

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

M400850242

FACILITY: US ECOLOGY MICHIGAN, Inc. (Detroit North)		SRN / ID: M4008
LOCATION: 6520 GEORGIA ST, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Terry Howes, Environmental Compliance Manager		ACTIVITY DATE: 09/04/2019
STAFF: Jonathan Lamb	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Targeted inspection, FY 2019		
RESOLVED COMPLAINTS:		

INSPECTED BY: Jonathan Lamb, EGLE-AQD
PERSONNEL PRESENT: Terry Howes, Environmental Compliance Manager
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FACILITY BACKGROUND:

US Ecology - Detroit North is a hazardous and non-hazardous waste storage and treatment facility. The facility was previously owned by PVS Chemicals and operated as Dynecol until being purchased by US Ecology, Inc. in June 2012. US Ecology, Inc. is a waste management company based in Boise, Idaho which has facilities throughout North America. The company expanded into Michigan by purchasing Dynecol in Detroit in 2012 and later acquiring three EQ-owned sites in Detroit, Belleville, and Romulus in 2014.

The Detroit North facility performs treatment of liquid industrial waste through wastewater treatment/filtration and solidification. The treatment plant operates two shifts, 4:00 AM through 12:00 AM, Monday through Friday, and occasional Saturdays. There are currently 11 employees on site.

COMPLAINT/COMPLIANCE HISTORY:

The facility does not have a history of complaints. There have been two odor complaints lodged against the facility since the last inspection performed on August 28, 2015, neither of which were confirmed.

The facility was determined to be in noncompliance during the most recent inspection performed on August 28, 2015, for failing to maintain negative pressure in the solidification building (Building 4), resulting in the issuance of a Violation Notice on October 2, 2015. In its response, received by AQD on October 28, 2015, the facility stated it had taken actions to correct the issue from recurring. This violation is considered resolved.

There are currently no outstanding violations or Consent Orders.

ADDITIONAL REGULATORY INFORMATION:

US Ecology – Detroit North submitted its Part 111 – Hazardous Waste Management Facility License renewal in March 2013; the renewal application is currently under review by EGLE – Materials Management Division (MMD). In its renewal, the facility has requested an expansion of operations. Currently, Building 4 (waste solidification) is licensed under Part 115 – Solid Waste Management through EGLE – MMD and can only process non-hazardous

waste. The company is seeking approval to have Building 4 licensed under Part 111 to allow for the processing of hazardous wastes. This would require the facility to modify the pits in Building 4 plus additional monitoring to meet 40 CFR Part 264, Subpart J standards for hazardous waste treatment, storage, and disposal facilities. In its renewal, US Ecology also requested to convert some existing tanks to hazardous waste storage. These tanks were originally permitted for hazardous waste storage and already meet the requirements of Subpart J. The renewal application also requests an increase in allowable processing rates and approval for the construction of two additional buildings (Building 5A and 5B) to be used for the bulking, consolidation, and storage of hazardous waste.

Several public hearings have been held for the Part 111 renewal, most recently on March 28, 2019. The facility is considered to be a controversial source and there has been strong public and legislative opposition to the expansion request.

PROCESS/EQUIPMENT DESCRIPTION:

US Ecology – Detroit North uses two separate processes to treat waste: wastewater treatment (Building 2) and waste stabilization/solidification (Building 4).

Treatment Plant (Building 2):

The Treatment Plant is currently permitted under Part 111, allowing for the treatment of hazardous waste. US Ecology – Detroit North accepts both non-hazardous and hazardous wastes, including listed and characteristic wastes, but only treats inorganic acids and bases on-site. The most common wastes processed in the treatment plant come from various steel industries (including platers, metal finishers, and picklers), auto manufacturing, utilities, and chemical processing. The wastes generally have a low volatile organic compound (VOC) content.

Wastes are received either in bulk from tankers or in 55-gallon drums and go through a fingerprint analysis before being accepted for treatment. Non-bulk wastes that can be treated on-site are pumped from drums to tankers in the “bulking area” of the Container Management Facility (CMF), which is also used for drum storage. The bulking area consists of a drum unloading hood, vapor recovery exhaust, and drum wash station. Emissions from the CMF are vented first through a regenerative carbon adsorber to remove VOCs, then through caustic Scrubber-2 (Duell Model FW 303; 5000 CFM; 30 gal/min; SP = 5) to remove hydrochloric acid (HCl), before being exhausted through a 70' stack. The carbon adsorber is equipped with a flame ionization detector (FID) to monitor breakthrough in the carbon bed, and a control system to automatically switch the process emissions to a standby carbon bed prior to breakthrough. A small natural gas-fired boiler (Iron Fireman Whirlpower Space Conditioner; Model 2803; 70 horsepower output) is used to steam-strip the carbon beds after saturation for reuse. Liquid waste collected from the carbon bed during steam stripping is collected and sent off site either for disposal or to be used in fuel blending. The boiler is exempt per R.282(2)(b)(i) because it has a heat input capacity below 50 MMBtu/hr.

[Calculation using AP-42 conversion factor: $(70 \text{ BPH})(50 \times 10^3 \text{ Btu/hr}) = 3.5 \text{ MMBtu/hr input capacity.}$]

Bulked wastes are transferred from the tankers to either one of four 20,000-gallon primary treatment tanks (Tanks 1 through 4), or to bulk storage tanks for later processing. The empty tankers and drums are then sent to the Wash-Out Bay, where they are rinsed until they are

considered empty per RCRA standards. Wastewater from the Wash-Out Bay is sent through the treatment process. The emptied drums are crushed and disposed of as non-hazardous waste.

While in primary treatment, the waste has a pH around 5-6 and undergoes neutralization, absorption, and chemical red-ox. The waste is then moved to one of four 20,000-gallon secondary treatment tanks (Tanks 18 through 21), where the pH is raised to 9-10, causing the solids to coagulate. During secondary treatment, the waste goes through precipitation, flocculation, detoxification, sedimentation, and clarification. The primary and secondary treatment tanks are cleaned after each batch of waste is treated.

There are also several tanks used to store wastes prior to processing or materials used in the treatment process:

- Tank 7: 10,000-gallon hazardous waste storage tank.
- Tanks 9 and 15: 27,600-gallon alkaline reagent storage tanks.
- Tank 10: 12,000-gallon hazardous waste storage tank.
- Tanks 12, 13, 16, and 17: 25,800-gallon non-hazardous waste storage tanks.
- Tank 14: 14,000-gallon lime slurry storage tank.
- Tank 24: 6,000-gallon sodium hydroxide storage tank (used in scrubbers).

Emissions from the primary and secondary treatment tanks, alkaline storage tanks, non-hazardous storage tanks, and hazardous waste storage tanks are vented through caustic Scrubber-1 (Heil Model 734-XL; 5000 CFM) to remove HCl. Scrubber-1 operates continuously and exhausts through a 70' stack. Two dry lime silos (Silos 1 and 2) are outside the treatment building and are controlled by 1000-cfm fabric filter dust collectors.

After undergoing secondary treatment, the waste is sent through one of two filter presses, which separate the solids from the liquid waste. The liquid waste is pumped from the filter press to one of two 30,000-gallon effluent "Pre-Tertiary Treatment" tanks (Tanks 34 and 35), where it is held until it can undergo tertiary treatment in the Dissolved Air Floatation (DAF) unit. The DAF unit was installed in 2004 to allow the liquid waste to meet the more stringent municipal wastewater discharge requirements. The DAF unit uses flocculants (alum, sodium hydroxide) to further remove dissolved metals from the wastewater. The treated water is then pumped to one of two 30,000-gallon tanks (Tanks 37 and 38), where the solids and liquids separate. The solids float to the top and are scraped off the surface and sent to a solids holding tank before being sent back through the filter press again. The liquid waste is then sent to one of two 14,000-gallon post-treatment effluent holding tanks (Tanks 30 and 31), where it is tested and, if meeting the regulatory limits, is discharged to the City of Detroit sanitary sewer system in accordance with US Ecology's Wastewater Discharge Permit. Liquid waste not meeting discharge limits is sent back through the entire process, starting at primary treatment. The DAF Unit has been determined by AQD to be exempt from permitting requirements under Rule 285(2)(m).

After the wastewater is sent through the filter press, the solid waste (sludge) is manually scraped off filter plates into a roll-off box, where it is tested using the Toxicity Characteristic Leaching Procedure (TCLP) and shipped off for land disposal. Waste that passes the TCLP test is disposed of as non-hazardous solid waste. If the waste does not pass TCLP and the waste is determined to be categorized as a characteristic hazardous waste, the waste is put through the process again, starting with primary treatment, until the waste no longer meets the definition of characteristic hazardous waste and can be disposed of as non-hazardous waste. Listed hazardous wastes, however, are always disposed of as hazardous waste, so

no additional treatment is performed. About 90% of the treated solid waste is disposed of as non-hazardous waste at Carleton Farms Landfill; the remaining 10% is considered listed hazardous waste and is sent to US Ecology's hazardous waste landfill in Belleville. The facility disposes of three or four roll-off boxes per day, on average. Non-bulk wastes that cannot be treated on-site (including organics) are stored in drums in segregated areas in accordance with the facility's Part 111 license and then shipped out at a later date to another facility for processing. The bulking of wastes for off-site treatment is performed infrequently, only a few times per year.

There is one 12,000-gallon and two 1,000-gallon diesel tanks used to fuel vehicles on site; these tanks are exempt per Rule 284(2)(g)(ii).

Waste Stabilization (Building 4/EUSTABILIZE):

Building 4 is currently permitted under Part 115 – Solid Waste Management through EGLE – Materials Management Division, but the company has applied for licensing under Part 111 – Hazardous Waste Management through EGLE – Materials Management Division to allow for the processing of hazardous wastes in Building 4.

Building 4 is permitted through AQD to perform waste solidification but for the past few years the building has primarily been used as a waste diversion center for the storage of household hazardous waste, as allowed in its Part 115 license; no processing of the household hazardous waste is performed. It has been used for waste solidification only when the Chem-Fix building at US Ecology - Detroit South has been down for extended time due to repairs or maintenance. Based on operating records, Building 4 was used for waste solidification March through July 2017, September 2017, and April and May 2019; no solidification was performed in 2018.

Building 4 contains three 30,000 gallon "pits" (30'x 29'x 12' deep) in which stabilization and solidification of non-hazardous liquid wastes is performed. Wastes include clean-out water from neutralization tanks, water slurries, oil and paint sludge, and industrial wastes. These wastes generally have a low VOC content. No oxidizers or flammables are processed due to risk of fire and explosion.

When the building is used for waste solidification, a normal production day begins with the load out of the stabilized waste from the previous day. The stabilized waste is loaded into trucks and hauled to Carleton Farms Landfill for disposal. Once a pit is cleared, untreated wastes are dumped into the pit either straight from the trucks or from drums while a solidification agent (a mix of fly ash and cement kiln dust) is mixed in via a screw conveyor/tube system. The fly ash/cement kiln dust mix is stored in a 100-ton silo outside of Building 4. After mixing with the solidification agent, the waste is then cured in the pit at least overnight or until it is ready for disposal.

The pits are enclosed by a plastic curtain to keep the dust contained within the pit area. Around the top edges of the pits are intake vents which collect the particulate emissions and send them to two 40,000 cfm baghouses. The building is maintained under negative pressure.

APPLICABLE RULES/PERMIT CONDITIONS:

Wayne County Permit Nos. C-10626 through C-10632, issued on January 8, 1997, covers

operations within the wastewater treatment process. This permit consolidated and amended conditions for 19 emission units within the wastewater treatment process which had previously been permitted and also added conditions for Primary Treatment Tanks 1 through 4, Hazardous Waste Storage Tanks 7 and 10, and Scrubber-1. This permit also set limits on hazardous air pollutant (HAP) emissions below major source thresholds, allowing the facility to opt out of Title V permitting requirements.

PTI No. 302-07A, issued on March 17, 2014, covers the waste stabilization process. This permit was a modification of PTI No. 302-07, allowing the facility to process hazardous waste in the waste stabilization process and changing the limits on hours of operation to limit material processing. However, at the time of inspection, the facility did not yet have approval to process hazardous waste in the stabilization process under Part 111.

In determining compliance for this inspection, process and emission records from September 2017 through August 2019 were reviewed. These records can be found on the orange facility file.

Permit Nos. C-10626 through C-10632, Special Conditions:

17. IN COMPLIANCE. Per Greg Morrow, EGLE-MMD, US Ecology - Detroit North is currently in compliance with its Part 111 permit. The status of the Wastewater Discharge Permit (issued by the Detroit Water and Sewage Department) is not known, but AQD does not have regulatory authority over this permit.
18. IN COMPLIANCE. The facility was in compliance with the hazardous waste treatment limits of 144,000 gallons per day and 44,928,000 gallons per year. The highest daily total amount of hazardous waste processed during the compliance period was 57,488 gallons on July 12, 2019. The highest 12-month rolling total hazardous waste treated during the compliance period was 7,157,248 gallons in the 12-month rolling time period ending September 2017; the facility had treated 5,220,184 gallons of hazardous waste during the 12-month rolling time period ending August 2019.
19. IN COMPLIANCE. Facility does not accept wastes not approved in its Hazardous Waste Facility Operating License (Part 111 License).
20. IN COMPLIANCE. Facility only processes wastes approved by its Hazardous Waste Facility Operating License in the primary treatment tanks (Part 111 License).
21. IN COMPLIANCE. Facility only stores and bulks wastes approved in its Hazardous Waste Facility Operating License (Part 111 License).
22. IN COMPLIANCE. Facility only stores wastes approved in its Hazardous Waste Facility Operating License (Part 111 License).
23. IN COMPLIANCE. Facility follows procedures for dealing with ignitable, reactive, and incompatible wastes in accordance with its Hazardous Waste Facility Operating License (Part 111 License).
24. IN COMPLIANCE. Compatibility testing is performed prior to bulking wastes to determine there are no adverse reactions.
25. IN COMPLIANCE. Cyanide wastes are segregated from acid wastes in the CMF Building and bays are labeled, as required.
26. IN COMPLIANCE. Facility does not bulk wastes with a reactive cyanide content greater than 250 ppm.
27. IN COMPLIANCE. Facility does not accept F006 and F019 waste codes with a reactive cyanide content greater than 20 ppm in the primary or secondary treatment tanks.
28. IN COMPLIANCE. Organic materials with TCLP concentrations greater than 30 ppm (volatiles) and 30,000 ppm (semi-volatiles) are only treated in Primary Treatment Tank 3.

29. NOT EVALUATED. Scrubber-3 is installed but has not been used because the facility has yet to operate at capacity.
30. IN COMPLIANCE. Primary Treatment Tanks 1 through 4 are vented through Scrubber-1. Scrubber-1 appeared to be operating properly at the time of inspection.
31. IN COMPLIANCE. Organic exhaust gases from the drum wash station are vented through the carbon adsorber.
32. IN COMPLIANCE. Inorganic exhaust gases from the drum wash station are vented through the carbon adsorber.
33. IN COMPLIANCE. Exhaust gases from the carbon adsorber are discharged through Scrubber-2.
34. IN COMPLIANCE. Vapor Recovery Exhaust and Drum Unloading Hood are vented through the carbon adsorber/Scrubber-2 system.
35. IN COMPLIANCE. Bungs immediately replaced on drums after emptying.
36. IN COMPLIANCE. Tanks No. 7, 10, 12, 13, 16, 17, 18, 19, 20, and 21 are exhausted through Scrubber-1.
37. IN COMPLIANCE. Scrubber-1 appears to be installed and operating properly. During the inspection, I noted the pH at 10.6.
38. IN COMPLIANCE. Scrubber-2 appears to be installed and operating properly, though it was not in operation during the inspection because no bulking was being performed.
39. IN COMPLIANCE. Lime silos fabric filter collectors are installed and operational. Company usually uses a lime slurry rather than dry lime during processing.
40. IN COMPLIANCE. Facility reported 58 pounds (0.04 tons) of particulate emissions from the lime silos in its 2018 MAERS submittal, which is below the permit limit of 0.15 tons per year; the facility reported that the lime silos were not used in its 2017 MAERS submittal. The facility usually uses a lime slurry which is delivered pre-mixed, so the lime silos are not used regularly. Testing to determine particulate emission rates from the lime silos has not been determined; however, the condition is assumed to be in compliance since the fabric filter collectors are properly installed and maintained. No visible emissions were observed from the silos during the inspection.
41. IN COMPLIANCE. Reported VOC emissions are minimal. Total VOC emissions from Scrubber-2 are below the permitted limits of 12.60 pounds per hour and 18.5 tons per year. During the compliance period, the highest total VOC emissions from the wastewater treatment process, which includes Scrubber-1 and Scrubber-2, was 0.098 tons in the 12-month rolling time period ending January 2018. The 12-month rolling total VOC emissions from the wastewater treatment process was 0.077 tons in August 2019.
42. IN COMPLIANCE. Reported VOC emissions are minimal. Total VOC emissions from Scrubber-1 and Scrubber-2 are below permitted limit of 21.5 tons per year. During the compliance period, the highest total VOC emissions from the wastewater treatment process, which includes Scrubber-1 and Scrubber-2, was 0.098 tons in the 12-month rolling time period ending January 2018. The 12-month rolling total VOC emissions from the wastewater treatment process was 0.077 tons in August 2019.
43. IN COMPLIANCE. Hydrochloric acid emission rate from Scrubber-1 is below permitted limits of 0.016 gram per second and 0.12 pounds per hour. Results of HCl emissions testing performed on July 9, 2002, show HCl emission rates were below the detection limits of < 0.0002 grams per second and < 0.0018 pounds per hour.
44. IN COMPLIANCE. Sulfuric Acid emission rate from Scrubber-1 is below the permitted limits of 0.149 grams per second and 1.18 pounds per hour. Results of sulfuric acid testing performed on July 11, 2002, show sulfuric acid emission rates below the detection limits of < 0.000003 grams per second and < 0.000002 pounds per hour.
45. IN COMPLIANCE. Hydrogen Cyanide emission rate from Scrubber-1 is below the permitted limits of 0.02 grams per second and 0.18 pounds per hour. Results of hydrogen

cyanide emissions testing performed on July 10, 2002, show hydrogen cyanide emission rates below the detection limits of < 0.0001grams per second and < 0.0005 pounds per hour.

46. IN COMPLIANCE. HAP emissions are well below the permit limits of 25 tons per year aggregate HAPs and 10 tons per year for any individual HAP. The highest 12-month rolling total HAP emissions during the compliance period was 0.1387 tons in the 12-month rolling time period ending December 2017. The 12-month rolling total HAP emissions were 0.1122 for the 12-month rolling total ending August 2019. Testing performed on July 10, 2002, showed a total HAP emission rate of 0.02 lb/hour.

47. IN COMPLIANCE. No visible emissions were observed from the fabric filter dust collectors on the silos during the inspection. Visible emission readings are part of the daily inspection performed by plant operators. Records were reviewed during the inspection and did not note any issues with visible emissions.

48. IN COMPLIANCE. No visible emissions were observed from Primary Treatment Tanks 1, 2, 3, and 4, Scrubber-1, or Scrubber-2/carbon adsorber system during the inspection. Visible emission readings are part of the daily inspection performed by plant operators. Records were reviewed during the inspection and did not note any issues with visible emissions.

49. IN COMPLIANCE. No visible emissions were observed from Secondary Treatment Tanks 18, 19, 20, and 21 during the inspection. Visible emission readings are part of the daily inspection performed by plant operators. Records were reviewed during the inspection and did not note any issues with visible emissions.

50. NOT APPLICABLE. Act 451, Part 55, Administrative Rule 373 has been rescinded. However, the facility continues to implement and maintain a fugitive dust plan to control fugitive dust emissions.

51. IN COMPLIANCE. Facility uses a dry sweeper daily on paved areas of the facility, unless it rains or snows; unpaved areas are sprayed with water or calcium chloride, as necessary. No issues with fugitive dust from the lot were observed during the inspection.

52. IN COMPLIANCE. Scrubber-1 pH was 10.6 at time of inspection, in compliance with the permit minimum of 10.0.

53. IN COMPLIANCE. Scrubber-1 is inspected daily and appears to be operated according to manufacturer's specifications, though I was unable to verify the packing bed depth. Daily scrubber inspection and maintenance logs were reviewed during the inspection.

54. NOT EVALUATED. Scrubber-3 is installed but has yet to be put into use.

55. IN COMPLIANCE. Carbon adsorber is operated according to manufacturer's specifications. Breakthrough is monitored by an automatic FID. The facility replaced one carbon bed in 2018 and one in 2019.

56. IN COMPLIANCE. Lime silo filter is installed as required.

57. NOT EVALUATED. Scrubber-3 is installed but has yet to be put into use.

58. IN COMPLIANCE. Scrubber-2 has a gas flow rate of 5,000 ACFM, as required.

59. IN COMPLIANCE. Fabric filter collector has a design rating of 1,000 ACFM, as required.

60. IN COMPLIANCE. Scrubber-1 stack appears to meet permit specifications.

61. IN COMPLIANCE. Scrubber-2 stack appears to meet permit specifications.

62. IN COMPLIANCE. Records of wastes processed are maintained, as required.

63. NOT EVALUATED. AQD has not requested odor testing at this facility.

64. IN COMPLIANCE. Testing for VOC, HCL, sulfuric acid, and hydrogen cyanide, and HAP emission rates was performed on July 10-12, 2002, by Derenzo and Associates, Inc. Results showed all emission rates in compliance with permit limits.

65. IN COMPLIANCE. Facility has not been a source of odor complaints, so there has not been a need to propose a Plan of Action for odor abatement.

PTI No. 302-07A; Special Conditions:

EUSTABILIZE: Liquid waste stabilization process consisting of three 30,000-gallon processing pits in a building controlled by two dust collectors.

I. Emission Limits:

Pollutant	Limit	Actual	Compliance Status
1. PM	0.002 gr/dscf	0.0014 gr/dscf ¹	IN COMPLIANCE
2. PM	0.69 pph	0.15 pph ¹	IN COMPLIANCE
3. VOC	14.6 tons per 12-month rolling time period	4.8 tons for 12-month rolling time period ending Feb. 2018	IN COMPLIANCE
4. Naptha	3.5 pph	Not evaluated*	NOT EVALUATED*

¹Results based on testing performed on June 25, 2008, by Derenzo and Associates, Inc.

*Testing to determine naptha emission rate has not been requested by AQD. However, materials with waste code D001, which would include naptha, do not appear to be commonly processed in Building 4.

II. Material Limits:

1. IN COMPLIANCE. The facility only treats wastes with a VOC content below 5.0 ppm in EUSTABILIZE.
2. NOT EVALUATED. The facility does not have an approved Part 111 license for Building 4, so the facility has not yet treated hazardous waste in EUSTABILIZE.
3. IN COMPLIANCE. The highest quantity of waste processed in EUSTABILIZE on a daily basis during the compliance period was 358 tons on May 2, 2019, below the permit limit of 600 tons per day.
4. IN COMPLIANCE. Facility did not exceed the permit limit of 156,000 tons of waste treated per 12-month rolling time period. The highest 12-month rolling total was 22,960 tons in the 12-month rolling time period ending October 2017. The facility had treated 4,769 tons of waste in the 12-month rolling time period ending August 2019.
5. IN COMPLIANCE. Facility calculates the VOC and SVOC content of the material processed on a 12-month rolling time period basis as determined at the end of each calendar month.
6. IN COMPLIANCE. Facility does not process any wastes containing components listed in 6a. through 6t. with concentrations greater than the maximum allowed for each component.
7. NOT EVALUATED. Hazardous wastes are not currently being treated in EUSTABILIZE. Facility does not have an approved Part 111 license to treat hazardous waste in EUSTABILIZE.

III. Process/Operational Restrictions:

1. IN COMPLIANCE. Facility implements and maintains an approved fugitive dust plan. Facility uses a dry sweeper daily on paved areas of the facility, unless it rains or snows; unpaved areas are sprayed with water or calcium chloride, as necessary.
- 2 and 3. IN COMPLIANCE. At the time of inspection, EUSTABILIZE was not currently being used for waste stabilization and solidification. When the building is used for stabilization and solidification, the facility keeps no more than one bay door open at a time during normal operation, as defined in Appendix B, and maintains the building under negative pressure. Annual testing to demonstrate the building is under negative pressure during normal operating conditions has been performed as required per EUSTABILIZE, SC V.1.
4. IN COMPLIANCE. Facility maintains an approved preventative maintenance plan and malfunction abatement plan for the baghouses for EUSTABILIZE.

IV. Design/Equipment Parameters:

1. IN COMPLIANCE. Baghouses are installed, maintained, and operated when EUSTABILIZE

is used to perform waste solidification operations. Facility personnel perform regular inspections of the baghouse and annual negative pressure verification tests are performed with the baghouse in operation.

V. Testing/Sampling:

1. IN COMPLIANCE. Verification of negative pressure in the EUSTABILIZE building is performed annually using smoke tubes. The most recent tests were performed on June 8, 2018, and August 22, 2019; each test demonstrated that the building was under negative pressure during testing.

VI. Monitoring/Recordkeeping

1. IN COMPLIANCE. Calculations and records are maintained, as required.

2. IN COMPLIANCE. VOC and SVOC analyses for the liquid wastes received in EUSTABILIZE are maintained, as required.

3. IN COMPLIANCE. Facility maintains daily, monthly, and 12-month rolling time period records of the amount of waste received for treatment in EUSTABILIZE. Records were provided to AQD.

4. IN COMPLIANCE. Facility maintains daily and monthly records of the type (by waste code) and amount of waste treated in EUSTABILIZE.

5. IN COMPLIANCE. Facility calculates the VOC emission rate from EUSTABILIZE on a monthly and 12-month rolling time period in accordance with Appendix A.

6. IN COMPLIANCE. Records of verification of negative pressure determinations (smoke tests) are maintained and were reviewed during the inspection.

7. IN COMPLIANCE. Facility performs the required calculations to determine VOC content of wastes received on a monthly and 12-month rolling basis, in accordance with EUSTABILIZE, SC II.5.

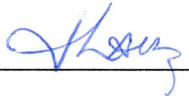
8. IN COMPLIANCE. Facility maintains records of the composition of each waste stream received for treatment in EUSTABILIZE. These records are retained on site.

VIII. Stack/Vent Restrictions:

1 and 2. IN COMPLIANCE. Baghouse stacks appear to meet permit specifications.

FINAL COMPLIANCE DETERMINATION:

At the time of inspection, US Ecology - Detroit North was determined to be in substantial compliance Wayne County Permit Nos. C-10626 through C-10632 (including the amended conditions for previously issued permits for the wastewater treatment process), PTI No. 302-07A, and other applicable State and federal air regulations.

NAME 

DATE 9-23-19

SUPERVISOR JK