



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

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

Certified Article Number

9414 7266 9904 2212 9441 46

SENDER'S RECORD

RE: Eastman Chemical Company
File ID. 82-0003
Case No. APC23-0054

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.

On March 9, 2023, the Division issued you a Notice of Violation for failing to comply with conditions E8-1, E8-2, E8-3 of Title V operating permit number 572407 and condition E3-8 (MM4) of Title V operating permit number 576931. Division Rule 1200-03-20-.06(1) requires the Technical Secretary to issue a Notice of Violation for excess emissions resulting from startups, shutdowns, and malfunctions. The information provided in the reports met the minimum reporting requirements of Division Rules 1200-03-20-.06(2) and 1200-03-20-.06(3). Therefore, the Technical Secretary has elected to take no further action regarding this portion of the Notice of Violation.

If you have any questions regarding this Order and Assessment of Civil Penalty, please contact Kevin McLain at (615) 532-6819 or kevin.mclain@tn.gov. For all other questions, please contact the Division of Air Pollution Control at (615) 532-0554 or air.pollution.control@tn.gov.

Sincerely,

Kevin McLain
Section Manager, Enforcement
Division of Air Pollution Control

vom

Enclosure

**STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD**

IN THE MATTER OF:)	DIVISION OF AIR POLLUTION CONTROL
)	
)	
EASTMAN CHEMICAL COMPANY,)	
)	
)	
)	
RESPONDENT.)	CASE NO. APC23-0054

**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. The Respondent's facility address is 200 S. Wilcox Drive, Kingsport, Tennessee 37660-5147. The 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 \$25,000.00 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.

The 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). The Respondent operates an air contaminant source.

FACTS

VII.

On February 9, 2023, Division personnel conducted an inspection at the Respondent’s facility. Prior to the records review portion of the inspection, the Respondent provided Division personnel with a Summary of Potential Deviations document. The potential deviations were discovered by the Respondent in preparation of the February 9, 2023, inspection. After review and consideration of the pertinent facts associated with the Summary of Potential Deviations, the Division determined violations of the permits identified in the paragraphs below occurred.

PERMIT 568496

VIII.

On November 24, 2014, the Technical Secretary issued Title V operating permit number 568496 (“Permit 568496”), (facility 82-0003), MSOP-32, to the Respondent for the incineration of waste chemicals, wastewater treatment system, landfill, and associated waste handling, storage, and disposal operations. The Technical Secretary amended, modified, and reopened for cause Permit 568496 as follows:

Type	Issued Date
Administrative Amendment	March 17, 2016
Minor Modification	October 12, 2016
Administrative Amendment	June 16, 2017
Minor Modification	September 1, 2017
Minor Modification	November 1, 2017
Reopen for Cause	February 1, 2018
Minor Modification	August 15, 2018

IX.

Condition E2-1(MM2)(a) of Permit 568496 states, in pertinent part:

The semiannual reports shall cover the six-month periods from January 1 to June 30 of each calendar year and from July 1 through December 31 of each calendar year. . . .

(4) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

X.

Condition E2-1(MM2)(b) of Permit 568496 states, in pertinent part:

The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(4) . . . The certification shall identify each deviation and take it into account in the compliance certification.

XI.

Condition E3-7(RC1) of Permit 568496 requires the Respondent to follow the Compliance Assurance Monitoring (CAM) plan found in Attachment 4 for PES B-248-1 Kiln #1 caustic scrubber (Vent D) and Kiln #2 caustic scrubber (Vent E). Specifically, Quality Assurance and Quality Control (QA/QC) Practices of the CAM plan requires the Respondent to conduct pH sensor calibrations for each vent once per calendar month.

XII.

Kiln #1 was out of operation during the month of February 2020 until February 27, 2020. A Summary of Potential Deviations document provided by the Respondent indicated that the pH sensor calibration was not completed for the Kiln #1 caustic scrubber (Vent D) during the month of February 2020. The next pH sensor calibration on the Kiln #1 caustic scrubber (Vent D) was completed on March 3, 2020. Calibrations of pH sensor prior to the shutdown and on March 3, 2020, were consistent. The Respondent indicated during the February 9, 2023, inspection that they were not aware of the deviation of condition E3-7 as outlined in the Summary of Potential Deviations document at the time the Report ending June 30, 2020, or the Annual Compliance Certification for the period ending December 31, 2020, were submitted. Subsequently, these deviations were not reported as required by conditions E2-1(MM2)(a)(4) and E2-1(MM2)(b)(4).

XIII.

On February 14, 2023, the Respondent submitted a letter (“Letter”) reporting additional deviations that resulted from the July 22, 2022, site-wide power failure¹. The Respondent previously reported that during preparation for a software upgrade in the B-253 Powerhouse, unclear and incomplete Distributed Control System (“DCS”) instructions resulted in a loss of boiler feedwater flow. An immediate shutdown of B-253 was initiated to prevent unsafe operating conditions, and the unplanned shutdown resulted in a cascading shutdown of other boilers and the eventual site-wide loss of power and utilities. The Respondent also reported that the DCS instructions and interface were improved to prevent the recurrence of this event at B-253 and that the Respondent audited other DCS systems in the plant’s utilities systems to identify and resolve similar deficiencies. The Letter indicated that the B-253 DCS instructions and interface were improved to rectify the issue that led to the unplanned shutdown. The Respondent believes that these changes will prevent future recurrence of the outage. The Respondent audited other DCS systems in the plant’s utilities systems to identify similar deficiencies and, as of the Letter date, all critical and moderate priority issues identified by the audit have been resolved.

¹For some deviations, the information in the Letter was supplemented with information from the Title V reports, as indicated in specific violations.

PERMIT 572389

XIV.

On October 1, 2017, the Technical Secretary issued Title V operating permit number 572389 (“Permit 572389”), (facility 82-0003), MSOP-13, to the Respondent for the production of synthetic fibers, manufacture of cellulose esters, and the associated ester storage and solids handling operations. The Technical Secretary amended and modified Permit 572389 as follows:

Type	Issued Date
Minor Modification	March 16, 2018
Significant Modification	February 1, 2019
Minor Modification	February 12, 2021

XV.

Conditions E5-9 and E10-5 and Attachment 3 of Permit 572389 require PES CA-MNF and PES B-67-1 to comply with the requirements of 40 C.F.R. Part 64 – Compliance Assurance Monitoring. The Respondent satisfies these requirements by maintaining the minimum scrubber inlet water flow rates as indicated in the table below.

XVI.

The Letter indicated that as a result of the power failure, the scrubbers lost inlet flow, and the daily average flow rates were below the required minimum values.

Compliance Assurance Monitoring Indicators, MSOP-13				
PES	Vent ID	Minimum Scrubber Flow Rate, 24-hour Block Average (gallons/minute)	Measured Flow Rate, 24-hour Block Average (gallons/minute)	Date of Excursion
CA-MNF	A	3.5	3.1	July 22, 2022
CA-MNF	B	3.5	2.9	July 22, 2022
CA-MNF	C	5	2.8	July 22, 2022
			4.2	July 23, 2022
CA-MNF	D	5	3.8	July 22, 2022
CA-MNF	E	3.5	2.4	July 22, 2022
CA-MNF	F	3.5	2.9	July 22, 2022
B-67-1	D	7	4	July 22, 2022

			4	July 23, 2022
B-67-1	E	7	6	July 22, 2022
			5	July 23, 2022
B-67-1	V	5	2	July 23, 2022
B-67-1	W	2	1	July 23, 2022

PERMIT 572407

XVII.

On November 16, 2018, the Technical Secretary issued Title V permit number 572407, (“Permit 572407”), (facility 82-0003), MSOP-17, to the Respondent for synthesis gas production from coal and acid gas removal and sulfur recovery operations. On August 8, 2022, the Technical Secretary modified Permit 572407.

XVIII.

Condition D6 of Permit 572407 prohibits the emissions of sulfur dioxide (“SO₂”) from process and non-process emission sources in excess of the standards in Division Rule 1200-03-14 (1,000 parts per million by volume, dry basis, one-hour average for process emission sources in Sullivan County).

XIX.

Conditions E4-3, E4-7, and E4-8 of Permit 572407 require PES B-334-1 to comply with the emission limits identified in the table below. Condition E4-7 also requires the Respondent to install and operate continuous emissions monitoring systems to measure SO₂ emissions and a minimum data availability of 75% is required to calculate a valid average.

MSOP-17 Emission Limits			
Permit Condition	Vent ID	Pollutant	Emission Limit
E4-3	Vents A and B	Carbon monoxide (“CO”)	76.45 lbs./hr. (daily average)
E4-7	Vent B	SO ₂	21.8 lbs./hr. (daily average)
E4-8	Vent B	Nitrogen oxide (“NO _x ”)	0.78 lbs./hr. ²

²An averaging period is not specified in the permit.

XX.

Condition E8-3 of Permit 572407 limits CO emissions from PES B-351-5 to 365 lbs./hr.

XXI.

The Letter indicated that coal gasification operations shut down due to the power failure, and process gases from the gasification operation were diverted to the incinerator. The Letter also indicated that the power failure resulted in a data loss. The minimum data availability requirement was not met for the CEMS on the Tail Gas Incinerator (PES B-334-1, Vent B)³. During this event, there were also visible emissions observed from the Flare (Vents B/C, PES B-351-5). The Respondent reported the excess emissions and parameter excursions as identified in the table below.

MSOP-17 Excess Emissions, PES B-334-1			
Date	Vent ID	Pollutant	Excess Emissions
July 22, 2022	Vent B	CO	108.8 lbs./hr.
		SO ₂	140.1 lbs./hr.
			49% CEMS availability
			1,192 ppm from 10:00 AM to 11:00 AM
		NO _x	6.73 lbs./hr.
July 23, 2022	Vent B	SO ₂	0% CEMS availability ⁴
		NO _x	2.5 lbs./hr.

Additionally, the semiannual report ("Report") for MSOP-17 for July 1, 2022, through December 31, 2022, indicated that following the extended outage, the Respondent restarted the coal gasification process on July 27, 2022, and flaring for extended periods of time was necessary to optimize the CO/H₂ separation while restarting the cold boxes in the Rectisol section. The Report indicated that CO emissions were 473.1 lbs./hr. on July 28, 2022, 1,063.3 lbs./hr. on July 29, 2022, and 500.6 lbs./hr. on July 30, 2022. These emissions were reported as excess emissions due to startup, shutdown, or malfunction, but because the event was initiated by the July 2022 power outage, this event did not qualify for further consideration pursuant to Division Rule 1200-03-20.

³The Letter indicated that emissions were calculated during this period using engineering judgement and process information.

⁴The Respondent estimated SO₂ emissions as 5.2 lbs./hr. on July 23, 2022, which is less than the permitted emission limit.

PERMIT 573862

XXII.

On January 1, 2019, the Technical Secretary issued Title V operating permit 573862 (“Permit 573862”), (facility 82-0003), MSOP-03, to the Respondent for the production of alcohol, esters, organic acid, methanol, and cyclohexane dicarboxylic acid in the Chemicals Manufacturing Division. On September 23, 2019, the Technical Secretary amended Permit 573862. On November 21, 2019, the Technical Secretary modified Permit 573862.

XXIII.

Condition E4-1 of Permit 573862 limits volatile organic compound (“VOC”) emissions to 0.21 lbs./hr. from PES B-336-1, Vent A.

XXIV.

Condition E4-9 of Permit 573862 limits methyl acetate emissions to 1.91 lbs./hr. and 8.37 tons/year from PES B-336-1.

XXV.

Conditions E3-8, E4-7, and E9-8 of Permit 573862 require PES B-335-1, B-336-1, and B-354-1, respectively, to comply with the provisions of 40 C.F.R. Part 63 Subpart G - National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. Subpart G includes the following requirements:

40 C.F.R. Part 63 Subpart G Requirements, MSOP-03				
Category	PES	Affected Equipment	Summary of Requirement	Rule Citation
Group 1 storage vessels	B-335-1	Tanks 19D-52 and 19D-53 (Vent A); Tank 10D-2 (Vent B)	Reduce hazardous air pollutant emissions to the atmosphere by routing emissions to a closed vent system and control device. The control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95% or greater.	§63.119(a)(1), §63.119(e)(1)
	B-336-1	Tank 21D-4 (Vent A);		
	B-354-1	Tanks 31D-2, 29D-20, and 29D-21 (Vent A)		

XXVI.

The Letter indicated that due to the power failure, water flow was lost to the scrubbers listed in the table below for a period of 4.1 hours. Since there was no water flow to the scrubbers during this time, all VOC and other organic emissions from the scrubbers, including organic hazardous air pollutants, were reported as excess emissions. The Letter indicated that the water valves to the scrubbers are fail-open valves, and the emissions reported in the table below were conservative estimates because the Respondent could not measure the water flow to the scrubbers during the power loss.

Excess Emissions Reported for MSOP-03			
PES	Scrubber and Vent ID	VOC Emissions (lbs.)	Other Organics Emissions (lbs.)
B-335-1	101C-2 (Vent A)	17.5	32.7
B-335-1	19C-26 (Vent B)	8.5	0
B-336-1	21C-30 (Vent A)	2.3	14.1
B-354-1	31C-30 (Vent A)	2.6	2.8

PERMIT 574267

XXVII.

On September 1, 2019, the Technical Secretary issued Title V operating permit 574267 ("Permit 574267"), (facility 82-0003), MSOP-09, to the Respondent for a polyester polymer and plastics manufacturing and associated material handling operations. The Technical Secretary amended and modified Permit 574267 as follows:

Type	Issued Date
Administrative Amendment	October 16, 2019
Minor Modification	January 22, 2020
Minor Modification	March 19, 2021

XXVIII.

Condition E2-7 of Permit 574267 requires:

- Permitted emission source (PES) B-255-1 to comply with the provisions of 40 C.F.R. Part 63 Subpart FFFF - National Emission Standards for Hazardous Air Pollutant: Miscellaneous Organic Chemical Manufacturing, including the requirements shown in the table below.

40 C.F.R. Part 63 Subpart FFFF Requirements, MSOP-09			
Category	Affected Equipment	Summary of Requirement	Rule Citation
Group 1 continuous process vents	SA-01 Catalytic oxidizer and SA-02 Scrubber (PES B-255-1, Vent Y1)	Group 1 continuous process vent that reduces HAP emissions by $\geq 98\%$ by weight or to an outlet concentration of ≤ 20 ppmv (as HAP or TOC) by venting emissions through a closed-vent system to any combination of control devices (except a flare)	§63.2455(a), (b) Table 1: Item 1(a)(i)
Group 1 continuous process vents		MON overlap with 40 C.F.R. Part 60 Subpart NNN. Comply with Subpart FFFF but consider all TOC as HAP.	§63.2535(h)

- PES B-226-1 to comply with the provisions of 40 C.F.R. Part 63 Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins, including the requirements shown in the table below.

40 CFR 63 Subpart JJJ Requirements, MSOP-09		
Affected Equipment	Summary of Requirement	Rule Citation
PET production using a continuous terephthalic acid process, raw material preparation sections, process equipment venting to TW-01 Water Column Scrubber (PES B-226-1, Vent C3)	Limit organic HAP emissions from continuous process vents to 0.04 kg organic HAP per Mg of product or reduce emissions in a combustion device to achieve 98% reduction by weight or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. Comply with alternative monitoring for wet scrubbers (maintain an inlet scrubber water flow rate > 2.0 gpm, 24-hour block average).	§63.1316(b)(2)(i), §63.1317, Alternative monitoring plan dated June 11, 2018
Pressure relief devices in organic HAP service (PES B-226-1)	Except as specified in paragraph §63.1331(a)(9)(iv) (pressure relief devices routed to a closed-vent system and control device), pressure releases to the atmosphere from pressure relief devices in organic HAP service are prohibited.	§63.1331(a)(9)(iii)
	If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring no later	§63.1331(a)(9)(ii)(A)

	than five calendar days after the pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm above background, except as provided in §63.171.	
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- PES B-255-1 and PES B-270-1 to comply with the provisions of 40 C.F.R. Part 63 Subpart FFFF, including the requirements shown in the table below.

40 C.F.R. Part 63 Subpart FFFF Requirements, MSOP-09			
Category	Affected Equipment	Summary of Requirement	Rule Citation
Group 1 continuous process vents	SA-01 Catalytic oxidizer and SA-02 Scrubber (PES B-255-1, Vent Y1)	Group 1 continuous process vent that reduces HAP emissions by $\geq 98\%$ by weight or to an outlet concentration of ≤ 20 ppmv (as HAP or TOC) by venting emissions through a closed vent system to any combination of control devices (except a flare)	§63.2455(a), (b) Table 1: Item 1(a)(i)
	DL-03 Catalytic oxidizer and DL-02 Scrubber (PES B-270-1, Vent D1)	MON overlap with 40 C.F.R. Part 60 Subpart NNN. Comply with Subpart FFFF but consider all TOC as HAP.	§63.2535(h)
Group 1 storage tanks CY-56 Tank Farm S	CY-56 Tank Farm Scrubber (PES B-255-1, Vent T5) DA-73 Scrubber (PES B-270-1, Vent T2)	Group 1 storage tank that reduces HAP emissions by $> 95\%$ by weight or to an outlet concentration of ≤ 20 ppmv of TOC or organic HAP and ≤ 20 ppmv of hydrogen halide and halogen HAP by venting through a closed vent system to any combination of control devices (excluding a flare)	§63.2470(a), (c), (d) Table 4: Item 1(a)(i)

XXIX.

The Report for MSOP-09 for July 1, 2022, through December 31, 2022, indicated that during the November 26, 2022, shutdown of Y-line, there were intermittent surges of VOC that resulted in overheating of the catalytic oxidizer and activation of the safety interlock oxidizer bypass. The Report indicated that an investigation found that the reflux on the

methanol column was too low to condense vapors from the process cookout material that were venting from the reactors through the column to the control system. As a result, the required 98% control efficiency was not met. The Report indicated that 3.2 lbs. of VOC were emitted over a period of 1.25 hours. The Report indicated that the Respondent provided coaching to operations on the necessity of maintaining proper methanol column operation during shutdowns.

XXX.

The Respondent reported in the Letter the following deviations to condition E2-7 of Permit 574267:

- The power failure caused a loss of utilities, including scrubber water and power to the DCS system which maintains parametric monitoring data for this area. As a result, the required water flow was not maintained resulting in an estimated 43 lbs. of HAPs being emitted over a period of 15 minutes. (Related to Subpart JJJ)
- The failure of cooling water supply to the column condenser resulted in overheating and a release from a monitored pressure relief device. Due to confusion surrounding the events of the power failure, the pressure relief device was not monitored within five days of the release as required by §63.1331(a)(9)(ii)(A). The Report indicated that the pressure relief device was monitored on February 16, 2023, and a reading of less than 500 ppm above background was confirmed. Due to the loss of raw material feeds and system heat, the Respondent believed that no new vapors were added to the system after the power failure. (Related to Subpart JJJ)
- The power failure caused loss of utilities including scrubber water and power to the DCS system, which maintains parameter monitoring data. As a result, for minimum water flow requirement for the scrubber (PES B-255-1, Vent T5) and 95% HAP control efficiency were not met. The Respondent estimated 106 lbs. of HAP were emitted over a period of 10.5 hours. (Related to Subpart FFFF)
- The power failure caused loss of utilities to the control devices (PES B-255-1, Vent Y1), including scrubber water and electric power to both the catalytic oxidizer and the DCS which maintains parameter monitoring data. As a result, the 98% control efficiency

requirement was not met. The Respondent estimated 15 lbs. of VOC were emitted over a period of 15 minutes. (Related to Subpart FFFF)

- The Letter and the Report for MSOP-09 from July 1, 2022 through December 31, 2022, indicated that the power failure and subsequent unplanned and abnormal shutdown of polymer lines resulted in multiple lines filled with solid polymeric material. The Respondent believed that the melting of polymer prior to restart created an abnormal emissions profile, which the scrubber/catalytic oxidizer system (PES B-255-1, Vent Y1) was unable to control. The oxidizer intermittently overheated and shutdown on a safety bypass interlock. As a result, the 98% control efficiency requirement was not met. Total bypass time was 2.25 hours and total VOC emissions were estimated to be 37.8 lbs. (Related to Subpart FFFF)
- The power failure caused loss of utilities to the control devices (PES B-270-1, Vent D1), including scrubber water and electric power to both the catalytic oxidizer and the DCS, which maintains parameter monitoring data. As a result, the 98% control efficiency requirement was not met. The Respondent estimated 23 lbs. of VOC were emitted over a period of 15 minutes. (Related to Subpart FFFF)
- The power failure and subsequent unplanned, abnormal shutdown of polymer lines resulted in multiple lines filled with solid polymeric material. The Respondent believes that the melting of polymer prior to restart created an abnormal emissions profile, which the scrubber/catalytic oxidizer system (PES B-270-1, Vent D1) was unable to control. The oxidizer intermittently overheated and shutdown on a safety bypass interlock. As a result, the 98% control efficiency requirement was not met. Total bypass time was 25 minutes, and total VOC emissions were estimated to be 27.6 lbs. (Related to Subpart FFFF)
- The power failure caused loss of utilities including scrubber water and power to the DCS system, which maintains parameter monitoring data. As a result, for minimum water flow requirement for the scrubber (PESB-270-1, Vent T2) and 95% HAP control efficiency were not met. The Respondent estimated 24 lbs. of HAP were emitted over a period of 14.6 hours. (Related to Subpart FFFF)

PERMIT 575805

XXXI.

On May 24, 2020, the Technical Secretary issued Title V permit number 575805, ("Permit 575805"), (facility 82-0003), MSOP-19, to the Respondent for the production of triethyl phosphate, copolyester monomer manufacturing and solvent manufacturing and refining in the Chemicals Manufacturing Division. On December 16, 2021, the Technical Secretary amended Permit 575805.

XXXII.

Condition E2-6 of Permit 575805 requires:

- PES B-545-1 to comply with the provisions of 40 C.F.R. Part 63 Subpart FFFF, including the requirements shown in the table below.

40 C.F.R. Part 63 Subpart FFFF Requirements, MSOP-19			
Category	Affected Equipment	Summary of Requirement	Rule Citation
Group 1 continuous process vents	PES B-545-1, Vent C Vapor Incinerator (MON TRE Points Triangles F, G, M, N, and O)	Group 1 continuous process vent that reduces HAP emissions by $\geq 98\%$ by weight or to an outlet concentration of ≤ 20 ppmv (as HAP or TOC) by venting emissions through a closed-vent system to any combination of control devices (except a flare)	§63.2455(a), (b) Table 1: Item 1(a)(i)
Group 1 storage tanks	PES B-545-1, Vent C Vapor Incinerator (Group 1 storage tanks TA-D-110, TA-D-220, and TA-D-230)	Group 1 storage tank that reduces HAP emissions by $> 95\%$ by weight or to an outlet concentration of ≤ 20 ppmv of TOC or organic HAP and ≤ 20 ppmv of hydrogen halide and halogen HAP by venting through a closed vent system to any combination of control devices (excluding a flare)	§63.2470(a), (c), (d) Table 4: Item 1(a)(i)

XXXIII.

The Letter indicated that the power failure caused the entire manufacturing facility associated with MSOP-19 to shut down, including the Vent C vapor incinerator. Emissions from

process vents and storage tanks were routed through Vent I (vapor incinerator bypass) for 17.65 hours.

PERMIT 576931

XXXIV.

On October 1, 2020, the Technical Secretary issued Title V operating permit 576931 (“Permit 576931”), (facility 82-0003), MSOP-34, to the Respondent for the production of aromatic acids in the Polymers Division. On October 13, 2021; February 4, 2022, and June 6, 2022, the Technical Secretary modified Permit 576931.

XXXV.

Condition E3-7 of Permit 576931 limits VOC emissions from PES B-232-1, Vent V1 (Azeo Vent Scrubber) to less than 11.32 lbs./hr. The Respondent assures compliance with this requirement by maintaining a minimum scrubber water flow of 21 lbs./minute (daily average) to control emissions from the tank farm when the Azeo column is down.

XXXVI.

The Letter indicated that as a result of the site-wide power outage, the Azeo column shut down and water flow to the Azeo Vent Scrubber was lost. This event lasted for 11 hours and the daily average scrubber water flow was 14 lbs./minute with 55% data availability. The Respondent estimated that 346 lbs. of excess VOC (acetic acid) were emitted over a period of 11 hours.

PERMIT 576926

XXXVII.

On November 1, 2020, the Technical Secretary issued Title V operating permit 576926 (“Permit 576926”), (facility 82-0003), MSOP-32, to the Respondent for the incineration of waste chemicals, wastewater treatment system, landfill, and associated waste handling, storage, and disposal operations.

XXXVIII.

Condition E2-6 of Title V Operating Permit 576926 requires PES B-248-1 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, including the requirements shown in the table below.

40 C.F.R. Part 63 Subpart EEE Requirements, MSOP-32		
Affected Equipment	Summary of Requirement	
Rotary Kiln #1 (Vent D)	Emission standards for existing hazardous waste incinerators:	
	Pollutant	Emission Limit
	PM	Except as provided by §63.1219(e), 0.013 gr/dscf corrected to 7% oxygen.
	Semivolatile metals (cadmium and lead)	230 µgm/dscm, combined emissions, corrected to 7% oxygen
	Low-volatile metals (Arsenic, Beryllium, and Chromium)	92 µgm/dscm, combined emissions, corrected to 7% oxygen
	HCl and Cl ₂	32 ppmv, combined emissions, expressed as a chloride equivalent, dry basis and corrected to 7% oxygen.

XXXIX.

The Letter indicated that Kiln #1 was burning both hazardous and non-hazardous waste at the time of the event and, as a result of the power loss, the Kiln #1 emergency safety vent (ESV) opened. The kiln's automatic waste feed cutoff functioned as designed and stopped the waste feed into the unit, but solids were in the unit and the residence time of those solids had not expired prior to the ESV opening. Based on the compositions of waste material in the unit at the time of the ESV opening, the Respondent estimated that 4 lbs. of particulate matter, 0.01 lb. of semivolatile metals, and 0.2 lb. of low-volatile metals were emitted during this event. The Letter indicated that these estimates assume that 100% of the material was emitted through the ESV, but there was no draft or forced air fan in service during the ESV opening. The Letter indicated that it is unknown if these emissions exceeded the standard due to the lack of vent flow measurement from the ESV outlet.

XL.

On March 9, 2023, the Division issued a Notice of Violation to the Respondent for the violations identified in paragraphs **XII, XVI, XXI, XXVI, XXIX, XXX, XXXIII, XXXVI, and XXXIX.**

VIOLATIONS

XLI.

By failing to comply with the conditions of the Title V operating permits as discussed herein, the 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

XLII.

The Respondent is assessed a civil penalty of \$45,500.00 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, APC23-0054, 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. 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.

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 the 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
Department of Environment and Conservation
William R. Snodgrass Tennessee Tower, 2nd Floor
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243

The petition may be mailed or delivered to this address, or it may be sent to TDEC.Appeals@tn.gov. If an appeal is filed, an initial hearing of this matter will be conducted by an Administrative Judge 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 Administrative Judge 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 Administrative Judge, on behalf of the Board, has the authority to assess additional damages incurred by the Department

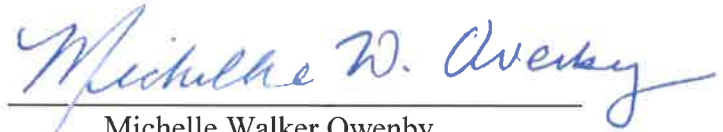
including, but not limited to, all docketing expenses associated with the setting of the matter for a hearing, and the hourly fees incurred due to the presence of the Administrative Judge and a court reporter.

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

Kevin McLain, Division of Air Pollution Control
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, APC23-0054, should be written on all correspondence regarding this matter.

Issued by the Technical Secretary, Air Pollution Control Board, Department of Environment and Conservation, on June 29, 2023.



Michelle Walker Owenby
Technical Secretary
Air Pollution Control Board

Reviewed by:



William Freeman Miller
BPR #028826
Senior Associate Counsel
Department of Environment & Conservation
312 Rosa L. Parks Avenue, 2nd Floor
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