

**ALLEGHENY COUNTY HEALTH DEPARTMENT  
AIR QUALITY PROGRAM**

In the Matter of:

United States Steel Corporation  
Clairton Works  
400 State Street  
Clairton, PA 15025

Violation No. 211207

Violations of Article XXI (“Air  
Pollution Control”) at property:

United States Steel  
Corporation – Clairton Plant  
400 State Street  
Clairton, PA 15025

**ENFORCEMENT ORDER**

**NOW**, this 15<sup>th</sup> day of December, 2021, the Allegheny County Health Department (hereinafter "ACHD") issues this Enforcement Order after it has found and determined the following:

1. The Director of the ACHD has been delegated authority pursuant to the federal Clean Air Act, 42 U.S.C. Sections 7401 -7671q (hereinafter “CAA”), and the Pennsylvania Air Pollution Control Act, 35 P.S. Sections 4001-4014 (hereinafter “APCA”), and the ACHD is a local health agency organized under the Local Health Administration Law, 19 P.S. §§ 12001-12028, whose powers and duties include the enforcement of laws relating to public health within Allegheny County including, but not limited to, the ACHD’s Rules and Regulations, Article XXI, Air Pollution Control (Allegheny County Code of Ordinances Chapters 505, 507 and 535) (hereinafter “Article XXI”).

2. United States Steel Corporation (hereinafter “U.S. Steel”) owns and operates a facility in Clairton, Allegheny County, Pennsylvania (Clairton Coke Plant). Clairton Coke Plant operates ten coke batteries and produces approximately 11,000 tons of coke per day from the destructive distillation (carbonization) of approximately 14,000 tons of coal. During the carbonization process, approximately 170 million cubic feet of coke oven gas are produced. The

volatile products of coal contained in the coke oven gas are recovered in the by-products plant. In addition to the coke oven gas, daily production of these by-products includes approximately 100,000 gallons of crude tar, 14,000 to 30,000 gallons of light oil, 40 tons of elemental sulfur, and 50 tons of ammonia.

3. On April 6, 2018, the ACHD issued Installation Permit Amendment No. 0052-I011b (hereinafter “IP-011b”) to U.S. Steel for C Battery.

4. On August 27, 2021, at 9:55 AM, U.S. Steel reported to the ACHD via telephone an obstruction in the standpipe of C Battery Oven C21 which caused venting from this oven. The date and time of the breakdown was August 27, 2021 at 9:00 AM (Breakdown No. 22089).

5. On August 27, 2021, at 11:13 AM, the ACHD received a voice message from U.S. Steel stating that a “restriction” in the standpipe was causing a release of emissions from the “charging hole,” and that they were working to clear this restriction.

6. On September 2, 2021, the ACHD received a follow-up report from U.S. Steel for the August 27 standpipe obstruction. The follow-up report indicated that emissions continued for 5.17 hours (5 hours and 10 minutes) until the obstruction was removed using air lances and the oven was connected to the collector main. The report stated that the following emissions were released as a result of the standpipe obstruction:

<b>Chemical</b>	<b>Quantity Released (lb)</b>
Hydrogen Sulfide (H <sub>2</sub> S)	6.75
Carbon Monoxide (CO)	49.50
Volatile Organic Compounds (VOC)	99.00
PM <sub>2.5</sub> (Filterable)	27.06
Coke Oven Emissions	7.85

7. On May 27, 2021, the ACHD signed Agreement 256731 with Keramida Environmental, Inc. (hereinafter “Keramida”) for Keramida to perform daily observations of doors, lids (charging ports or holes), offtakes, collection mains, and charging operations at the U.S. Steel Clairton Coke Plant under the provisions of USEPA Method 303 (such inspections hereinafter referred to as “Method 303 inspections”).

8. On September 8, 2021, Keramida submitted the Summary Report for Method 303 inspections performed during the month of August 2021. The Summary Report showed that five (5) lid leaks were observed on August 27, 2021 out of a total of 400 lids observed. This is a leak rate of 1.25% for August 27, 2021. Inspection of the raw data file submitted by Keramida for August 27, 2021 showed that all five leaks observed at C Battery on this date were from oven C21.

9. Based on the observation, on the same date as the breakdown, of a lid leak rate more than twice the limit from Condition V.A.1.e of IP-011b,<sup>1</sup> all of which occurred at the oven experiencing the breakdown; and based on U.S. Steel’s reporting of excess emissions resulting from the breakdown, ACHD has determined that U.S. Steel is in violation of Condition V.A.1.a of IP-011b, which states, “The permittee shall not operate C Battery coke ovens unless the PROven® System is installed and operating in such manner that the collector main is maintained at a negative pressure and each individual oven is maintained at the lowest positive pressure necessary to inhibit leaks of raw coke oven gas to the atmosphere from oven doors, charging port lids, and offtakes.”

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<sup>1</sup> The leak rate of 1.25% exceeds the visible emissions limit of 0.6% set forth in Condition V.A.1.e of IP-011b. This violation will be addressed separately in the Demand for Stipulated Penalties to be issued for the 3<sup>rd</sup> quarter of 2021.

10. Failure to operate the PROven® System in accordance with Condition V.A.1.a of IP-011b is a violation of Article XXI, §2102.03.c, which states, “It shall be a violation of this Article giving rise to the remedies provided by Part I of this Article for any person to fail to comply with any terms or conditions set forth in any permit issued pursuant to this Part.”

**ORDER**

**NOW THEREFORE**, pursuant to the authority granted to the ACHD by Article XXI §§ 2109.03.a.1 and the Local Health Administration Law, 19 P.S. § 12010, it is hereby ORDERED that:

11. For the violations set forth in the preceding paragraphs, U.S. Steel is hereby assessed a civil penalty of **FIVE THOUSAND FIVE HUNDRED DOLLARS** (\$5,500.00). The civil penalty is as follows:

**A. Gravity Based Component**

Violation	Gravity Based Penalty	Violation Days	Total Gravity Penalty
Failure to Operate PROven® System – IP 0052-I011b Condition V.A.1.a; §2102.03.c	\$2,500.00	1	\$ 2,500.00
<b>Gravity Component Subtotal</b>			<b>\$ 2,500.00</b>

**B. Adjustment Factors**

**Compliance History:** \$ 2,500.00  
 9 Issued violations in last 2 years

**Title V Source:** \$ 500.00

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**TOTAL CIVIL PENALTY** **\$ 5,500.00**

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12. U.S. Steel shall pay the civil penalty amount within thirty (30) days of receipt of this Order. Payment shall be made by corporate or certified check, or the like, made payable to

the “Allegheny County Clean Air Fund”, and sent to Air Quality Program Manager, Allegheny County Health Department, 301 39th Street, Bldg. #7, Pittsburgh, PA 15201.

13. The ACHD has determined the above civil penalty to be in accordance with Article XXI § 2109.06.b. reflecting relevant factors including, but not limited to: the nature, severity and frequency of the alleged violations; the maximum amount of civil and criminal penalties authorized by law; the willfulness of such violations; the impact of such violations on the public and the environment; the actions taken by U.S. Steel to minimize such violations and to prevent future violations; and U.S. Steel’s compliance history.

14. The gravity-based component of the civil penalty reflects the severity of the violation and the potential harm to the public or environment from the violation. The gravity-based component may be adjusted for factors and circumstances unique to the violator.

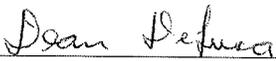
15. Please be advised that failure to comply with this Order within the times specified herein is a violation of Article XXI giving rise to the remedies provided by Article XXI § 2109.02 including civil penalties of up to \$25,000 per violation per day.

16. Pursuant to Article XI, § 1104.A (“Hearings and Appeals”), of the Allegheny County Health Department Rules and Regulations, you are notified that if you are aggrieved by this Order, a Notice of Appeal shall be filed no later than thirty (30) days after receipt of written notice or issuance of this Order. Such a Notice of Appeal shall be filed in the Office of the Director at 542 Fourth Avenue, Pittsburgh, PA 15219. This Order is enforceable upon issuance and any appeal of this Order shall not act as a stay unless the Director of the ACHD so orders. In the absence of a timely appeal, the terms of this Order shall become final.

17. Please be aware that if you wish to appeal this Order, you are required within 30 days of receipt of this Order to either forward the penalty amount of the ACHD for placement in

an escrow account or post an appeal bond to the ACHD in the amount of the penalty. Please review the specific requirements for prepaying the penalty or posting the appeal bond found in Article XXI § 2109.06.a.2-3. A copy of Article XXI and Article XI may be found at <https://www.alleghenycounty.us/Health-Department/Health-Department-Regulations.aspx>.

**DONE** and **ENTERED** this 15<sup>th</sup> day of December, 2021, in Allegheny County, Pennsylvania.

  
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Dean DeLuca  
Air Quality Program Manager

12/15/2021  
Date