

**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. 220304

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 24th day of March, 2022 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. 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”).

## II. BACKGROUND

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 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.

4. 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.

### Pushing Operations

5. 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.

6. 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.

7. Emissions occur during the pushing operation from activities such as the physical movement of the coke mass from the oven, dropping of coke into the hot car, or partial combustion of coke due to the high temperature of the coke contacting ambient air.

8. 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.

9. 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 (filterable particulate emissions) from the gas stream before this stream is vented through a stack connected to that module.

### **Uncontrolled Pushing**

10. The Clairton Coke Plant has experienced process and equipment failures which resulted in the traveling hood to not properly position above the hot car, a loss of suction to the baghouse, or other issues causing emissions not to be captured during the push.

11. The pushing of coke from an oven without first capturing and ducting the emissions to the PEC baghouse is known as an “uncontrolled push.”

12. 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**

13. On March 27, 2012, the ACHD issued a Major Source Operating Permit No. 0052 to U.S. Steel for the Clairton Coke Plant (hereinafter “Clairton Operating Permit”).

14. The Clairton Operating Permit, Condition V.B.1 (“Restrictions”), 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.

15. The Clairton Operating Permit, Condition V.D.1 (“Restrictions”), 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.

16. The Clairton Operating Permit, Condition V.F.1 (“Restrictions”), states:

- 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.

17. 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 January 1, 2020 through March 15, 2022 as such reports are required under Conditions V.B.5.a, V.D.5.c, and V.F.5.c of the Clairton Operating Permit, as well as information provided in Breakdown Reports submitted pursuant to Article XXI, § 2108.01.c, and information provided in U.S. Steel’s 2020 Emission Inventory Statement submitted pursuant to Article XXI, § 2108.01.e.

18. The ACHD has determined that between January 1, 2020 and March 15, 2022, uncontrolled pushes occurred at the above-mentioned batteries as shown in the table below:

Year	Uncontrolled Pushes			
	Batteries 1, 2, and 3 (Condition V.B.5.a)	Batteries 13, 14, and 15 (Condition V.D.5.c)	Batteries 19 and 20 (Condition V.F.5.c)	Total
2020	155	34	79	268
2021	155	159	193	507
2022 (partial)	8	0	48	56
<b>Total</b>	<b>318</b>	<b>193</b>	<b>320</b>	<b>831</b>

19. 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.”

20. Each uncontrolled push is a separate violation of the applicable permit condition stated above for the battery where the push occurs and of Article XXI.

21. The ACHD finds that U.S. Steel's failures to use its pollution control device constitute 831 violations of Article XXI, § 2103.10.b.3, for failing to comply with the conditions set forth in the Clairton Operating Permit.

#### IV. ORDER

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

22. Within thirty (30) days, U.S. Steel shall take action to prevent future noncompliant pushes from occurring and provide ACHD with a plan to achieve and maintain compliance with its permit requirement to capture emissions from all pushes to the PEC baghouse. The compliance plan shall be subject to ACHD approval. Upon notification of the 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 the ACHD within sixty (60) days following approval detailing actions completed and completion dates.

23. If the ACHD determines that the compliance plan is ineffective in eliminating uncontrolled pushes, the ACHD may require U.S. Steel to submit a revised compliance plan.

24. Nothing in this Order shall prohibit the ACHD from taking further enforcement action for uncontrolled pushes not specifically identified in this Order.

25. 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.

26. For the violations set forth in the preceding paragraphs, U.S. Steel is hereby assessed a civil penalty of **FOUR MILLION FIVE HUNDRED SEVENTY THOUSAND FIVE HUNDRED DOLLARS** (\$4,570,500.00). The civil penalty is as follows:

<b>A. <u>Gravity Based Component</u></b>			
<b>Violation</b>	<b>Gravity Based Penalty</b>	<b>Violations</b>	<b>Total Gravity Penalty</b>
Uncontrolled Pushing: OP #0052, Conditions V.B.1.c, V.D.1.c, and V.F.1.c (Article XXI, § 2105.03)	\$2,500.00	831	\$2,077,500.00
<b>GRAVITY COMPONENT SUBTOTAL</b>			<b>\$2,077,500.00</b>
<b>B. <u>Adjustment Factors</u></b>			
<b>Compliance History:</b> 9 Issued violations in last 2 years			\$ 2,077,500.00
<b>Title V Source:</b>			\$ 415,500.00
<b>TOTAL CIVIL PENALTY</b>			<b>\$ 4,570,500.00</b>

27. 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.


28. 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

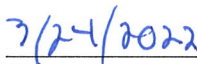
and the environment; the actions taken by U.S. Steel to minimize such violations and to prevent future violations; and U.S. Steel's compliance history.

29. 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.

30. 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 24<sup>th</sup> day of March, 2022, in Allegheny County,  
Pennsylvania.

  
\_\_\_\_\_  
Dean DeLuca  
Air Quality Program Manager

  
\_\_\_\_\_  
Date