N0731
March

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

N073136681

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| **FACILITY:** Nortru, LLC | | **SRN / ID:** N0731 |
| **LOCATION:** 421 LYCASTE, DETROIT | | **DISTRICT:** Detroit |
| **CITY:** DETROIT | | **COUNTY:** WAYNE |
| **CONTACT:** Ed Burk , Manager, Environmental Heath & Safety | | **ACTIVITY DATE:** 09/19/2016 |
| **STAFF:** Jonathan Lamb | **COMPLIANCE STATUS:** Non Compliance | **SOURCE CLASS:** MAJOR |
| **SUBJECT:** Scheduled Inspection, FY 2016 | | |
| **RESOLVED COMPLAINTS:** | | |

DATES OF INSPECTION: 4/26/2016 and 9/19/2016
INSPECTED BY: Jonathan Lamb, AQD-Detroit Office
PERSONNEL PRESENT: Ed Burke, EH&S Manager
SAFETY EQUIPMENT REQUIRED: hard hat, steel-toed boots, safety glasses, safety vest

## FACILITY BACKGROUND:

Nortru, Inc. is a waste processing and fuel blending facility located at 421 and 515 Lycaste St. in Detroit, Michigan. The facility is RCRA Part 111 licensed to transfer, store, and process hazardous and non-hazardous wastes, including solvents, waste fuels, paints, and household hazardous wastes. The company was purchased by Stericycle in May 2014.

## COMPLAINT/COMPLIANCE HISTORY:

The facility currently has no outstanding violations, but has received Violation Notices in the past five years for not submitting Title V certification reports and MAERS in a timely manner.

The facility is required to perform ambient monitoring per its Part 111 license. The ambient monitoring results have shown recurring issues with spikes of various compounds, including xylene, toluene, and methylene chloride. AQD and OWRP met with Nortru most recently on January 22, 2016, to discuss these monitoring concerns.

## OUTSTANDING CONSENT ORDERS:

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

## INSPECTION NOTES:

An initial inspection was performed on April 26, 2016, which included a facility walk-through and monitoring of the processing equipment for leaks using an infrared camera, which was performed by Jorge Acevedo and Kathy Brewer, DEQ-AQD, and Stafford Dusenbury, DEQ-OOGM. AQD also requested emission and processing records at this time, which were received by AQD on May 16, 2016. A follow-up inspection was performed on September 19, 2016, to obtain additional information regarding facility operations and clarification of records received on May 16, 2016.

## PROCESS DESCRIPTION AND EQUIPMENT:

Nortru primarily performs fuel blending of solvent-based wastes, including paint solvents and solvent flush waste. The blended solvents are then sold to be used as fuel for cement kilns. The facility also performs waste consolidation. Wastes are received from tankers or from drums/totes.

Drums are processed in the Container Management Building, which includes a drum segregation/storage area, a pump room for emptying drums (EU-PUMPROOM), and a lab pack area (EU-LABPACKAREA). The lab pack area is used consolidate compatible small-quantity wastes, often from labs or retail, into larger quantities to ship off site for disposal. Contents of the drums unloaded in the pump room are stored in either of two 6,000-gallon waste storage tanks (EU-WASTETANK1 and EU-WASTETANK2). All of these operations are permitted under the flexible group FG-CONTNROFFLOAD and emissions are controlled by a permanganate scrubber.

The offloading of wastes from tankers is performed in the TS1 and TS2 Transfer Pads, permitted as the flexible group FG-TruckTransfer. Offloading of trucks is performed using vapor balance to control emissions.

Fuel blending (FG-BlendingTanks) is performed in the TS1 and TS2 Tank Farms. Wastes are pumped into the tank farms either directly from tankers or from EU-WASTETANK1 or EU-WASTETANK2. 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). 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 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 R.282(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 R.282(b)(i) exemption.

## APPLICABLE RULES/ PERMIT CONDITIONS:

Nortru was considered a major source for hazardous air pollutants (HAPs), under Section 112 of the Clean Air Act, at the time the facility was required to submit the required notification per 40 CFR 63.697 (Subpart DD – Off-Site Waste and Recovery Operations NESHAP) because the facility failed to obtain an opt-out permit prior to the notification deadline of October 19, 1999. Therefore, due to the USEPA's "once in, always in" policy, the facility remains a Title V source and is also subject to the following federal standards:

- 40 CFR Part 63, Subpart DD – National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations;
- 40 CFR Part 61, Subpart FF – National Emission Standards for Benzene Waste Operations;
- 40 CFR Part 63, Subpart EEEE – National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline);
- 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.

Nortu was issued ROP No. MI-ROP-N0731-2009 on August 19, 2009, which also incorporated the conditions of Consent Agreement and Final Order (CAFO) Docket No. CAA-05-2002-0020. However, after the issuance of ROP No. MI-ROP-N0731-2009, the CAFO was terminated and Nortru has since been issued two PTIs (PTI Nos. 84-04B and 84-04C) which have superseded the conditions of MI-ROP-N0731-2009. These conditions will be incorporated into the ROP upon renewal; Nortru's ROP renewal application was received by AQD on December 13, 2013. The active permits are listed below:

- ROP No. MI-ROP-N0731-2009;
- PTI No. 84-04C, issued February 11, 2011;
- PTI No. 84-04B, issued April 8, 2009;
- PTI No. 184-13, issued May 6, 2014.

The following permit conditions were evaluated in determining compliance status for this inspection:

ROP No. MI-ROP-N0731-2009, Special Conditions:

EU-MVRSCONDTANK and FG-RTO&Scrubber: The RTO, acid gas scrubber, and master vapor recovery system (MVRS) have been discontinued and EU-MVRSCONDTANK and FG-RTO&Scrubber are no longer in use. Therefore, these conditions were not evaluated during the inspection.

FG-TruckTransfer: The conditions of ROP No. MI-ROP-N0731-2009, FG-TruckTransfer have been superseded by PTI No. 84-04B, FG-TruckTransfer.

FG-TS1BlendingTanks and FG-TS2BlendingTanks: The conditions of ROP No. MI-ROP-N0731-2009, FG-TS1TransferTanks and FG-TS2TransferTanks have been superseded by PTI No. 84-04B, FG-BlendingTanks.

FG-ContnrOffload: The conditions for ROP No. MI-ROP-N0731-2009, FG-ContnrOffload have been superseded by PTI No. 84-04C, FG-CONTNROFFLOAD.

For ROP No. MI-ROP-N0731-2009, the facility is not in compliance with the following conditions for FG-TruckTransfer, FG-TS1BlendingTanks, FG-TS2BlendingTanks, and FG-ContnrOffload:

VII. Reporting
1, 2, and 3. NOT IN COMPLIANCE. Responsible Official submitted annual and semi-annual ROP certifications which failed to promptly report deviations that should have been reported based on reasonable inquiry.

PTI No. 84-04C, Special Conditions

FG-CONTNROFFLOAD: All equipment and operations associated with waste offloading from containers, up to the point that materials are transferred to FG-BLENDINGTANKS or FG-TRUCKTRANSFER. This includes the following emission units: EU-LABPACKAREA, EU-PUMPROOM, EU-WASTETANK1, and EU-WASTETANK2.

II. MATERIAL LIMITS

1. NOT DETERMINED. Facility did not provide the proper records of number of containers processed in FG_CONTNROFFLOAD. This condition will be reevaluated once the revised records are submitted to AQD.
2. NOT DETERMINED. Facility did not provide the proper calculations of average benzene content of offloaded material in FG-CONTNROFFLOAD to demonstrate compliance with this condition. This condition will be reevaluated when the revised calculations are submitted to AQD.
3. NOT DETERMINED. Facility did not provide the proper calculations of average formaldehyde content of offloaded material in FG-CONTNROFFLOAD to demonstrate compliance with this condition. This condition will be reevaluated when the revised calculations are submitted to AQD.
4 NOT DETERMINED. Facility did not provide the proper calculations of average chloroform content of offloaded material in FG-CONTNROFFLOAD to demonstrate compliance with this condition. This condition will be reevaluated when the revised calculations are submitted to AQD.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 61, Subparts A and FF. This condition will be reevaluated once the records are submitted to AQD.
2. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 63, Subparts A and DD. This condition will be reevaluated once the records are submitted to AQD.
3. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 63, Subparts A and EEEE. This condition will be reevaluated once the records are submitted to AQD.
4. IN COMPLIANCE. Facility has implemented and maintained a malfunction abatement plan (MAP) for FG-CONTNROFFLOAD.
5. IN COMPLIANCE. Facility has implemented and maintained a MAP for EU-PUMPROOM, including the conservation vents on EU-WASTETANK1 and EU-WASTETANK2, operation of the permanganate scrubber, spill minimization, and maintaining negative pressure in EU-PUMPROOM.
7. IN COMPLIANCE. Facility maintains negative pressure in EU-PUMPROOM during normal operation. Negative pressure was verified using smoke tests on February 9, 2016, and April 21, 2016, in accordance with the procedures in Appendix A. Based on my visual observations, the pump room appeared to be under negative pressure during the inspection.

IV. DESIGN/EQUIPMENT PARAMETERS

1. IN COMPLIANCE. Negative pressure is maintained in EU-PUMPROOM during offloading.
2. NOT IN COMPLIANCE. Facility monitors oxidation-reduction potential and pH to monitor scrubber operation, but does not monitor permanganate concentration, so facility was unable to demonstrate that the permanganate concentration of the scrubber was maintained at a minimum of 3 percent by weight.
3. IN COMPLIANCE. Main header system and permanganate scrubber are installed, maintained, and operated in a satisfactory manner during container offloading in EU-PUMPROOM and material transfer to EU-WASTETANK1 or EU-WASTETANK2
4. IN COMPLIANCE. EU-WASTETANK1 and EU-WASTETANK2 are equipped with conservation vents.

V. TESTING/SAMPLING

1. IN COMPLIANCE. Verification of negative static pressure in EU-PUMPROOM was performed on February 9, 2016, and April 21, 2016, in accordance with the procedures in Appendix A.

VI. MONITORING/RECORDKEEPING

1. NOT IN COMPLIANCE. Facility failed to provide accurate records of number of containers processed in FG-

CONTNROFFLOAD on a monthly and 12-month rolling time period basis.
2. NOT IN COMPLIANCE. Facility failed to provide the average benzene, formaldehyde, and chloroform concentration of all offloaded waste on a monthly basis, based on a composite off all materials offloaded during the calendar month to demonstrate compliance with the limits set in FG_CONTNROFFLOAD, SC I.1 through 3.
3. NOT IN COMPLIANCE. Facility failed to provide the average benzene, formaldehyde, and chloroform concentration of all offloaded waste on a monthly basis, based on a composite off all materials offloaded during the calendar month to demonstrate compliance with the limits set in FG_CONTNROFFLOAD, SC I.1 through 3.
4. NOT IN COMPLIANCE. Facility failed to monitor the permanganate concentration in the scrubber twice per day.
5. NOT IN COMPLIANCE. Facility failed to maintain records of permanganate concentration in the scrubber.
6. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the emission monitoring and operating and maintenance provisions of 40 CFR Part 63, Subparts A and EEEE. This condition will be reevaluated once the records are submitted to AQD.

VIII. STACK/VENT RESTRICTIONS

1. IN COMPLIANCE. Scrubber stack (SV-CONTNRSCRUB) appears to meet the permit requirements of maximum diameter of 20 inches and minimum height of 33.2 feet above ground.
2 and 3. IN COMPLIANCE. Diffuser stacks 1 and 2 (SV-DIFFUSER1 and SV-DIFFUSER2) appear to meet the permit requirements of maximum diameter of 14 inches and minimum height of 16 feet above ground.
4. IN COMPLIANCE. SV-GROUNDSTACK appears to meet the permit requirements of maximum diameter of 32 inches and minimum height of 41 feet above ground.

PTI No. 84-04B, Special Conditions:

FG-ContnrOffload: The conditions of PTI No. 84-04B, FG-ContnrOffload have been superseded by the conditions of PTI No. 84-04C, FG-CONTNROFFLOAD.

FG-BlendingTanks: Waste fuel storage tanks. This includes EU-TS1Tank16 through EU-TS1Tank30 and EU-TS2Tank35 through EU-TS2Tank 40.

II. MATERIAL LIMITS

1. NOT IN COMPLIANCE. Facility states that all wastes received are waste blends and no single component in any tank exceeds 40% by weight; however, the facility was not able to provide the proper records demonstrating compliance with this condition prior to tank cleanouts.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 60, Subparts A and Kb. This condition will be reevaluated once the records are submitted to AQD.
2. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 63, Subparts A and DD. This condition will be reevaluated once the records are submitted to AQD.

IV. DESIGN/EQUIPMENT PARAMETERS

1. IN COMPLIANCE. Each tank in FG-BlendingTanks is equipped with a conservation vents and vapor balance system, which are properly maintained and operated.
2. IN COMPLIANCE. Each tank in FG-BlendingTanks is equipped with alarms and pressure/vacuum relief valves for each tank and pumps with automatic cut-off systems. Alarms are set to go off if the contents of any tank reaches 28,000 gallons.

VI. MONITORING/RECORDKEEPIING

1. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the inspection and monitoring provisions of 40 CFR Part 60, Subparts A and Kb. This condition will be reevaluated once the records are submitted to AQD.
2. IN COMPLIANCE. Vapor pressure of FG-BlendingTanks is monitored on a monthly basis. Since the vapor balance system equalizes pressure between all tanks in FG-BlendingTanks, the vapor pressure is approximately the same in all tanks in FG-BlendingTanks.
3. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40

CFR Part 60, Subparts A and Kb. This condition will be reevaluated once the records are submitted to AQD.
4. IN COMPLIANCE. The dimensions and analysis of capacity of each tank in FG-BlendingTanks is maintained.
5. IN COMPLIANCE. The vapor pressure of FG-BlendingTanks is recorded on a monthly basis. Since the vapor balance system equalizes pressure between all tanks in FG-BlendingTanks, the vapor pressure is approximately the same in all tanks in FG-BlendingTanks.
6. NOT IN COMPLIANCE. Facility maintains records of the date and identification of each tank cleaned out, but failed to maintain and provide records of the composition of the material last stored in the tank prior to cleanout to demonstrate compliance with FG-BlendingTanks, SC II.1.

IX. OTHER REQUIREMENTS

1. IN COMPLIANCE. Provisions of PTI No. 84-04B for FG-BlendingTanks became effective upon termination of CAFO Docket No. CAA-05-2002-0020 on June 24, 2009.

FG-TruckTransfer: Tanker truck load/unloading pads. This includes EU-TS1TransferPad and EU-TS2TransferPad.

II. MATERIAL LIMITS

1. IN COMPLIANCE. Total number of truckloads from January 2015 through April 2016 was 1,099 truckloads, well below the permit limit of 7,300 truckloads of material through FG-TruckTransfer per 12-month rolling time period.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. IN COMPLIANCE. A vapor balance system is installed, maintained, and operated for all organic liquid transfers involving FG-TruckTransfer.
2. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 63, Subparts A and EEEE. This condition will be reevaluated once the records are submitted to AQD.
3. NOT IN COMPLIANCE. Facility has not submitted a malfunction abatement plan (MAP) for the loading rack and vapor balance system to AQD for approval, and was unable to provide a written MAP to AQD at the time of inspection.

IV. DESIGN/EQUIPMENT PARAMETERS

1. IN COMPLIANCE. Vapor balance system is installed and properly maintained and operated during vessel unloading.

VI. MONITORING/RECORDKEEPING

1. NOT IN COMPLIANCE. Facility maintains records of each truck transfer for FG-TruckTransfer; however, total truck transfers were not calculated on a monthly basis.
2. NOT IN COMPLIANCE. Facility was unable to provide required records when requested at the time of inspection.
3. NOT IN COMPLIANCE. Facility failed to provide records of FG-TruckTransfer throughput of each specific product for each calendar month and 12-month rolling time period.

IX. OTHER REQUIREMENTS

1. IN COMPLIANCE. Provisions of PTI No. 84-04B for FG-TruckTransfer became effective upon termination of CAFO Docket No. CAA-05-2002-0020 on June 24, 2009.

FGFACILITY: All process equipment source-wide, including equipment covered by other permits, grandfathered equipment, and exempt equipment. Associated Emission Unit IDs include EU-TS1Tank16 through EU-TS1Tank30, EU-TS2Tank35 through EU-TS2Tank40, EU-TS1TransferPad, EU-TS2TransferPad, EU-PUMPROOM, EU-LABPACKAREA, EU-WASTETANK1, and EU-WASTETANK2.

II. MATERIAL LIMITS

1. NOT DETERMINED. Facility failed to provide records demonstrating that the total benzene from facility waste processed in FGFACILITY does not exceed the permit limit of 10 megagrams of benzene per 12-month rolling

time period. This condition will be reevaluated once the records are submitted to AQD.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 61, Subparts A and FF. This condition will be reevaluated once the records are submitted to AQD.
2. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 63, Subparts A and DD. This condition will be reevaluated once the records are submitted to AQD.

VI. MONITORING/RECORDKEEPING

1. NOT IN COMPLIANCE. Facility failed to provide records demonstrating the total benzene quantity from waste processed in FGFACILITY was monitored on a monthly and 12-month rolling time period basis.
2. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 61, Subparts A and FF. This condition will be reevaluated once the records are submitted to AQD.
3. NOT IN COMPLIANCE. Facility failed to provide records demonstrating the total benzene quantity from waste processed in FGFACILITY was monitored on a monthly and 120month rolling time period basis.
4. NOT DETERMINED. Facility has not provided the records demonstrating compliance with the provisions of 40 CFR Part 61, Subparts A and FF. This condition will be reevaluated once the records are submitted to AQD.

VII. REPORTING

1. NOT DETERMINED. To date, AQD has not received any annual reports from Nortru required per 40 CFR Part 61, Subpart FF if the total annual benzene throughput of facility waste exceeds 1 megagram per 12-month rolling time period. However, the facility failed to provide records of total benzene processed in FGFACILITY, so at this time it cannot be determined if the facility processed a total annual benzene quantity in waste exceeding 1 megagram per 12-month rolling time period to trigger the reporting requirement. This condition will be reevaluated once the proper records are submitted to AQD.

IX. OTHER REQUIREMENTS

1. IN COMPLIANCE. Provisions of PTI No. 84-04B for FGFACILITY became effective upon termination of CAFO Docket No. CAA-05-2002-0020 on June 24, 2009.
2. IN COMPLIANCE. On June 29, 2009, Nortru forwarded to AQD a copy of USEPA's letter terminating CAFO Docket No. CAA-05-2002-0020 on June 24, 2009.

PTI No. 184-13, Special Conditions:

The emission units covered by PTI 184-13 are installed, but have yet to be operated since issuance of the permit. Therefore, the conditions of PTI No. 184-13 were not evaluated during this inspection.

**FINAL COMPLIANCE DETERMINATION:**

At the time of inspection, Nortru was found to be in noncompliance with the conditions of ROP No. MI-ROP-N0731-2009, PTI No. 84-04C, and PTI No. 84-04B. A Violation Notice will be issued to the facility for the conditions found to be in noncompliance. Permit conditions for which compliance status was not determined at this time will be reevaluated once the records needed to demonstrate compliance are received by AQD.

NAME _____ DATE 9-23-16 SUPERVISOR JK