

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

November 3, 2022

United Agent Group Inc. 205 Powell Place Brentwood, Tennessee 37027-7522

RE: Eastman Chemical Company

File ID. 82-0003

Case No. APC22-0099

Dear Sir or Madam:

Enclosed, please find an Order and Assessment of Civil Penalty issued by Michelle Walker Owenby, Technical Secretary of the Air Pollution Control Board, Tennessee Department of Environment and Conservation (TDEC), in the above-referenced matter. Please read it carefully and pay special attention to the Notice of Rights section.

If you have any questions regarding this Order and Assessment of Civil Penalty, please contact Michael D. Lewis at (615) 308-2770 or via e-mail at Michael.d.lewis@tn.gov. For all other questions, please contact the TDEC Division of Air Pollution Control at (615) 532-0554 or via e-mail at air.pollution.control@tn.gov.

Sincerely, Kewi M. Lan

Kevin McLain

Section Manager, Enforcement Division of Air Pollution Control

vom

Enclosure

Certified Article Number

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SENDER'S RECORD

TENNESSEE AIR POLLUTION CONTROL BOARD

IN THE MATTER OF:) DIVISION OF AIR POLLUTION
) CONTROL
)
EASTMAN CHEMICAL)
COMPANY,)
)
)
RESPONDENT.) CASE NO. APC22-0099

TECHNICAL SECRETARY'S ORDER AND ASSESSMENT OF CIVIL PENALTY

Michelle Walker Owenby, Technical Secretary of the Air Pollution Control Board, states:

PARTIES

I.

Michelle Walker Owenby is the Technical Secretary of the Air Pollution Control Board ("Board") and Director of the Division of Air Pollution Control ("Division"), Tennessee Department of Environment and Conservation ("Department").

II.

Eastman Chemical Company ("Respondent") is a foreign corporation formed in Delaware and authorized to do business in the State of Tennessee. Respondent's facility address is 200 S. Wilcox Drive, Kingsport, Tennessee. Respondent's registered agent for service of process is United Agent Group Inc., 205 Powell Place, Brentwood, Tennessee 37027-7522.

AUTHORITY

III.

The Technical Secretary may assess a civil penalty of up to \$25,000 per day for each day of violation of the Tennessee Air Quality Act, Tenn. Code Ann. §§ 68-201-101 to -121 ("Act"), or Tennessee Air Pollution Control Regulations, Tenn. Comp. R. & Regs. 1200-03-01 to -36; 0400-30-01 to -39, ("Rules"). Tenn. Code Ann. § 68-201-116. The Technical Secretary may issue an order for correction to the responsible person when provisions of the Act or Rules are violated, and such person may be liable for resulting damages to the State. *Id*.

IV.

Respondent is a "person," Tenn. Code Ann. § 68-201-102(7), and has violated the Act and Rules.

V.

"Air contaminant" means particulate matter, dust, fumes, gas, mist, smoke, vapor, or any combinations thereof. Tenn. Code Ann. § 68-201-102(1).

VI.

"Air contaminant source" means any and all sources of emission of air contaminants, whether privately or publicly owned or operated. Tenn. Code Ann. § 68-201-102(2). Respondent operates an air contaminant source.

<u>FACTS</u> <u>PERMIT 576162</u>

VII.

On January 1, 2020, the Technical Secretary issued Title V operating permit number 576162 ("Permit 576162"), (facility 82-0003), MSOP-24, to Respondent for a chemical manufacturing operation. Permit 576162 was amended and modified as follows:

Туре	Issued Date
Amendment	January 10, 2020
Amendment	June 12, 2020
Modification	September 8, 2021
Modification	December 15, 2021
Modification	March 25, 2022
Modification	May 24, 2022

VIII.

Condition E2-6 of Permit 576162 requires Respondent to comply with the provisions of 40 C.F.R. Part 60 Subpart VVa (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or

Modification Commenced after November 7, 2006), which Respondent satisfies by compliance with the provisions of 40 C.F.R. Part 63 Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks). For pumps in heavy liquid service, §63.169(c) of Subpart H requires leaks to be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171 of Subpart H. For equipment that is not monitored by EPA Method 21 as published in 40 C.F.R. part 60, appendix A ("EPA Method 21"), "repaired" means that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

IX.

Condition E2-7 of Permit 576162 requires Respondent to comply with the provisions of 40 C.F.R. Part 63 Subpart H. Section 63.163(b)(1) of Subpart H requires Respondent to monitor each pump monthly to detect leaks using EPA Method 21. Section 63.173(a)(1) of Subpart H requires each agitator in gas/vapor or light liquid service to be monitored monthly to detect leaks using EPA Method 21.

X.

Additionally, condition E2-7 of Permit 576162 requires respondent to comply with the provisions of 40 C.F.R. Part 63 Subpart FFFF (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks). For equipment leaks, §63.2480 and Table 6 of Subpart FFFF require equipment in organic HAP service to comply with the requirements of 40 C.F.R. Part 63 Subpart H, 40 C.F.R. 63 Subpart FFFF, or 40 C.F.R. 65 Subpart F. For the Glycol and t-DMCD MCPUs, Respondent complies with §63.2480 of Subpart FFFF using 40 C.F.R. Part 63 Subpart H. Section 63.163(b)(1) of Subpart H requires Respondent to monitor each pump monthly to detect leaks using EPA Method 21. Section 63.163(b)(3) of Subpart H requires each pump to be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal which indicates a leak.

XI.

Condition E3-5 of Permit 576162 limits volatile organic compound ("VOC") emissions from PES B-221-3 (entire source excluding fugitive equipment leaks) to 55.27 tons per year.

XII.

Condition E3-6 of 576162 limits VOC emissions from PES B-221-3 (Vents E, F, and J) to 30.12 pounds per hour. Respondent complies with these conditions by routing VOC emissions to the WE-38 Scrubber (Vent F), which achieves a 98% control efficiency.

XIII.

On May 17, 2022, the Division received via e-mail Respondent's Title V semiannual report ("Report"), dated May 16, 2022, for the period of October 1, 2021, through March 31, 2022. In the Report, Respondent identified the following violations at MSOP-24:

On October 5, 2021, Respondent collected a bag sample¹ of the inlet stream of the WE-38 Scrubber in the Glycol area (PES B221-3, Vent F) as part of an engineering test that was unrelated to scrubber operation. The bag sample results indicated high levels of VOC, particularly dimethyl ether (DME), in the inlet stream. Respondent began efforts to evaluate the bag sample results and to evaluate long-term countermeasures to control a higher VOC load in the vapor stream. Pending the results of a reference method test to confirm the preliminary data, Respondent elected to install a temporary flare. The Report indicated that Respondent paid \$139,000 in total for the lease and shipping of the flare, propane tank and associated equipment, and piping and labor costs and worked with the flare vendor to expedite the procurement process. A stack test was completed on December 14, 2021², and the test confirmed that VOC emission rates exceeded the limits established by conditions E3-5 and E3-6 of Permit 576162. On December 15, 2021, Respondent submitted an application for a Title V minor modification for the temporary flare, and following completion of the stack test, removal of all test equipment, completion of safety interlock checks, and the re-routing of the waste gas stream from WE-38 Scrubber to the flare, Respondent started up the temporary flare on the same day.

¹ A bag sample is a non-reference method sampling procedure used to obtain vapor stream flow and composition data without requiring the time and resources to conduct a full stack test.

² The Report indicated that the first reference method test on was conducted on October 19, 2021. This test indicated compliance with the VOC emission limits, but the production rate (approximately 10%) was not representative of actual operating conditions, and the Glycol area experienced serious catalyst degradation issues at that time. A second test was initially for November 16, 2021, but was delayed due to operational conditions, scheduling issues, and the evaluation of the effects of a glycol additive system.

- During November of 2021, five pumps in the t-DMCD MCPU were not monitored by Method 21. The Report indicated that the pumps remained in HAP service although the process was down, and the pumps were not running. The Report indicated that the Method 21 inspections for all five pumps in October 2021 and in December 2021 indicated no leaks. The Report also indicated that reinforcement training was issued to personnel responsible for ensuring the required completion of the inspections.
- During February 2022, four pumps in the Glycol MCPU were not monitored by Method 21. The Report indicated that the pumps remained in HAP service although the process was down, and the pumps were not running. The Report indicated that the Method 21 inspections for all four pumps in January 2022 and in March 2022 indicated no leaks. The Report also indicated that reinforcement training was issued to personnel responsible for ensuring the required completion of the inspections.
- During week 11 of March 2022, seven pumps in the t-DMCD MCPU were not visually inspected. The Report indicated that weekly inspections for these seven pumps in week 10 and in week 12 indicated no leaks. The Report also indicated that reinforcement training was issued to personnel responsible for ensuring the required completion of the inspections.
- On March 12, 2022, one heavy liquid service pump in the DMT process was found to be leaking, but was not confirmed to be repaired within 15 days of identification as required by §63.169(c)(1). On March 12, 2022, the pump seal was replaced which was within the 15-day repair requirement. On March 28, 2022, visual inspection was used to confirm that the repair was successful.
- During March of 2022, one pump and one agitator in the DMT CMPU were not monitored by Method 21. The Report indicated that the pump and agitator were taken out of service in mid-March before monthly monitoring was conducted. The Report also indicated that the Method 21 inspections for this equipment in February 2022 and in April 2022 indicated no leaks.

PERMIT 576603

XIV.

On April 1, 2021, the Technical Secretary issued Title V operating permit number 576603 ("Permit 576603"), (facility 82-0003), MSOP-33, to Respondent for a chemical manufacturing operation.

XV.

Condition E3-8 of Permit 576603 requires Vents AL, AM, and AN of PES B120-1 comply with the requirements of 40 C.F.R. Part 64 (Compliance Assurance Monitoring ("CAM")), as referenced in Attachment 3 of Permit 576603. Section 64.3(b)(3) requires Respondent to design the monitoring to include quality assurance and control practices that are adequate to ensure the continuing validity of the data. To assure compliance with this requirement, the CAM plan in Attachment 3 requires the acid flow meter on Scrubber 1207 (Vent AM) to be calibrated once per calendar year.

XVI.

On May 20, 2022, the Division received via e-mail Respondent's Report, dated May 19, 2022, for the period of October 1, 2021, through March 31, 2022. In the Report, Respondent indicated that the acid flow meter on Scrubber 1207 at MSOP-33 was not calibrated in 2021. The Report indicated that the missed calibration was an oversight due to personnel changes within Respondent's Calibration Services. The Report also indicated that Respondent would take the following corrective actions:

- The calibration will be completed at the next shutdown, which is currently scheduled for June 2022.
- The addition of electronic notifications for all affected flowmeters to create a redundant notification system and to ensure that all calibrations are scheduled during shutdown.
- Consideration of whether installing a bypass around the flowmeter, so that it could be removed and calibrated while the process is in operation, would be feasible.

PERMIT 577389

XVII.

On February 1, 2021, the Technical Secretary issued Title V operating permit number 577389 ("Permit 577389"), (facility 82-0003), MSOP-02, to Respondent for a coal fired steam electric generating plant. On May 10, 2021, the Technical Secretary reopened for cause Permit 577389.

XVIII.

Condition E2-1(a) of Permit 577389 requires Respondent to submit semiannual reports of the monitoring and recordkeeping required by the permit, including identification of all instances of deviations from all permit requirements.

XIX.

Condition E2-5 of Permit 577389 requires Respondent to comply with the provisions of 40 C.F.R. Part 60 Subpart DDDD (Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration ("CISWI") Units). For oxides of nitrogen ("NOX") and sulfur dioxide ("SO₂") emissions, §§60.2730(k)(1) and 60.2730(l)(1) of Subpart DDDD allow Respondent to use NO_X and SO₂ continuous emission monitoring systems ("CEMS") to demonstrate initial and continuous compliance with the emission limits for each pollutant. Subpart DDDD requires Respondent to follow the requirements of Performance Specification 2 of 40 C.F.R. Part 60, Appendix B, the quality assurance Procedure 1 of 40 C.F.R. Part 60 Appendix F, and the procedures under §60.13 for installation, evaluation, and operation of the CEMS. On June 8, 2017, the Environmental Protection Agency ("EPA") approved the use of the performance specifications and quality assurance ("QA") procedures established by 40 C.F.R. Part 75 to demonstrate compliance with Subpart DDDD. EPA's approval indicated that the grace periods allowed under Part 75 for QA tests were not allowed for Boilers 18 through 24 when demonstrating continuous compliance with Subpart DDDD. For cadmium emissions, §60.2715 of Subpart DDDD requires annual performance tests to be completed no more than 13 months following the previous test.

Condition E2-6 of Permit 577389 requires Respondent to comply with the provisions of 40 C.F.R. Part 63 Subpart EEE (National Emission standards for Hazardous Air Pollutants from Hazardous Waste Combustors). Section 63.1209(a)(1)(i) of Subpart EEE requires Respondent to use either a carbon monoxide or hydrocarbon CEMS and an oxygen CEMS to demonstrate and monitor compliance with the carbon monoxide and hydrocarbon standard established by Subpart EEE. For sources using a carbon monoxide CEMS, §63.1209(a)(2) of Subpart EEE requires Respondent to install, calibrate, maintain, and continuously operate the CEMS in compliance with the quality assurance procedures provided in the appendix to Subpart EEE and Performance Specification 4B in Appendix B to 40 C.F.R. Part 60. Section §63.8(b) indicates that monitoring shall be conducted as set forth in the MACT General Provisions and the relevant standard(s) unless the Administrator approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures. Respondent received approval from EPA's Office of Air Quality Planning and Standards on March 28, 2019, to monitor carbon dioxide as a diluent in lieu of oxygen and to use Part 75 performance specifications and QA procedures to demonstrate compliance with Subpart EEE. On August 23, 2021, Respondent began using the alternative plan.

XXI.

On May 26, 2022, the Division received via e-mail Respondent's Report, dated May 25, 2022, for the period of October 1, 2021, through March 31, 2022. In the Report, Respondent identified the following violations at MSOP-02:

The CISWI relative accuracy test audits ("RATAs") were not performed on Boiler 18 by the deadlines established by 40 C.F.R. Part 75 (within four QA operating quarters based on the previous RATA results). The Report indicated that previous RATAs were conducted on March 11, 2020, and subsequent RATAs were conducted on April 14, 2021, which was 14 days past the March 31, 2021, deadline. During this period of noncompliance, Boiler 18 operated for 41.4 hours between April 1, 2021, and the time the RATAs were conducted. The Report indicated that the CEMS data for this period have been marked as invalid, but the change did not result in any required 30-day averages exceeding applicable limits. The Report indicated that the operational availability of the CEMS units remained above 95% after making this change.

- The B-83 Boiler 20 was last tested for compliance with the CISWI cadmium limits on May 19, 2020, and the subsequent test was due by June 30, 2021. The Report indicated that Boiler 20's induced draft fan failed on April 27, 2021, and that the boiler remained shut down for an extended period of time due to long lead part items and limited labor resources to complete the repair. Consequently, Boiler 20 was not able to operate in order to meet the required CISWI testing deadline for cadmium. The Report indicated that Boiler 20 was repaired on or about December 2, 2021, and operated for 552 hours between December 2, 2021, and March 15, 2022, when the testing was completed. The test results demonstrated that cadmium emissions from Boiler 20 were below the CISWI limit, and there were no excess emissions as a result of the delay in testing.
- The required annual RATAs for Boilers 23 and 24 were not conducted on the oxygen and carbon monoxide CEMS in 2019 through 2021 even though data from these CEMS were still being used to demonstrate compliance with Subpart EEE. The Report indicated that the last RATAs were performed in November of 2018, and subsequent RATAs were due no later than December 31, 2019. The annual RATAs were not completed between January 1, 2020, and August 23, 2021, when Respondent discontinued the use of the oxygen CEMS.

XXII.

On June 20, 2022, the Division issued a Notice of Violation to Respondent for the violations identified in paragraphs XIII, XVI, and XXI.

VIOLATIONS

XXIII.

By failing to comply with conditions of the operating permits described above, Respondent violated Division Rule 1200-03-09-.02(6), which states, in pertinent part:

Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in the operating permit, all provisions of these regulations, and all provisions of the Tennessee Air Quality Act.

ORDER AND ASSESSMENT OF CIVIL PENALTY

XXIV.

Respondent is assessed a civil penalty of \$12,500.00 for violation of the Act and Rules, to be paid to the Department at the following address:

Division of Fiscal Services - Consolidated Fees Section Tennessee Department of Environment and Conservation William R. Snodgrass Tennessee Tower, 10th Floor 312 Rosa L. Parks Avenue Nashville, Tennessee 37243

The civil penalty shall be delivered to the Department on or before the 31st day after receipt of this Order and Assessment of Civil Penalty. The case number, APC22-0099, should be clearly written on all correspondence.

RESERVATION OF RIGHTS

In issuing this Order and Assessment of Civil Penalty, the Department does not implicitly or expressly waive any provision of the Act or Rules promulgated thereunder or the authority to assess costs, civil penalties, and/or damages incurred by the State against the Respondent(s). The Department expressly reserves all rights it has at law and in equity to order further corrective action, assess civil penalties and/or damages, and to pursue further enforcement action including, but not limited to, monetary and injunctive relief. Compliance with this order will be considered as a mitigating factor in determining the need for future enforcement action(s).

NOTICE OF RIGHTS

The Respondent may appeal this Order and Assessment. Tenn. Code Ann. §§ 68-201-108(a) and 68-201-116(b). To do so, a written petition setting forth the reasons for requesting a hearing must be received by the Technical Secretary within 30 days of the date Respondent received this Order and Assessment or this Order and Assessment becomes final. Any petition for review must be directed to:

Commissioner of the Department of Environment and Conservation c/o Jenny L. Howard, General Counsel
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower, 2nd Floor

312 Rosa L. Parks Avenue Nashville, Tennessee 37243

If an appeal is filed, an initial hearing of this matter will be conducted by an Administrative Law Judge (ALJ) as a contested case hearing. Tenn. Code Ann. § 68-201-108(a); Tenn. Code Ann. § 4-5-301 to -325; Tenn. Comp. R. & Regs. 1360-04-01. Such hearings are legal proceedings in the nature of a trial. Individual respondents may represent themselves or be represented by an attorney licensed to practice law in Tennessee. Artificial respondents (*e.g.*, corporations, limited partnerships, limited liability companies, etc.) cannot engage in the practice of law and therefore may only pursue an appeal through an attorney licensed to practice law in Tennessee. Low-income individuals may be eligible for representation at reduced or no cost through a local bar association or legal aid organization.

At the conclusion of any initial hearing, the ALJ has the authority to affirm, modify, or deny this Order and Assessment of Civil Penalty, including the authority to increase or decrease the penalty. Tenn. Code Ann. § 68-201-116. The ALJ, on behalf of the Board, has the authority to assess additional damages incurred by the Department including, but not limited to, all docketing expenses associated with the setting of the matter for a hearing, and the hourly fees incurred due to the presence of the ALJ and a court reporter.

Technical questions and other correspondence involving compliance issues should be sent to:

Kevin McLain, Division of Air Pollution Control Tennessee Department of Environment and Conservation William R. Snodgrass Tennessee Tower, 15th Floor 312 Rosa L. Parks Avenue Nashville, Tennessee 37243

Attorneys should contact the undersigned counsel of record. The case number, APC22-0099, should be written on all correspondence regarding this matter.

Issued by the Technical Secretary, Air Pollution Control Board, Department of Environment and Conservation, on November 3, 2022.

Michelle Walker Owenby

Technical Secretary

Tennessee Air Pollution Control Board

Whichelke W. averly

Reviewed by:

Michael D. Lewis

BOPR # 033408

Associate Counsel

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