ALLEGHENY COUNTY HEALTH DEPARTMENT AIR QUALITY PROGRAM

In the Matter of:

United States Steel Corporation Clairton Plant 400 State Street Clairton, PA 15025 Violation No. 240204

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

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

ENFORCEMENT ORDER

NOW, this 26th day of February, 2024, the Allegheny County Health Department (hereinafter "ACHD") issues this Enforcement Order after it has found and determined the following:

I. AUTHORITY

1. The Director of the ACHD has been delegated authority pursuant to the federal Clean Air Act, 42 U.S.C. §§ 7401 -7671q (hereinafter "CAA"), and the Pennsylvania Air Pollution Control Act, 35 P.S. §§ 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").

II. <u>BACKGROUND</u>

- 2. United States Steel Corporation (hereinafter "U. S. Steel") owns and operates a coke making facility in Clairton, Allegheny County, Pennsylvania (hereinafter "Clairton Coke Plant").
- 3. The Clairton Coke Plant currently operates seven coke batteries (Batteries 13, 14, 15, 19, 20, B, and C) and produces approximately 8,600 tons of coke per day from the destructive distillation (carbonization) of approximately 11,700 tons of coal.
- 4. During the carbonization process, approximately 150 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 95,500 gallons of crude tar and 33 tons of elemental sulfur.
- 5. Until March 31, 2023, the Clairton Coke Plan operated ten coke oven batteries (Batteries 1, 2, 3, 13, 14, 15, 19, 20, B, and C). On or about April 1, 2023, pursuant to Condition IV.35. of the renewed Major Source Operating Permit No. 0052 for the Clairton Coke Plant (hereinafter "2022 Clairton Operating Permit"), U. S. Steel permanently shut down Batteries 1, 2, and 3 at the Clairton Coke Plant.

Pushing Operations

- 6. Pushing is generally the operation by which coke that has completed the coking cycle is mechanically pushed from a coke oven into a traveling car ("hot car") and transported to a quench station where the coke is cooled with water. *See* Article XXI § 2101.20 (defining "pushing operation").
- 7. During normal operation of the coke oven batteries at the Clairton Coke Plant, a fume collection hood ("traveling hood") is moved into place above the hot car outside the door of a coke oven at the completion of the coking cycle for that oven. The door on the side of the

oven where the hot car is located ("coke side") is then removed prior to pushing coke from the oven.

- 8. Emissions occur during the pushing operation from activities such as: (a) the physical movement of the coke mass from the oven, (b) dropping of coke into the hot car, or (c) partial combustion of coke due to the high temperature of the coke contacting ambient air.
- 9. To significantly reduce emissions from the pushing operation, the traveling hood is connected to a fan which provides suction at the hood, pulling emissions from the pushing operation into the hood and through ductwork to the Pushing Emission Control ("PEC") baghouse.
- 10. At the PEC baghouse, the gas stream carrying pushing emissions passes through multiple filter compartments or modules. Each module contains a series of fabric filters, which together remove more than 99% of dust (i.e., filterable particulate emissions) from the gas stream before the stream is vented through a stack connected to that module.

Uncontrolled Pushing

- 11. The Clairton Coke Plant has experienced process and equipment failures, which resulted in: (a) the traveling hood not properly positioning above the hot car, (b) a loss of suction to the baghouse, and/or (c) other issues causing emissions not to be captured during the push.
- 12. The pushing of coke from an oven without first capturing and ducting the emissions to the PEC baghouse is known as an "uncontrolled push."
- 13. As identified in detail below, U. S. Steel elected to perform numerous uncontrolled pushes without capturing and ducting the emissions to the PEC baghouse, which resulted in increased filterable particulate emissions.

III. FINDINGS OF VIOLATIONS

14. On March 27, 2012, ACHD issued Major Source Operating Permit No. 0052 toU.S. Steel for the Clairton Coke Plant (hereinafter "2012 Clairton Operating Permit").

- 15. On November 21, 2022, ACHD issued the 2022 Clairton Operating Permit to U.S. Steel for the Clairton Coke Plant.
- 16. Condition V.B.1 ("Restrictions") of the 2012 and 2022 Clairton Operating Permits states:
 - a. The permittee shall not operate, or allow to be operated, Battery 1 or Battery 2 or Battery 3 coke ovens unless there is installed a pushing emission control system baghouse which is designed to reduce fugitive emissions from pushing
 - c. The permittee shall not operate, or allow to be operated Battery 1 or Battery 2 or Battery 3, unless the Battery 1, 2, & 3 PEC System baghouse is properly installed, operated and maintained according to the following conditions, at all times:
 - 1) Emissions due to the pushing of Battery 1, 2, & 3 coke ovens shall be vented through the PEC System baghouse dust collector.
- 17. Condition V.D.1 ("Restrictions") of the 2012 and 2022 Clairton Operating Permits states:
 - a. The permittee shall not operate, or allow to be operated, Battery 13 or Battery 14 or Battery 15 coke ovens unless there is installed a pushing emission control system baghouse which is designed to reduce fugitive emissions from pushing
 - c. The permittee shall not operate, or allow to be operated Battery 13 or Battery 14 or Battery 15, unless the Battery 13, 14, & 15 PEC System baghouse is properly installed, operated and maintained according to the following conditions, at all times:
 - 1) Emissions due to the pushing of Battery 13, 14, & 15 coke ovens shall be vented through the PEC System baghouse dust collector.
- 18. Condition V.F.1 ("Restrictions") of the 2012 and 2022 Clairton Operating Permits state:
 - a. The permittee shall not operate, or allow to be operated, Battery 19 or Battery 20 coke ovens unless there is installed a pushing emission control system baghouse which is designed to reduce fugitive emissions from pushing
 - c. The permittee shall not operate, or allow to be operated Battery 19

or Battery 20 unless the Battery 19 and 20 PEC System baghouse is properly installed, operated and maintained according to the following conditions, at all times:

- 1) Emissions due to the pushing of Battery 19 and 20 coke ovens shall be vented through the PEC System baghouse dust collector.
- 19. The ACHD has reviewed data regarding uncontrolled pushes for Batteries 1, 2, 3, 13, 14, 15, 19, and 20 provided by U. S. Steel in its monthly Process Information Reports dating from March 16, 2022, through January 15, 2024, as such reports are required under Conditions V.B.5.a, V.D.5.c, and V.F.5.c of the 2012 and 2022 Clairton Operating Permits, as well as information provided in Breakdown Reports submitted pursuant to Article XXI § 2108.01.c and U. S. Steel's 2022 Emission Inventory Statements submitted pursuant to Article XXI § 2108.01.e.
- 20. The ACHD has determined that from March 16, 2022, through December 31, 2023, uncontrolled pushes occurred at the above-mentioned batteries as shown in the table below:

	Uncontrolled Pushes					
Year	Batteries 1, 2, and 3	Batteries 13, 14, and 15	Batteries 19 and 20	Total		
	(Condition V.B.1.c)	(Condition V.D.1.c)	(Condition V.F.1.c)			
2022 (partial)	42	81	30	153		
2023	21	57	131	209		
Total	63	138	161	362		

- 21. Article XXI § 2103.10.b.3 ("Prohibition of Operation in Violation of Conditions") states: "It shall be a violation of this Article giving rise to the remedies provided by Section 2109.02 of this Article for any person to fail to comply with any terms or conditions set forth in any permit issued pursuant to this Subpart."
- 22. Article XXI § 2109.02.a.1. authorizes ACHD, per Article XXI § 2109.03, to order corrective action to remedy any violations of Article XXI.

- 23. Article XXI § 2109.02.a.4. authorizes ACHD, per Article XXI § 2109.06, to issue a civil penalty for each and any violation of Article XXI "or any order or permit issued" thereunder.
- 24. Each uncontrolled push is a separate violation of the applicable permit condition stated above for the Battery where the push occurred and of Article XXI.
- 25. ACHD finds that U. S. Steel's failures to use its pollution control equipment constitute failures to comply with the conditions set forth in the 2012 and 2022 Clairton Operating Permits, which, in turn, constitute 362 total violations of Article XXI § 2103.10.b.3.

IV. ORDER

NOW THEREFORE, pursuant to the authority granted to ACHD by Article XXI §§ 2109.02, 2109.03, and 2109.06 and the Local Health Administration Law, 19 P.S. § 12010, it is hereby ORDERED that:

- 26. Within thirty (30) days, U. S. Steel shall take action to prevent future uncontrolled, noncompliant pushes from occurring and provide ACHD with a plan to achieve and maintain compliance with its permit requirements to capture emissions from all pushes to the PEC baghouse. The compliance plan shall be subject to ACHD approval. Upon notification of ACHD's approval of the compliance plan, U.S. Steel shall immediately begin implementing the plan and complete implementation within forty-five (45) days following approval. U. S. Steel shall submit a report to ACHD within sixty (60) days following approval detailing actions completed and completion dates.
- 27. If ACHD determines that the compliance plan is ineffective in eliminating uncontrolled pushes, ACHD may require U. S. Steel to submit a revised compliance plan and/or may pursue remedies available to the ACHD under Article XXI §§ 2109.02, 2109.03, and 2109.06 for failure to comply with this Order. Such remedies may include but are not limited to imposing

a compliance schedule and plan on the U. S. Steel Clairton Coke Plant.

- 28. Nothing in this Order shall prohibit ACHD from taking further enforcement action for uncontrolled pushes not specifically identified in this Order.
- 29. 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 but not limited to civil penalties of up to \$25,000 per violation per day under Article XXI § 2109.06.
- 30. For the violations set forth in the preceding paragraphs, U. S. Steel is hereby assessed a civil penalty of **ONE MILLION, NINE HUNDRED, NINETY-ONE THOUSAND DOLLARS.** The civil penalty is as follows:

A. Gravity Based Component

	Gravity Based		Total Gravity	
Violation	Penal	Violations	Penal	
Uncontrolled Pushing: OP #0052, Conditions V.B.l.c, V.D.l.c, and V.F.l.c (Article XXI §2105.03)	\$2,500	362	\$905,000.000	
GRAVITY COMPONENT SUBTOTAL			\$905,000.000	

B. Adjustment Factor

TOTAL CIVIL PENALTY					\$1,991,000.00	
Title V Source:					\$181,000.00	
years						
Compliance History:	Eight	enforcement	actions	issued in last two	\$905,000.000	

- 31. 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, Enforcement, Allegheny County Health Department, 836 Fulton Street, Pittsburgh, PA 15233.
 - 32. 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 deterrence of future violations; the actions taken by U.S. Steel to minimize such violations and to prevent future violations; and U.S. Steel's compliance history.
- Ounty Health Department Rules and Regulations, and Article XXI §§ 2109.03.d. and 2109.06.a, 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 or Hearing Officer of the ACHD so orders. In the absence of a timely appeal, the terms of this Order shall become final, and the civil penalty shall become collectible.
- 34. Please be aware that if you wish to appeal this Order, you are required within 30 days of receipt of this Order to either (a) forward the penalty amount to the ACHD for placement in an escrow account, (b) post an appeal bond to the ACHD in the amount of the penalty, or (c) claim an inability to prepay the penalty or post the bond. When filing the appeal, failure to also forward the money, post the bond, or claim an inability to do either shall result in a waiver of all legal rights to contest the violation or the amount of the civil penalty. If you allege financial inability to prepay the penalty or post a bond, then you have the burden to prove it. 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 XI and Article XXI may be found at <a href="https://www.alleghenycounty.us/Services/Health-Department/Legal/Health-Department-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Legal/Health-Leg

Regulations.

DONE and **ENTERED** this 26 day of February, 2024, in Allegheny County, Pennsylvania.

Date: February 26, 2024

Allason Holt

Slenders

Air Quality Manager, Compliance and Enforcement Program