



**STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
Division of Air Pollution Control  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor  
Nashville, TN 37243**

Gladivee Garcia  
1800 Zinc Plant Road  
Clarksville, Tennessee 37040-7092

**Certified Article Number**

**9414 7266 9904 2212 9418 55**

**SENDER'S RECORD**

RE: Nyrstar Clarksville Inc.  
Facility Id. 63-0092  
Case No. APC23-0139 & APC23-0162

Dear Ms. Garcia:

Enclosed, please find an Order and Assessment of Civil Penalty issued by Michelle Walker Owenby, Technical Secretary of the Air Pollution Control Board, Department of Environment and Conservation. 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 Kevin McLain at [kevin.mclain@tn.gov](mailto: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](mailto:air.pollution.control@tn.gov).

Sincerely,

A handwritten signature in blue ink, reading "Kevin McLain", is positioned below the "Sincerely," text.

Kevin McLain  
Section Manager, Enforcement  
Division of Air Pollution Control

vom

Enclosure

**STATE OF TENNESSEE  
AIR POLLUTION CONTROL BOARD**

<b>IN THE MATTER OF:</b>	)	<b>DIVISION OF AIR POLLUTION</b>
	)	<b>CONTROL</b>
	)	
<b>NYRSTAR CLARKSVILLE INC.,</b>	)	
	)	
	)	
	)	<b>CASE NO. APC23-0139</b>
<b>RESPONDENT.</b>	)	<b>CASE NO. APC23-0162</b>

**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"), Department of Environment and Conservation ("Department").

**II.**

Nyrstar Clarksville Inc. ("Respondent") is a foreign corporation formed in Maryland and authorized to do business in the State of Tennessee. The Respondent's facility address is 1800 Zinc Plant Road, Clarksville, Tennessee 37040-7092. The Respondent's registered agent for service of process is Gladivee Garcia at the same address.

**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 November 14, 2019, the Technical Secretary issued Major Source operating permit (“Title V”) permit number 572963, (facility 63-0092), to the Respondent for a zinc, sulfuric acid, and cadmium manufacturing facility. The Technical Secretary amended and modified Title V permit number 572963 as follows:

<b>Type</b>	<b>Issued Date</b>
Minor Modification #1	May 20, 2020
Minor Modification #2	October 22, 2020
Administrative Amendment #1	January 26, 2021
Minor Modification #3	June 29, 2022

**VIII.**

Condition E3-3. of Title V permit number 572963 states, in pertinent part:

Air quality data reported must meet all the requirements set forth in the latest EPA Quality Assurance Handbook (Handbook), Volume II, Appendix D, Revision (currently Revision 1, dated March 2017)<sup>1</sup>; as specified in the Validation Templates. Validated ambient data and accompanying precision data are to be reported in the proper Air Quality System (AQS) format and must be accompanied by a statement of validation attesting data accuracy.

The monitoring sites will continue to be operated and maintained as directed by the Technical Secretary of the Air Pollution Control Board to ensure that complete, precise, and accurate data are generated and reported.

The SO<sub>2</sub> data submitted shall be judged complete if at least 75% of the hourly values per site per day and 75% of sampling days each calendar quarter of each year are reported.

The [Quality Assurance Project Plan] QAPP, once approved, must be utilized, and employed for all future ambient monitoring. Any deviation from the approved QAPP would be considered as evidence of noncompliance with this permit condition.

Page 5 of the approved QAPP (Version #09-2020) states, in pertinent part:

Multi-point calibrations are performed by Nyrstar maintenance employees at least quarterly during preventive maintenance activities and after any major repairs or maintenance to ensure continued optimum performance of the equipment regardless of the one-point quality control check and zero/span check results.

A one-point quality control check that is off more than 7 percent will trigger an action to submit a notification for maintenance work to inspect the SO<sub>2</sub> analyzer and correct the issue. Bi-weekly one-point quality control checks are required to be reported within the range of 0.005 - 0.080 ppm for SO<sub>2</sub>. Nyrstar currently sets the one-point quality control check at 0.080 ppm (7% would be a difference of 0.0056 ppm). This in house safety factor will help protect the integrity of the data.

A zero/span check in which the span drift is more than 7 percent will trigger an action to submit a notification for maintenance work to inspect the SO<sub>2</sub> analyzer and correct the issue. Nyrstar currently sets the zero/span check at 0.400 ppm (7% would be a difference of 0.028 ppm). This in-house safety factor will help protect the integrity of the data.

## **IX.**

Condition E5-8. of Title V permit number 572963 states:

The sulfur dioxide concentration in the acid plant tail gas stack shall not exceed 650 parts per million (0.065 percent by dry volume basis) maximum 2 hour average nor 233 pounds per hour of sulfur dioxide emissions.

40 CFR §60.173, TAPCR 1200-03-16-.24(4)(a), and 1200-03-09-.03(8)

Compliance Method: Compliance with this emission standard shall be determined through the use of continuous in-stack monitoring for sulfur dioxide.

Consistent with the provisions of Rule 1200-03-20-.06 of the Tennessee Air Pollution Control Regulations, no notice of violation shall be automatically issued unless the specified de minimums level of one (1) 24-hour period per year of sulfur dioxide emissions in excess of the applicable sulfur dioxide emissions standard, as measured by the continuous in-stack sulfur dioxide emissions monitoring system, is exceeded. This exemption is applicable provided that good operational and maintenance practices are utilized for both the process equipment and the associated air pollution control equipment, and the 90 percent operational availability of the sulfur dioxide monitoring system is maintained.

Written responses to the quarterly reports of excess emissions shall constitute prima facie evidence of compliance with the applicable sulfur dioxide emission standard. For purposes of annual certification of compliance with the applicable visible emissions condition, the acceptance, by the Division, of the quarterly reports of excess emissions shall be the basis of said certification.

## X.

The Division discovered the following violations based on the review of the monthly reports and data submitted by the Respondent for the first calendar quarter of 2023:

- The Respondent's cover letter for the January 2023 monthly report dated February 10, 2023, states:

At 00:00 on January 7<sup>th</sup>, the SO<sub>2</sub> analyzer [SN 0710321446] at the Meeks (0006) site malfunctioned. Upon investigation, it was determined that a bulb had failed. A replacement bulb has been ordered, but as of January 31<sup>st</sup>, the bulb has not been delivered or replaced inside this unit. Therefore, both SO<sub>2</sub> and SO<sub>2</sub>H5A data from January 7<sup>th</sup> until January 31<sup>st</sup> have been invalidated with the error code of AN – Machine Malfunction. A rental SO<sub>2</sub> analyzer [SN 1150990003] was installed at the Meeks site on February 2<sup>nd</sup>, and valid SO<sub>2</sub> data is being collected since that date.

This data loss resulted in only 65% of the hourly values being reported during the first calendar quarter of 2023 for the Meeks (0006) site. This fell short of the minimum data requirement of 75% as outlined in condition E3-3. of Permit 572963, resulting in an incomplete quarter of data.

- The data for the first calendar quarter of 2023 lacked any evidence of performing multi-point calibrations at either of the two SO<sub>2</sub> monitoring sites. The QAPP states that multi-point calibrations are performed, "at least quarterly during preventive maintenance activities and after any major repairs." At a minimum, the data should provide evidence of performing at least one multi-point calibration at each SO<sub>2</sub> site according to the QAPP. Furthermore, when

the rental SO<sub>2</sub> analyzer (SN 1150990003) was installed at the Meeks (0006) site on February 2<sup>nd</sup>, this installation required a multi-point calibration to be performed. The SO<sub>2</sub> Validation Template in Appendix D of the Handbook, which is included in the QAPP (Version #09-2020), states, “upon receipt/adjustment/repair/installation/moving,” a multi-point calibration must be performed. There was no evidence of a multi-point calibration being performed upon installation of the rental unit. The Respondent’s failure to perform the required multi-point calibrations in the first calendar quarter of 2023 demonstrated deviations from the QAPP and Appendix D of the Handbook, resulting in noncompliance with condition E3-3. of Permit 572963. Additionally, the data and reports indicated numerous instances of failures in one-point quality control and zero/span checks. To ensure the generation of complete, precise, and accurate data, the Division strongly recommended a timelier adherence to the statements outlined on page 5 of the QAPP that indicated these failed checks, “...will trigger an action to submit a notification for maintenance work to inspect the SO<sub>2</sub> analyzer and correct the issue.”

#### **XI.**

On June 28, 2023, the Division issued a Notice of Violation to the Respondent for the violations discussed in Paragraph X.

#### **XII.**

On or about July 13, 2023, the Division received the Respondent’s quarterly report of excess sulfur dioxide emissions from the Acid Plant Tailgas Stack. The quarterly report addressed data for the second (April - June) quarter of 2023. The Division’s assessment of the report indicated that the in-stack sulfur dioxide monitoring system achieved the 95 percent operational availability level required by condition E5-11. of Title V permit number 572963 for each month of data addressed.

The assessment of the data also denoted a total of 13 two-hour time periods extending over a 28 hour time frame between May 10, and 11, 2023, when the reported sulfur dioxide emission concentrations were in excess of the emission concentration standard of 650 parts per million by dry volume maximum based on a two-hour data average. The quarterly report indicated that the cause of the excess sulfur dioxide emissions was a condensate drain valve that had been left open

between the shell side and the tube side of heat exchanger #4 allowing condensate and sulfur dioxide gas from the roaster to bypass the converter and go directly to the final tower and tailgas stack without going through the converter. The quarterly report indicated that once the drains were closed no further sulfur dioxide exceedances were observed.

In reviewing this situation, reference was made to the definition of malfunction contained in 40 CFR 60.2:

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Based on the Respondent's explanation provided in the report, the Division did not consider that the stated cause of these reported excess sulfur dioxide emissions qualifies for excusal as having resulted from a malfunction.

In reviewing this situation reference was made to the de minimis language contained in the compliance method for condition E5-8. of Title V permit number 572963. Here it was noted that the total duration of the time period over which the excess sulfur dioxide emissions were reported exceeds the twenty-four hour time frame stipulated in the permit condition which precludes the applicability of this exception.

### **XIII.**

On August 1, 2023, the Division issued a Notice of Violation to the Respondent for the noncompliance with the sulfur dioxide standard of 650 parts per million by dry volume maximum based on a two-hour data average as stipulated in condition E5-8. of Title V permit number 572963. In addition, the Division noted that this time period of excessive sulfur dioxide emissions was not repeated for the remainder of the calendar quarter and procedures had been put in place to prevent a reoccurrence of this situation. For these reasons, the Division did not require a Proposed Schedule of Corrective Action (APC 115) to address the noncompliance.

### **VIOLATIONS**

### **XIV.**

By failing to comply with conditions E3-3. and E5-8. of Title V permit number 572963, 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**

#### **XV.**

The Respondent is assessed a civil penalty of \$17,500.00 for violation of the Act and Rules, to be paid to the Department at the following address:

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

The civil penalty shall be delivered to the Department on or before the thirty-first day after receipt of this Order and Assessment of Civil Penalty. The case numbers, APC23-0139 and APC23-0162, 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, 2<sup>nd</sup> 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 -326; 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.

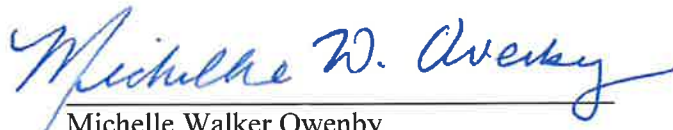
Technical questions and other correspondence involving compliance issues should be sent to:

Kevin McLain, Division of Air Pollution Control  
Department of Environment and Conservation  
William R. Snodgrass Tennessee Tower, 15<sup>th</sup> Floor

312 Rosa L. Parks Avenue  
Nashville, Tennessee 37243

Attorneys should contact the undersigned counsel of record. The case numbers, APC23-0139 and APC23-0162, 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, 2023.



Michelle Walker Owenby  
Technical Secretary  
Air Pollution Control Board

Reviewed by:



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William Freeman Miller  
BPR# 028826  
Senior Associate Counsel  
Department of Environment & Conservation  
312 Rosa L. Parks Avenue, 2<sup>nd</sup> Floor  
Nashville, Tennessee 37243  
(615) 532-0136  
William.F.Miller@tn.gov

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  
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Reference Information

APC23-0139 & APC23-0162 / vom

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1. Article Addressed to:  
Gladivee Garcia  
1800 Zinc Plant Road  
Clarksville, TN 37040-7092

2. Certified Mail (Form 3800) Article Number  
9414 7266 9904 2212 9418 55

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