exceed 1 megagram for any 12-month rolling time period during the compliance period, so annual reporting is not required.
2. IN COMPLIANCE. The facility submitted a Benzene Waste Monitoring Plan to the AQD District Supervisor on September 4, 2019, within 90 days of issuance of PTI No. 6-19. The Benzene Waste Monitoring Plan was reviewed and approved by AQD staff. A copy of the plan can be found in the facility file.

IX. OTHER REQUIREMENTS

1. IN COMPLIANCE. Based on a review of processing and emissions records, the facility appears to be in compliance with the applicable provisions of 40 CFR Part 61, Subparts A and FF.

FINAL COMPLIANCE DETERMINATION:

At the time of inspection, Clean Earth was determined to be in substantial compliance with the conditions of PTI No. 6-19 and the applicable requirements of 40 CFR 61, Subpart FF and 40 CFR 60, Subpart Kb.

NAME Jonathan Lamb

DATE 7/13/2021

SUPERVISOR Jeff Korniski