INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
Northwest Regional Office • 330 W. US Highway 30, Suite F • Valparaiso, IN 46385
(888) 209-8892 • (219) 464-0233 • Fax (219) 464-0553 • www.idem.IN.gov
Eric J. Holcomb, *Governor*
Brian Rockensuess, *Commissioner*

July 1, 2024

VIA ELECTRONIC MAIL
Mr. Matt Witter
Eco Services Operations Corp.
2000 Michigan Street
Hammond, Indiana 46320
matt.witter@eco-services.com

Re: Inspection Summary Letter
Eco Services Operations Corp.
Source ID 089-00242
Hammond, Lake County

Dear Mr. Matt Witter:

On June 26, 2024, a representative of the Indiana Department of Environmental Management (IDEM), Northwest Regional Office (NWRO), conducted an inspection of Eco Services Operations Corp., located at 2000 Michigan Street in Hammond, Indiana. This inspection was conducted pursuant to IC 13-14-2-2. For your information, and in accordance with IC 13-14-5, a summary of the inspection is provided below:

Inspection Type: Commitment
Inspection Results: No violations were observed

Please direct any questions to me at 219-252-3566 or by email at rbiscoch@idem.in.gov.

Sincerely,

Ramelito Biscocho, Compliance Inspector
Northwest Regional Office
Indiana Department of Environmental Management

ACES ID: 298888

cc: Ramelito Biscocho, Northwest Regional Office (NWRO)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FIELD INSPECTION REPORT

SOURCE INFORMATION	
SOURCE NAME	Eco Services Operations Corp.
SOURCE LOCATION	2000 Michigan Street, Hammond, Indiana Lake County
MAILING ADDRESS	2000 Michigan Street, Hammond, Indiana 46320
PLANT ID	089-00242
PERMIT INFORMATION	Permit Type: TVOP Permit Number: 089-40371-00242 Permit Expiration Date: 12/5/2024 VFC Document No.(hyperlink): 82873776
ATTAINMENT STATUS	☐ Attainment for all criteria pollutants ☒ Nonattainment for ☐SO_2 ☐CO ☒O_3 ☐NO_2 ☐Pb ☐PM_{10} ☐$PM_{2.5}$
SOURCE STATUS	☒ PSD Major (326 IAC 2-2) ☐ Major Source of HAPs ☒ Emission Offset (326 IAC 2-3) ☒ Area Source of HAPs ☐ Acid Rain (326 IAC 21)
SOURCE DESCRIPTION	The Permittee owns and operates a stationary sulfuric acid manufacturing plant.

INSPECTION INFORMATION			
INSPECTED BY	Ramelito Biscocho		
INSPECTION DATE AND TIME	June 26, 2024	TIME IN: 10:00 a.m.	TIME OUT: 12:30 a.m.
REPORTED BY	Ramelito Biscocho	REPORT DATE: 6/27/2024	
COMPLIANCE PERIOD REVIEWED	November 2021 to June 2024		
INSPECTION NOTIFICATION	☒ Unannounced ☐ Announced		
INSPECTION OBJECTIVE(S)	☒ Compliance Monitoring Strategy (CMS) ☐ Commitment ☐ Mega-Site: ☐ FCE ☐ PCE ☐ Complaint ☐ Other: ☐ Surveillance		
ACES TRACKING NUMBER(S)	Inspection: 298888	Complaint: N/A	Violation/Warning:
RM TRACKING NUMBER(S)	Complaint: N/A		
INSPECTION BACKGROUND	A Compliance Monitoring Strategy inspection was performed on 11/4/2021, with violations observed at the time of the inspection.		

SOURCE PERSONNEL INTERVIEWED			
Name	*Title*	*Phone Number*	*Email Address*
Matt Witter	Plant Manager	219-853-7124	matt.witter@eco-services.com
David Garcia	Operations Manager	219-932-7651 ext. 232	david.garcia@eco-services.com
John Richardson (remotely)	Environmental Manager	225-359-3768	john.richardson@eco-services.com

INSPECTION AND COMPLAINT HISTORY (PREVIOUS 5 YEARS)			
Date	*Inspection/Complaint Type*	*Result*	*Comments*
11/4/2021	CMS	Violations Noted	Failure to conduct stack test by designated due date.
11/12/2019	CMS	No Violations Noted	None

COMPLIANCE HISTORY (PREVIOUS 5 YEARS)			
Informal Enforcement Actions			
Date Issued	*Action Taken*	*Describe Violation(s)*	
11/5/2021	Violation Letter	Per the reviewed information during the 11/4/2021 inspection, the most recent valid compliance demonstration of the acid mist emissions was performed on November 2, 2016. The retest has not been completed, in violation of condition D.5.5(a) of Title V Renewal No. 089-40371-00242, and 326 IAC 2-1.1-11.	
5/25/2021	Violation Letter	On January 22, 2021, a pressure vent header exceeded the vent set point following railcar unloading, causing opening bypass to relieve pressure and the vapors venting to the atmosphere for approximately one (1) minute, in violation of condition E.1.2(3) of the Permit and requirements outlined in 60.112b(a)(3).	
3/23/2020	Violation Letter	On December 11, 2019, a nitrogen regulator, used to pad the vapor space of a spent sulfuric acid tank failed, causing excess nitrogen to be fed to the tank, the vent path for the spent acid system to be directed to the backup caustic scrubber and vapor combustor system, and eventually, the spent sulfuric acid tank vapors to be vented to the atmosphere, in violation of condition E.1.2(3) of the Permit and requirements outlined in 60.112b(a)(3). On December 16, 2019, the solenoid that controls the actuator of the vent valve to the atmosphere on the caustic scrubber and vapor combustor system momentarily failed, allowing the valve to open. Pressure from the caustic scrubber and vapor combustor vent system was relieved to the atmosphere, in violation of condition E.1.2(3) of the Permit and requirements outlined in 60.112b(a)(3).	
Formal Enforcement Actions			
Case Number	*Enforcement Type*	Civil Penalty	Describe Violation(s)
N/A	N/A	$ N/A	N/A
Other Relevant Actions			
Action Taken	*Comments*		
N/A	N/A		

PERMIT SECTION D.1
Emission Units and Control Devices:
(a) One (1) Natural Gas Fired Boiler, identified as Package Boiler, constructed in 1980, with a maximum heat input capacity of 94.3 MMBtu per hour, using no controls, and exhausting to a stack, identified as D011. This Package Boiler is used to provide supplemental plant steam when Unit 4 (SARU) is not in operation or is unable to meet the demand.

PERMIT SECTION D.1		
Pollutants with Emission Limits or Applicable Standards:		
☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS		
Applicable Rules:		
• Particulate Matter Less Than 10 Microns in Diameter (PM_{10}) [326 IAC 6.8-2-30]		
Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Recordkeeping Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Types of Records Reviewed: N/A		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Observations and Comments:		
Before entering the facility, outside surveillance was conducted from the public right-of-way. No violations were noted. Upon entering the facility, I met with Mr. Witter and Mr. Garcia. I informed them of the purpose of my visit and conducted an opening conference, records review, plant walkthrough, followed by a closing conference. Mr. Richardson joined the inspection's opening conference remotely. During the opening conference, Mr. Matt Witter provided me with an overview of the operation of the Sulfuric Acid Regeneration Unit (SARU), Unit 4, as well as the other permitted units at the site. The Package Boiler, which generates supplemental steam during increased demand situations, was not in operation at the time of the inspection. The preventive maintenance plan (PMP) for the Package Boiler was reviewed and found to be adequate.		
Permit Section Compliance Status:		
☒ No violations were observed or determined for this permit section at the time of the inspection. ☐ The following violations were determined for this permit section at the time of the inspection: N/A		

PERMIT SECTION D.2		
Emission Units and Control Devices:		
(b) One (1) Natural Gas Fired Furnace, identified as Unit 4 Preheater, constructed in 1962, with a maximum heat input capacity of 42 MMBtu per hour, using no controls, and exhausting to a stack, identified as D021. This Unit 4 Preheater is used to heat the back half of Unit 4 (SARU) following a long shutdown.		
Pollutants with Emission Limits or Applicable Standards:		
☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS		
Applicable Rules:		
• Particulate Matter Less Than 10 Microns in Diameter (PM_{10}) [326 IAC 6.8-2-30]		
Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☐ Yes ☒ No	☐ Yes ☐ No

PERMIT SECTION D.2		
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Recordkeeping Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Types of Records Reviewed: N/A		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No

Observations and Comments:

At the time of the inspection, the Unit 4 Preheater Furnace was not in operation. The Unit 4 Preheater Furnace is used to heat the back half of Unit 4 (SARU) following a long shutdown. Since Unit 4 was in operation, the preheater furnace was idle.

The preventive maintenance plan (PMP) for the Unit 4 Preheater Furnace was reviewed and was found to be adequate.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION D.3

Emission Units and Control Devices:

(c) One (1) Natural Gas Fired Furnace, identified as John Zink Furnace, constructed in 1981, with a maximum heat input capacity of 51 MMBtu per hour, using no controls.

This John Zink Furnace exhausts either through the Unit 4 (SARU) to a stack, identified as D031, or through the exit of the quench tower.

This John Zink Furnace is used to heat the front half of Unit 4 (SARU) following a long shutdown.

Insignificant activities:

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(d) Two (2) Emergency compression ignition generators less than 500 HP, ordered in 2000 and 2004, using no controls, and exhausting to the atmosphere.

(e) One (1) fire pump compression ignition RICE engine less than 500 HP, constructed in 1986, using no controls and exhausting to the atmosphere.

(f) Grinding and machining operations for maintenance purposes emitting less than five (5) pounds per hour and twenty-five (25) pounds per day of particulate matter.

(g) Catalyst screening with particulate emission control.

(h) Sand blasting.

(i) Two (2) cell forced draft non-contact cooling tower system (4 fans), with a capacity of 16,000 gallons per minute, not regulated under a NESHAP.

Pollutants with Emission Limits or Applicable Standards:

PERMIT SECTION D.3

☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

- Particulate Matter Less Than 10 Microns in Diameter (PM_{10}) [326 IAC 6.8-1-2(a)]]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Recordkeeping Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Types of Records Reviewed: N/A		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No

Observations and Comments:

At the time of the inspection, the John Zinc furnace was not in operation. The furnace is used to heat the front half of Unit 4 (SARU) following a long shutdown. Since Unit 4 was in operation, the John Zinc furnace was idle. The preventive maintenance plan (PMP) for the John Zinc furnace was reviewed and found to be adequate.

At the time of inspection, the two (2) emergency compression ignition generators were not in operation. Per Mr. Witter, the one (1) fire pump compression ignition RICE engine is out of service and will be replaced. He provided information on the replacement unit. Eco Services will notify IDEM Permits of the replacement for incorporation into the permit.

The catalyst screening operation with particulate emission control was not in operation. The catalysts are screened during plant turnaround which occurs every 18 months. This is performed by a third party and the equipment is not maintained on site.

The two (2) cell forced draft non-contact cooling tower system was in operation at the time of the inspection.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION D.4

Emission Units and Control Devices:

(f) Four (4) Raw Material Storage Tanks, identified as Tank Nos. 72, 73, 74, and 75, each with maximum capacities of 8,000 gallons. Raw materials stored consist of nonhazardous alternative fuels and other nonhazardous materials possibly containing volatile organic compounds.

Emissions from these Raw Material Storage Tanks are controlled by the furnace of Unit 4 (SARU) or by the vapor combustor, should the furnace of Unit 4 (SARU) be unavailable.

Emissions from these Raw Material Storage Tanks exhaust to the atmosphere through stack D031 when venting to the furnace of Unit 4 (SARU) and through stack D041 when venting to the vapor combustor.

All four (4) Raw Material Storage Tanks were constructed in 1985.

Direct burn tank trucks utilize the same control equipment during unloading activities and will be considered part of this emission unit. Direct burn tank trucks are typically depressurized to the furnace of Unit 4(SARU).

PERMIT SECTION D.4

During periods when the furnace of Unit 4 (SARU) is unavailable, direct burn tank trucks may need to be depressurized and emissions routed to the vapor combustor. To ensure the control efficiency of the vapor combustor during these periods, Eco Services Operations Corp. will not vent railcars simultaneously. Some atmospheric venting of tank trucks occurs (during open-dome sampling, for example).

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☒ VOC ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

N/A

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☐ Yes ☒ No	☐ Yes ☐ No
Preventive Maintenance Plan	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Determination Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Recordkeeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: The vessel identification number. The vessel dimensions. The vessel capacity.		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No

Observations and Comments:

Tanks 72, 73, 74, and 75 were out of service during the inspection. The tanks were used to store hazardous waste material, which was used as alternative fuel. Eco Services stopped using hazardous waste material as alternative fuel in 2004. The tanks have been cleaned, preserved, and not used since then. Eco Services is retaining the tanks in the permit.

At the time of the inspection, alternative fuels were not being fed into the Unit 4 furnace.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION D.5

Emission Units and Control Devices:

(h) One (1) sulfuric acid regeneration unit, identified as Unit 4 (SARU), constructed in 1958, with a maximum acid production rate of 58.33 tons per hour.

Raw materials fed to Unit 4 (SARU) include spent sulfuric acid, molten sulfur, and other sulfur-bearing materials.

Unit 4 (SARU) includes one (1) furnace firing both natural gas and non-hazardous alternative fuels.

Acid mist emissions from Unit 4 (SARU) are controlled by a mist eliminator before exhausting through one (1) stack, identified as D031.

Sulfur dioxide emissions from Unit 4 (SARU) are controlled in the process by a double absorption system.

PERMIT SECTION D.5

Pollutants with Emission Limits or Applicable Standards:

☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

- Particulate Matter Less Than 10 Microns in Diameter (PM_{10}) [326 IAC 6.8-2-30]
- Sulfur Dioxide (SO_2) [326 IAC 7-4.1-15] [Consent Decree 2:07CV134 WL]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Recordkeeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: Hourly records of the acid mist emission rate from Unit 4, Three (3) hour average quantity of sulfur dioxide emitted from the stack of Unit 4, Hourly quantity of sulfuric acid produced by Unit 4, Five (5) minutes fractional concentration of SO_2 entering the Converter of Unit 4, Five (5) minutes fractional concentration of SO_2 at the Unit 4 stack, Calculated five (5) minutes short-term sulfur dioxide emission rate, Calculated daily long-term sulfur dioxide emission rate, Hourly quantity of natural gas burned in the furnace of Unit 4, Monthly quantity of spent acid fed to the furnace of Unit 4, Monthly quantity of molten sulfur fed to the furnace of Unit 4, Hourly quantity of non-hazardous alternative fuels fed to the furnace of Unit 4, Records of daily visible emissions notations for the Unit 4 stack exhaust.		
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

At the time of the inspection, the Sulfuric Acid Regeneration Unit (Unit 4) was in operation. The furnace pressure was -0.74 in-H_2O. The unit has two flow meters in separate locations of the furnace to indicate the amount of molten sulfur fed to Unit 4. At the time of the inspection, molten sulfur feed rate of 200 lbs/min was shown on one of the flow meters. Spent acid feed rate was 51 gallons per minute and furnace temperature was 1755 °F.

The Brinks mist eliminator and the double absorption system were in operation. Unit 4 is vented to the final mist eliminator while the unit is in operation. During the inspection, the mist eliminator was operating with a pressure drop of 8.0 in-H_2O.

The Permittee is required to operate a continuous analyzer in the stack (D031) and the duct between the Unit 4 Dry Tower and Unit 4 Converter. The reported information is used for emissions calculations. The continuous emissions monitoring system (CEMS) in the stack serving Unit 4 (D031) monitors actual emissions of SO_2. At the time of the inspection, the instantaneous reading was 143 parts per million (ppm) SO_2. There were no visible emissions observed at the stack.

To demonstrate compliance with Condition D.5.4, the Permittee performed HCl testing at Unit 4 (SARU) stack on 6/10/2020. Mr. Witter provided documentation of the test for review. To demonstrate compliance with Condition D.5.1, the Permittee performed PM_{10} and acid mist testing at the stack of Unit 4 (SARU) on 11/15/2021. Mr. Witter provided documentation of the test for review.

The records required by the permit are being maintained and reviewed to be adequate.

Permit Section Compliance Status:

PERMIT SECTION D.5

☒ No violations were observed or determined for this permit section at the time of the inspection.
☐ The following violations were determined for this permit section at the time of the inspection:

PERMIT SECTION D.6

Emission Units and Control Devices:

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.8-3.

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☒ VOC ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

- Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Recordkeeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: The name and address of the parts washer solvent supplier; The date of purchase (or invoice/bill dates of contract servicer indicating service date); The type and the total volume of solvent purchased; The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No

Observations and Comments:

The Cold Cleaner Degreaser/Parts Washer was not in use at the time of the inspection. The lid was closed, and the unit contained conspicuous labels.

The required records were reviewed during the inspection. Safety-Kleen maintains the parts washer on a quarterly basis. The cleaning solvent used in the parts washer is Safety-Kleen Premium solvent. The solvent has a vapor pressure of less than one (1) millimeter of mercury measured at twenty (20) degrees Celsius. Reviewed records indicated that the most recent maintenance was conducted on 4/17/2024.

There were no leaks or odors observed at the time of the inspection.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.
☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION E.1

Emission Units and Control Devices:

(d) Five (5) Spent Acid Storage Tanks, identified as Tank Nos. 46, 47, 56, 57, and 58.

PERMIT SECTION E.1

Emissions from these Spent Acid Storage Tanks are controlled either by the furnace of the Unit 4 (SARU) or by the caustic scrubber and vapor combustor, should the furnace of Unit 4 (SARU) be unavailable.

Emissions from these Spent Acid Storage Tanks exhaust to the atmosphere through stack D031 when venting to the furnace of Unit 4 (SARU) and through stack D041 when venting to the caustic scrubber and vapor combustor.

These Spent Acid Storage Tanks may be vented directly to the atmosphere when they contain only fresh sulfuric acid product.

Spent sulfuric acid tank trucks and railcars utilize the same control equipment during unloading activities and will be considered part of this emission unit.

Reloading of tank trucks and railcars with fresh acid also results in VOC and sulfur dioxide emissions that are considered part of this emission unit.

Emissions from reloading with fresh acid are uncontrolled.

The specifications of these Spent Acid Storage Tanks are as follows:

(1) Tank 46 is a fixed cone roof tank with a maximum capacity of 102,500 gallons. This tank was constructed in 1958.

(2) Tank 47 is a fixed cone roof tank with a maximum capacity of 102,500 gallons. This tank was constructed in 1987.

(3) Tank 56 is a fixed cone roof tank with a maximum capacity of 815,000 gallons. This tank was constructed in 1979.

(4) Tank 57 is a fixed cone roof tank with a maximum capacity of 815,000 gallons. This tank was constructed in 1979.

(5) Tank 58 is a fixed cone roof tank with a maximum capacity of 815,000 gallons. This tank was constructed in 1979.

(e) Two (2) Raw Material Storage Tanks, identified as Tank Nos. 70 and 71, each with maximum capacities of 56,400 gallons.

Raw materials stored in these Raw Material Storage Tanks consist of nonhazardous alternative fuels and other nonhazardous materials possibly containing volatile organic compounds.

Emissions from these Raw Material Storage Tanks are controlled by the furnace of Unit 4 (SARU) or by the vapor combustor, should the furnace of Unit 4 (SARU) be unavailable.

Emissions from these Raw Material Storage Tanks exhaust to the atmosphere through stack D031 when venting to the furnace of Unit 4 (SARU) and through stack D041 when venting to the vapor combustor.

Tanks 70 and 71 were constructed in 1986 and 1985, respectively.

Direct burn tank trucks utilize the same control equipment during unloading activities and will be considered part of this emission unit. Direct burn tank trucks are typically depressurized to the furnace of Unit 4 (SARU). During periods when the furnace of Unit 4 (SARU) is unavailable, direct burn tank trucks may need to be depressurized and emissions routed to the vapor combustor. To ensure the control efficiency of the vapor combustor during these periods, Eco Services Operations Corp. will not vent railcars simultaneously. Some atmospheric venting of tank trucks occurs (during open-dome sampling, for example).

PERMIT SECTION E.1

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☒ VOC ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☐ HAPS

Applicable Rule:

- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 - NSPS [40 CFR Part 60, Subpart Kb]

Applicability Information:

The above tanks are subject to this rule because they are storage vessels with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Record Keeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: Records of each inspection performed, Vessel IDs, Dimensions, and Capacities of the vessels, Records of the VOLs stored, the period of storage, The maximum true vapor pressure of that VOLs during the respective storage period, and the operating plan.		
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

The spent acid storage tanks (46, 47, 56, 57, and 58) were in service during the inspection. Tanks 46, 47, 56, and 57 are used to store spent acid while tank 58 is used to store fresh acid. Emissions from tanks 46, 47, 56, and 57 are collected by a closed vent system controlled by either the furnace of Unit 4 (SARU) or the caustic scrubber and vapor combustor when the furnace of Unit 4 (SARU) is not in operation.

Tanks 70 and 71 were out of service during the inspection. The tanks were used to store hazardous waste material, which was used as alternative fuels. Since Eco Services stopped using hazardous waste material as alternative fuels in 2004, these tanks have been cleaned, preserved, and not used since then. Eco Services is retaining the tanks in the permit.

The caustic scrubber and vapor combustor were not in operation since Unit 4 (SARU) was operating,

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION E.2

Emission Units and Control Devices:

(h) One (1) sulfuric acid regeneration unit, identified as Unit 4 (SARU), constructed in 1958, with a maximum acid production rate of 58.33 tons per hour.

PERMIT SECTION E.2

Raw materials fed to Unit 4 (SARU) include spent sulfuric acid, molten sulfur, and other sulfur-bearing materials.

Unit 4 (SARU) includes one (1) furnace firing both natural gas and non-hazardous alternative fuels.

Acid mist emissions from Unit 4 (SARU) are controlled by a mist eliminator before exhausting through one (1) stack, identified as D031.

Sulfur dioxide emissions from Unit 4 (SARU) are controlled in the process by a double absorption system.

Pollutants with Emission Limits or Applicable Standards:

☒ SO_2 ☐ NO_X ☐ CO ☐ VOC ☐ PM ☒ PM_{10} ☐ $PM_{2.5}$ ☐ HAPS

Applicable Rule:

- Standards of Performance for Sulfuric Acid Plants NSPS [40 CFR Part 60, Subpart H]

Applicability Information:

The provisions of this subpart are applicable to each sulfuric acid production unit that commences construction or modification after August 17, 1971.

Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Record Keeping Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Types of Records Reviewed: N/A		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

Please see Section D.5 regarding the inspection of the Spent Sulfuric Acid Regeneration Unit (Unit 4).

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION E.3

Emission Units and Control Devices:

(d) Two (2) Emergency compression ignition generators less than 500 HP, ordered in 2000 and 2004, using no controls, and exhausting to the atmosphere.

(e) One (1) fire pump compression ignition RICE engine less than 500 HP, constructed in 1986, using no controls and exhausting to the atmosphere.

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☐ VOC ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☒ HAPS

Applicable Rule:

PERMIT SECTION E.3

- National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ]

Applicability Information:

The above emergency engines are subject to the requirements of 40 CFR 63, Subpart ZZZZ, because this rule applies to emergency engines that are located in a major or area source of HAP emissions.

Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Record Keeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: Maintenance records, Hours of operation		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

The generators and fire pump were not in operation at the time of the inspection. During the plant walkthrough, the generator run times indicated by the non-resettable hour-meters were verified. The 2004 generator had 724.8 operating hours and the 2000 generator had 228.3 operating hours. The generators are tested once per week for about fifteen minutes per test period. Per the maintenance records reviewed, maintenance was performed on the two emergency generators on 6/18/2024.

The fire pump is currently out-of-service and will be replaced. Information on the replacement unit was provided by Mr. Witter. Eco Services will notify IDEM Permits of the replacement for incorporation into the permit.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION E.4

Emission Units and Control Devices:

(c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☐ VOC ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☒ HAPS

Applicable Rule:

- National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities NESHAP [40 CFR Part 63, Subpart CCCCCC]

Applicability Information:

The gasoline fuel transfer and dispensing operation are subject to this subpart because it is located at an area source of HAPs.

Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☒ Yes ☐ No	☐ Yes ☒ No

PERMIT SECTION E.4		
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Record Keeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: Records of the occurrence and duration of each malfunction of gasoline fuel transfer and dispensing operation and records of actions taken during periods of malfunction of gasoline fuel transfer and dispensing operation to minimize emission were not created and reviewed since there were no occurrence of malfunctions of gasoline fuel transfer and dispensing operation.		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

Gasoline and diesel for in-plant use are stored in two 500-gallon aboveground tanks. At inspection time, they were not in use. There are no recorded incidents of equipment malfunction for this permitted unit.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.
☐ The following violations were determined for this permit section at the time of the inspection:

ADDITIONAL SOURCE COMPLIANCE REVIEW:

The following reports are required and were reviewed:

☒ Annual Compliance Certification(s) ☒ Deviation & Compliance Monitoring Report(s)
☐ Annual Notification(s) ☒ Emission Statement(s)

The reports are consistent with inspection observations.	☒ Yes ☐ No ☐ N/A
The permit accurately represents emission units observed on site.	☒ Yes ☐ No ☐ N/A
Compliance assistance was provided during the inspection.	☐ Yes ☒ No ☐ N/A
The source is required to have a Risk Management Plan [40 CFR 68].	☐ Yes ☒ No
If yes, the source has a plan.	☐ Yes ☐ No ☒ N/A
If yes, the employees have been trained.	☐ Yes ☐ No ☒ N/A

Additional Information and Comments:

None

Additional Source Compliance Review Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.
☐ The following violations were determined for this permit section at the time of the inspection:
N/A

INSPECTION FINDINGS

☒ No violations were observed or determined at the time of the inspection.
☐ The following violations were determined at the time of the inspection:

RECOMMENDED ACTION	Issue inspection summary/violation letter.
EXIT INTERVIEW	I explained my findings, recommendations, and conclusions with Mr. Witter and Mr. Garcia prior to exiting the facility.