#### Revision to

# ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS ARTICLE XXI, AIR POLLUTION CONTROL

§2105.21 Coke Ovens and Coke Oven Gas with Related §2101.20 Definitions and §2109.01 Inspections

and

# ALLEGHENY COUNTY'S portion of the PENNSYLVANIA STATE IMPLEMENTATION PLAN

for the Attainment and Maintenance of the National Ambient Air Quality Standards

(Revision Tracking No. 87)

(Document date: July 10, 2023)

### Table of Contents

#### 1. Revision

Changes to Article XXI Rules and Regulations:

- A. §2101.20, Definitions; and §2105.21, Coke Ovens and Coke Oven Gas
- B. §2109.01, Inspections

#### 2. Technical Support Document

#### 3. Documentation of Public Hearing and Certifications

Public hearing notice
Transmittals of hearing notice to EPA & PA DEP
Proof of publication of notice of hearing
Certification of hearing
Summary of comments and responses
Certification of approval and adoption

#### 1. Revision

## A. Coke Ovens and Coke Oven Gas Regulation Revision

Deletions are shown with strikethroughs.

Additions are shown **bolded and underlined.** 

**§2101.20 DEFINITIONS** {unless specifically indicated, all definitions effective October 20, 1995}

. . .

"Charging emissions" means any emissions occurring during the introduction of coal into the coke oven from the time that the gate(s) on the larry car coal hopper is opened or mechanical feeders start the flow of coal into the oven until the last charging port seal is replaced. Charging emissions include any air contaminant emitted from one or more charging ports, spaces between the charging port rings and the oven refractory, drop sleeves, larry car hoppers, open standpipes of the oven being charged and any associated air pollution control equipment, but shall not include emissions occurring during the temporary removal of a charging port seal for the purpose of sweeping excess coal spillage into the oven just charged, after such seal has been firmly seated over the charging port following the removal of the larry car. [effective Feb. 1, 1994. Amended October 26, 2022, effective November 5, 2022.]

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"Pushing emissions" means an air contaminant emitted into the outdoor atmosphere which is generated by or results from the pushing operation. {Added October 26, 2022, effective November 5, 2022.}

"Pushing <u>operation</u>" means the operation by which coke is removed from a coke oven and transported to a quench station, beginning, for the coke oven batteries designated 13, 14, 15, 20, and B at the USX Corporation Clairton Works, at the time the coke mass starts to move and ending at the time the coke transfer car enters the coke quenching system, and for all other coke oven batteries, beginning when the coke side door is first removed from a coke oven and continuing until the quenching operation is commenced. (Effective February 1, 1994. Amended October 26, 2022, effective November 5, 2022.)

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"Soaking emissions from a standpipe cap" means uncombusted emissions from an open standpipe which has been dampered off in preparation of pushing the coke mass out of the oven and shall end when pushing begins, i.e., when the coke side door is removed. (Added by August 29, 2013 amendment, effective September 23, 2013. Amended October 26, 2022, effective November 5, 2022.)

#### §2105.21 COKE OVENS AND COKE OVEN GAS

{portions effective August 15, 1997, the remainder effective February 1, 1994; Paragraph e.6 added June 22, 1995, effective July 11, 1995 and amended May 14, 2010 effective May 24, 2010; §2105.21.b, e, and h amended effective August 15, 1997; Subsection f amended February 12, 2007 effective April 1, 2007. Subsection i added August 29, 2013, effective September 23, 2013. Paragraph e.6 amended November 13, 2014, effective January 1, 2015, Subsections a through i amended and Subsection j added October 26, 2022, effective November 5, 2022.}

- a. **Charging.** No person shall operate, or allow to be operated:
  - 1. Any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978, in such manner that the aggregate of visible charging emissions exceeds a total of 55 seconds during any five (5) or fewer consecutive valid charges on such battery; or
  - 2. Any other battery of coke ovens in such manner that the aggregate of visible charging emissions exceeds a total of 75 seconds during any four (4) or fewer consecutive valid charges on such battery.
  - 3. Inspection Procedures. The following inspection technique shall be utilized for determining compliance with the coke oven charging standard as defined in this Subsection:
    - A. Observations of visible charging emissions shall be made from any point or points on the topside of a coke oven battery from which an observer can view the majority of any charging emissions which may be created during charging (typically at, but in no way limited to, a distance between 5 to 12 ovens);
    - B. Any U-tube system is part of the charging operation when it is connected during the charging of that oven, while any other offtakes are not included;
    - C. The observer will determine and record the total number of seconds that charging emissions are visibly being emitted. For each charge, the observer shall record the identification number of the oven charged and the approximate beginning time of the charge;
    - D. The observer will time the visible charging emissions with a timepiece (to the nearest half second) while observing the charging operation. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and shall not be added separately when calculating the total time. Upon observing any visible charging emissions being emitted from any part of the charging system, start the timepiece. Stop the timepiece when visible emissions are no

- longer being emitted. Restart the timepiece when or if visible emissions reoccur; start and stop the timepiece as often as needed during the same charging period;
- E. Open visible charging emissions shall not include any emissions observed after all the charging port seals have been replaced (i.e., the charging port lid is firmly seated) following the removal of the larry car, such as emissions occurring when a charging port lid is temporarily removed to allow the sweepin of spilled coal. In addition, visible charging emissions from the coke oven doors or the leveling bar shall not be included, or visible charging emissions which were previously counted;
- F. The total number of seconds of visible charging emissions observed, clock time for the initiation and completion of the charging operation for each oven, battery identification and oven number for each charge shall be recorded by the observer;
- G. In the event that observations of emissions from a charge are interrupted, the data from that charge may be invalidated. If the charge is invalidated, the observer shall note on their observation sheet the reason for invalidating the data and the observer may then resume observation of the next charge or charges;
- H. Compliance is determined by adding the number of seconds of charging emissions observed during a set of charges of either four or five charges, depending on whether the coke oven charging standards set forth in Paragraphs a.1 or a.2 of this Section apply;
- I. An observer may stop the observation when the number of seconds of charging emissions observed exceeds the coke oven charging standard set forth in Paragraphs a.1. and a.2. of this Section even if a full set of four or five charges have not been observed. A subsequent inspection may be conducted starting with the next set of charges; however, if the observer stops an observation, the observer cannot resume observing charging observations until after the original set of ovens are all charged; and
- J. These procedures include some, but not all, aspects of EPA

  Method 303. In order to ensure a full understanding of the inspection procedures set forth in this Subsection, the observer shall also maintain current certification for Method 303

#### observations.

- b. **Door Areas.** No person shall operate, or allow to be operated, any battery of coke ovens in such manner that:
  - 1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley
    Works Clairton Plant, at any time, there are visible emissions from
    more than three percent (3.0%) of the door areas of the operating
    coke ovens in such battery, excluding the two door areas of the last
    oven charged and any door areas obstructed from view as calculated
    in Subparagraph 8.B of this Subsection;
  - 42. For any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after between the dates of January 1, 1978, and October 31, 2012, at any time, there are visible emissions from more than five percent (5.0%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view;
  - 2. For any other batteries, other than those subject to Paragraph b.3 of this Section, at any time, there are visible emissions from more than tenpercent (10%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view:
  - 3. For any of the following batteries, at any time, there are visible emissions from more than eight percent (8.0%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view:

#### SPECIFIC COKE OVEN BATTERIES

Source Name		Location
A.	Coke Battery #1	<u>U. S. Steel</u> <del>USX</del> Corp. Clairton, PA
B.	Coke Battery #2	<u>U. S. Steel</u> <del>USX</del> Corp. Clairton, PA
C.	Coke Battery #3	<u>U. S. Steel</u> <del>USX</del> Corp. Clairton, PA
<del>D.</del>	Coke Battery #7	USX Corp. Clairton, PA
<del>E.</del>	Coke Battery #8	USX Corp. Clairton, PA
<del>F.</del>	Coke Battery #9	USX Corp. Clairton, PA
<u><b>D</b></u> <del>G</del> .	Coke Battery #19	U. S. Steel USX Corp. Clairton, PA;

- 4. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley

  Works Clairton Plant, emissions from the door areas of any coke oven
  exceed an opacity of 30% at any time 15 or more minutes after such
  oven has been charged;
- 5. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article;
- 6. For any batteries, other than those subject to Paragraphs b.4 or b.5 of this Section, Eemissions from the door areas of any coke oven exceed an opacity of 40% at any time 15 or more minutes after such oven has been charged.
- 57. Unless for any of the following batteries at the <u>U. S. Steel USX</u>
  <u>Corporation Mon Valley Clairton Coke</u> Works <u>Clairton Plant</u>, <u>Clairton</u>,

  Pennsylvania, there is installed big plug doors, <u>or better</u>, on the coke side of each oven by January 1, 2000. Any replacement doors on theses batteries, replaced after January 1, 2000, will also be big plug doors. A big plug door is a door that, when installed, contains a plug with minimum dimensions as listed below:

#### SPECIFIC COKE OVEN BATTERIES

	Source Name	Minimum Width	Minimum Depth
A.	Coke Battery #1	18 1/4"	14 1/2"
В.	Coke Battery #2	18 1/4"	14 1/2"
C.	Coke Battery #3	18 1/4"	14 1/2"
Đ.	Coke Battery #7	17"	<del>16 3/16"</del>
<del>E.</del>	Coke Battery #8	17"	<del>16 3/16"</del>
<del>F.</del>	Coke Battery #9	17"	<del>16 3/16"</del>
<u>D.</u> G.	Coke Battery #19	17"	16 1/4"
<u>E.</u> H.	Coke Battery #20	17"	16 1/4"

#### 8. Inspection Procedures.

- A. Compliance with the high opacity limitation as defined in

  Paragraphs b.4 through b.6 of this Section or source permit for
  a single door area is determined in accordance with the
  following method:
  - i. The observer shall place themselves no less than 25 feet from the face of the door in a location where their view of the door area is unobstructed;
  - ii. The observer's position for high opacity door areas must meet the sun angle requirements of 40 CFR Part 60, Appendix A, Method 9;
  - iii. The observer shall record the maximum observed
    opacity of emissions emanating from a point above the
    top, or at the top of the door, but below the battery top,
    or at the top of any local door area emission control
    hood;
  - iv. For determining compliance with Paragraphs b.4 and b.6, a 15 minute exclusion from the opacity limitation shall be allowed after such oven has been charged. The operator shall provide the observer with the time when the charging period ends on such oven. If the operator does not provide the time the charging period ends, the observer may presume that the 15 minute exclusion has expired at the start of the inspection of such oven;
  - v. The observer shall have a current certification as a qualified observer for EPA Method 9;
  - vi. The observer shall, as much as possible, make
    observations from a position such that their line of
    vision is approximately perpendicular to the plume
    direction and a position which provides a clear view of
    emissions as long as the observation position complies
    with Section 2.1 of Method 9; and
  - vii. Opacity observations shall be made at the point of
    greatest opacity in that portion of the plume where
    condensed water vapor is not present. Once the
    observer notices a potential high opacity door emission,
    the observer shall momentarily look away from the

door emissions before conducting a high opacity door reading. The observer shall look no longer than a few continuous seconds at the plume. If more than a few seconds are needed, the observer shall momentarily look away to recalibrate their eyes before observing the plume again.

- B. Compliance with the percent door area leakage standard as defined in Paragraphs b.1 through b.3 of this Section is determined in accordance with the following method:
  - i. The intent of this procedure is to determine visible
    emissions from door areas by carefully observing the
    door area from a standard distance while walking at a
    normal pace;
  - ii. The observer shall walk the length of the battery at a steady, normal walking pace sufficient to allow the inspector to observe any emissions from the door and differentiate any emissions from steam. The observer shall record the actual traverse time for the battery with a timepiece;
  - iii. Each door area should be observed in sequence;
  - iv. The observer shall place themselves no less than 25 feet from the face of the door unless readings are being conducted from the bench area in front of the doors;
  - v. For purposes of determining compliance with this

    Subsection, "operating oven" means any oven which is
    not out of operation for purposes of a rebuild or
    attributable to maintenance sufficiently extensive so as
    to require the oven be skipped in the charging
    sequence;
  - vi. Visible emissions from hot coke that has been spilled on the bench as a result of pushing shall not be recorded as a door area visible emission;
  - vii. If the observer's view of a door area(s) is more than momentarily obstructed by, for example, door machinery, pushing machinery, coke guide, or opaque steam plumes, the observer shall record the oven number(s) or door area(s) obstructed and the nature of the obstruction and continue the observations with the

#### next door area in sequence which is not obstructed;

- viii. The observer shall continue as per Subparagraphs B.i.

  through B.vii. above along the entire length of the
  battery for any battery side and shall record the battery
  identification, battery side, and oven door identification
  number of each door area exhibiting visible emissions.
  Before completing the traverse or immediately
  thereafter the observer shall attempt to re-observe the
  obstructed doors;
- based on the times provided by the operator. If the operator does not provide the times of the ovens charged, the observer shall indicate a "0" for the "number of door areas with visible emissions from the last oven charged" and a "1" for the "number of door areas from the last oven charged" for each inspected battery side for the formula in Subparagraph B.x or B.xi;
- x. For batteries that have sheds on the coke side that are used to control emissions during pushing or if it is unsafe to observe from the yard, the inspection should be conducted from the bench area in front of the doors.

  A bench correction factor shall be applied to the number of leaks observed from the bench areas to calculate a yard equivalent reading. The following formula shall be used to calculate the yard equivalent reading:

Yard
equivalent
reading

Total number of
door areas observed
from the bench –
Number of
door areas observed
from the bench –
Number of
door areas observed
from the bench –
Number of door
areas from the
last oven charged

xi. Compliance shall be calculated by application of the following formula rounded to the nearest tenth of one percent. If a bench correction factor was applied under Subparagraph B.x, above, the yard-equivalent reading shall be included in the "number of door areas with visible emissions" in the formula below:

 $Percent leaking = \frac{\begin{pmatrix} number of door areas with visible emissions \\ on operating ovens - number of obstructed \\ door areas with visible emissions - \\ number of door areas with visible emissions \\ \hline from the last oven charged \\ number of door areas on operating ovens - \\ number of obstructed door areas - \\ number of door areas from the last oven charged \\ \end{pmatrix} \times 100$ 

- xii. These procedures include some, but not all, aspects of
  EPA Method 303. In order to ensure a full
  understanding of the inspection procedures set forth in
  this Subsection, the observer shall also maintain current
  certification for Method 303 observations.
- c. **Charging Ports.** No person shall operate, or allow to be operated:
  - 1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley
    Works Clairton Plant, in such manner that, at any time, there are
    visible emissions from more than 0.6% of the charging ports or
    charging port seals on the operating coke ovens of such battery,
    excluding any charging ports obstructed from view; or
  - 42. Any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made on or after between the dates of January 1, 1978, and October 31, 2012, in such manner that, at any time, there are visible emissions from more than one percent (1.0%) of the charging ports or charging port seals on the operating coke ovens of such battery, excluding any charging ports obstructed from view; or
  - 3. Any batteries installed, replaced, or reconstructed, or at which a major modification was made after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article.

- 24. Any other battery of coke ovens, other than those subject to Paragraphs c.1, c.2 or c.3 of this Section, in such manner that, at any time, there are visible emissions from more than two percent (2.0%) of the charging ports or charging port seals on the operating coke ovens of such battery, excluding any charging ports obstructed from view.
- 5. Inspection Procedures. The following inspection technique shall be utilized for determining compliance with the percent charging port leakage standard as defined in this Subsection:
  - A. Observations of any visible emissions from charging ports or charging port seals, other than charging or pushing emissions, shall be made and recorded during the time an observer walks the topside of a battery from one end to the other, walking near the center of the battery but may deviate from this path to avoid visual interferences, safety hazards, and any other obstacles;
  - B. Each oven shall be observed in sequence during each of the traverses. The observer shall walk the length of the battery at a steady, normal walking pace sufficient to allow the inspector to observe any emissions from the charging ports or charging port seals and differentiate any emissions from steam and shall record the actual traverse time with an appropriate timepiece (note that charging ports from the last oven charged may be in the process of being sealed);
  - C. The observer shall record the battery and lid identification, the oven number, and whether an oven was dampered off or obstructed from view. The number of charging ports from dampered off ovens (not to exceed three ovens) will be excluded as described in the formula in Subparagraph F below:
  - D. For purposes of determining compliance with this Subsection,

    "operating oven" means any oven which is not out of operation
    for purposes of a rebuild or attributable to maintenance
    sufficiently extensive so as to require the oven be skipped in the
    charging sequences;

- E. The observer shall not count the following as charging port or charging port seal visible emissions:
  - i. Visible emissions from between the brickwork and oven lid casing or visible emissions from cracks in the oven brickwork. The observer shall make an appropriate notation under "Comments";
  - ii. Visible emissions from charging ports involved in a charging operation. The observer shall record the oven number, and make an appropriate notation (e.g., not observed because ports open for charging) under "Comments";
  - iii. Charging ports having maintenance work done. The observer shall record the oven number and make an appropriate notation under "Comments";
  - iv. Condensing water from wet-sealing material; and
  - v. <u>Visible emissions from the flue inspection ports and caps.</u>
- F. Compliance is determined by application of the following formula rounded to the nearest tenth of one percent; and

Percent leaking = 

| number of charging ports with visible emissions on operating ovens - number of charging ports with visible emissions from charging ports obstructed from view - number of charging ports with visible emissions on dampered off ovens, not to exceed three ovens 
| number of charging ports on operating ovens - number of charging ports obstructed from view - number of charging ports on dampered off ovens, not to exceed three ovens

G. These procedures include some, but not all, aspects of EPA

Method 303. In order to ensure a full understanding of the
inspection procedures set forth in this Subsection, the observer
shall also maintain current certification for Method 303
observations.

- d. **Offtake Piping.** No person shall operate, or allow to be operated:
  - 1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley
    Works Clairton Plant, in such manner that, at any time, there are
    visible emissions from more than three percent (3.0%) of the offtake
    piping on the operating coke ovens of such battery, excluding any
    offtake piping obstructed from view;
  - 42. Any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made on or after between the dates of January 1, 1978, and October 31, 2012, in such manner that, at any time, there are visible emissions from more than four percent (4.0%) of the offtake piping on the operating coke ovens of such battery, excluding any offtake piping obstructed from view;
  - 3. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article; or
  - 24. Any other battery of coke ovens, other than those subject to Paragraphs d.1, d.2 or d.3 of this Section, in such manner that, at any time, there are visible emissions from more than five percent (5.0%) of the offtake piping on the operating coke ovens of such battery, excluding any offtake piping obstructed from view.
  - 5. Inspection Procedures. The following inspection technique shall be utilized for determining compliance with the percent offtake piping leakage standard as defined in this Subsection:
    - A. Observations of any visible emissions from the offtake piping shall be made by traversing the topside of the battery near the center of the battery, but may deviate from this path to avoid visual interferences, safety hazards, and any other obstacles;
    - B. During the traverse, the observer may deviate from near the center of the battery and walk as close, or far as possible to the offtake piping to determine whether an observed emission is emanating from the offtake piping. In addition to items specifically listed in the definition for offtake piping in §2101.20 of this Article, the damper used for isolating the oven from the collecting main is also part of the offtake piping;

- C. The observer shall traverse the battery once per each collector main. Therefore, to observe a battery with two collector mains, one observer may traverse the battery in one direction for one offtake system and traverse the battery in one direction for the second offtake system or two observers can traverse the battery in one direction;
- D. Each oven should be observed in sequence. The observer shall walk the length of the battery at a steady, normal walking pace sufficient to allow the inspector to observe any emissions from the offtake piping and differentiate any emissions from steam and shall record the actual traverse time with an appropriate timepiece;
- E. The observer shall record the battery identification, side of the oven, the oven number for all offtake piping visible emissions and whether an oven was dampered off or obstructed from view. The number of offtake piping from dampered off ovens (not to exceed three ovens) will be excluded as described in the formula in Subparagraph I below;
- F. If any part or parts of offtake piping has or have visible emissions, the observer shall count it as one emitting offtake piping;
- G. Offtake piping with open standpipes for decarbonization or closed and sealed standpipes on such oven being charged would be counted as offtake piping obstructed from view in the formula in Subparagraph I below. Offtake piping with open standpipes on such oven being charged would count as charging emissions. All visible emissions from closed standpipe caps, excluding such oven being charged, count as offtake piping leaks;
- H. For purposes of determining compliance with this Subsection,

  "operating oven" means any oven which is not out of operation
  for purposes of a rebuild or attributable to maintenance
  sufficiently extensive so as to require the oven be skipped in the
  charging sequence;

I. Compliance is determined by application of the following formula rounded to the nearest tenth of one percent; and

Percent leaking = 

| number of offtake piping with visible emissions on operating ovens - number of offtake piping with visible emissions from offtake piping obstructed from view - number of offtake piping with visible emissions on dampered off ovens, not to exceed three ovens 
| number of offtake piping on operating ovens - number of offtake piping obstructed from view - number of offtake piping on dampered off ovens, not to exceed three ovens

- J. These procedures include some, but not all, aspects of EPA

  Method 303. In order to ensure a full understanding of the inspection procedures set forth in this Subsection, the observer shall also maintain current certification for Method 303 observations.
- e. **Pushing.** No person shall operate, or allow to be operated, any battery of coke ovens unless there is installed on such battery a pushing emission control device which is designed to reduce fugitive emissions from pushing to the minimum attainable through the use of BACT<sub>2</sub>, nor shall any person operate, or allow to be operated any battery of coke ovens in such manner that:

No person may permit the pushing of coke from a coke oven unless the pushing operation is enclosed during the removal of coke from a coke oven and pushing emissions are contained, except for the fugitive pushing emissions, that are allowed by Paragraphs 4 and 5 of this Subsection nor shall any person operate, or allow to be operated any battery of coke ovens in such manner that:

1. At any time, the particulate mass emission rate from the pushing emission control device, for any battery other than those subject to Paragraph e.2 or e.3 of this Section, exceeds a rate determined by an outlet concentration of 0.020 grains per dry standard cubic foot, or the rate determined by the following formula, whichever is greater:

2. At any time, the particulate mass emission rate from the pushing emission control device, for any of the following batteries, exceeds a rate determined by an outlet concentration of 0.010 grains per dry standard cubic foot:

#### SPECIFIC COKE OVEN BATTERIES

Source Name		Location
A.	Coke Battery #1	<u>U. S. Steel</u> <del>USX</del> Corp. Clairton, PA
B.	Coke Battery #2	<u>U. S. Steel</u> <del>USX</del> Corp. Clairton, PA
C.	Coke Battery #3	<u>U. S. Steel</u> <u>USX</u> Corp. Clairton, PA
<del>E.</del>	Coke Battery #7 Coke Battery #8 Coke Battery #9	USX Corp. Clairton, PA  USX Corp. Clairton, PA  USX Corp. Clairton, PA
<u>D.</u> <del>G.</del>	Coke Battery #19	<u>U. S. Steel</u> <del>USX</del> Corp. Clairton, PA
<del>H.</del>	Coke Battery #1	Shenango Inc Neville PA

3. At any time, the particulate mass emission rate from the pushing emission control device, for any of the following batteries Coke Oven Battery B at the U. S. Steel Corporation Mon Valley Works Clairton Plant, exceeds a rate determined by an outlet concentration of 0.040 pounds per ton of coke;

#### **SPECIFIC COKE OVEN BATTERIES**

Sour	ce Name	Location
A	Coke Battery #13	USX Corp. Clairton, PA
<del>B.</del>	Coke Battery #14	USX Corp. Clairton, PA
<del>C.</del>	Coke Battery #15	USX Corp. Clairton, PA
<del>D.</del>	Coke Battery #20	USX Corp. Clairton, PA
<u>E.</u>	Coke Battery B	USX Corp. Clairton, PA

- 4. Fugitive pushing emissions or emissions from the pushing emission control device outlet equal or exceed an opacity of 20% at any time, except if the Department determines in writing, upon written application from the person responsible for the coke ovens setting forth all information needed to make such determination, that such emissions are of only minor significance with respect to causing air pollution and do not prevent or interfere with the attainment or maintenance of any ambient air quality standard (any such determination shall be submitted as a proposed revision to Allegheny County's portion of the SIP);
- 5. Visible emissions from the transport of hot coke in the open atmosphere exceed ten percent (10%) opacity at any time; or
- 6. For any of the following batteries, at any time, the hot coke fails to be held under the hood of the pushing emission control (PEC) device for at least 67 seconds immediately after the pusher ram begins to move and the damper to the PEC device is opened or for at least 15 seconds immediately following the fall of the last of the coke into the hot car, whichever is longer:

#### SPECIFIC COKE OVEN BATTERIES

Source Name		Location
A. B. C.	Coke Battery #1 Coke Battery #2 Coke Battery #3	U. S. Steel USX Corp. Clairton, PA U. S. Steel USX Corp. Clairton, PA U. S. Steel USX Corp. Clairton, PA
	Coke Battery #7 Coke Battery #8 Coke Battery #9	USX Corp. Clairton, PA USX Corp. Clairton, PA USX Corp. Clairton, PA
	Coke Battery #13 Coke Battery #14 Coke Battery #15	U. S. Steel USX Corp. Clairton, PA U. S. Steel USX Corp. Clairton, PA U. S. Steel USX Corp. Clairton, PA
	Coke Battery #19 Coke Battery #20	<u>U. S. Steel</u> <u>USX</u> Corp. Clairton, PA <u>U. S. Steel</u> <u>USX</u> Corp. Clairton, PA

except that this Paragraph shall only be effective during the period from 30 days following the issuance of a written notice by the Department to the owner or operator of such battery that EPA has required the implementation of the contingency measures under the portion of the PM-10 SIP for the Liberty Borough/Clairton area, until issuance of a written notice by the Department that such measures are no longer required.

- 7. Inspection Procedures. Compliance with the visible emission standards for pushing under this Subsection shall be determined in accordance with the following methods:
  - A. Visible emission observers shall be certified in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9;
  - B. In making pushing observations the observer shall be positioned in accordance with the provisions of Section 2.1 of Method 9;
  - C. The provisions of Section 2.2 of Method 9 shall apply based on the observer's initial position and the pushing emissions field data sheets shall include all of the items in Section 2.2 of Method 9;
  - D. The provisions of Section 2.3 of Method 9 do not apply in that observers are not required to take readings at fifteen second intervals. The observer shall look no longer than a few continuous seconds at the plume. If more than a few seconds is needed, the observer shall momentarily look away to recalibrate their eyes before observing the plume again;
  - E. The provisions of Sections 2.4 and 2.5 of Method 9 do not apply except that opacity observations shall be recorded to the nearest 5 percent;
  - F. In viewing the pushing operation, the observer shall stand on the coke side of the battery where a clear view of the push can be obtained. This generally should be a location on the ground, in the coke side yard, outside the hot car tracks approximately perpendicular to the observed oven. However, the observer is not restricted to the ground level, but may make observation from an elevated level as long as the observation position complies with Section 2.1 of Method 9.

    The reader may change locations during a single oven reading but shall not take readings while in transit;
  - G. During the pushing operation, the reader shall observe all the pushing emissions. Pushing operation, as defined in §2101.20 of this Article, begins when the coke side door is first removed from a coke oven and continuing until the quenching operation is commenced. Pushing emissions include all fugitive emissions leaving an oven during a push, emissions from the pushing

- emission control device outlet and, evaluated separately, emissions from open quench cars during the transport of hot coke in the open atmosphere;
- H. Except as provided in Subparagraph I below, compliance is determined by observing any visible emissions with opacity equal to or greater than the opacity limit defined in §2105.21.e.4 or applicable source permit, as determined against any contrasting background. The reader shall independently observe emissions from the pushing emission control device gas cleaning outlet and fugitive emissions from the pushing operation; and
- I. Pushing emissions during the transport of hot coke in the open atmosphere to the quench tower shall be evaluated separately.

  In this case, the reader shall be positioned in accordance with Subparagraphs B and F above using the opacity limit defined in §2105.21.e.5 or applicable source permit.
- f. **Combustion Stacks.** No person shall operate, or allow to be operated, any battery of coke ovens in such manner that, at any time, emissions from the combustion stack serving such battery:
  - 1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley
    Works Clairton Plant, exceed a total particulate concentration of
    0.010 grains per dry standard cubic foot;
  - 42. For any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was on or after made between the dates of January 1, 1978, and October 31, 2012, exceed a total particulate concentration of 0.015 grains per dry standard cubic foot;
  - 3. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article.
  - 24. For any battery other than those subject to Paragraphs f.1, f.2 or f.3 of this Section, exceed a particulate concentration of 0.030 grains per dry standard cubic foot;
  - 35. Equal or exceed an opacity of 20% for a period or periods aggregating in excess of three (3) minutes in any 60 minute period; or

- 46. Equal or exceed an opacity of 60% at any time.
- 7. Measurements of opacity visible emissions shall be performed according to the methods for visible emissions established by \$2107.11 of this Article. in either of the following two ways:
  - A. Using any continuous opacity monitoring system (COMS)
    required by regulation, permit, consent agreement, consent
    decree, or enforcement order. Chapter 2 of the Allegheny
    County Source Testing Manual, entitled "Continuous Emission
    Monitoring," provides requirements for certification and
    ongoing verification of continuous opacity monitoring systems;
    or
  - B. In determining compliance with the visible emission standards,
    40 CFR Part 60, Appendix A, Method 9, shall be used except
    that the provisions of Section 2.5 of Method 9 do not apply.
    Rather than applying the provisions of Section 2.5 of Method
    9, each observation that is recorded to be equal to or greater
    than the opacity standard in §2104.01.a.1 or applicable source
    permit shall be counted in determining the hourly aggregated
    period.
- g. Quenching. No person shall quench, or allow the quenching of, coke unless the emissions from such quenching are vented through a baffled quench tower and the water used for such quenching meets the requirements of 40 CFR 63 Subpart CCCCC. Make-up water for quenching shall be equivalent to, or better than, the water quality standards established for the nearest stream or river by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, PL. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the nearest stream or river may be used for make-up water for the quenching of coke. The nearest stream or river to the U.S. Steel USX Corporation Mon Valley Works Clairton Plant facility in Clairton, PA, shall be the Monongahela River. Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.

- h. **Coke oven gas.** Except as provided for in this Section, no person shall operate, or allow to be operated, any source in such manner that unburned coke oven gas is emitted into the open air. In addition, no person shall flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed, or combusted, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to the following concentrations:
  - 1. Where the rated production capacity of the coke plant producing such gas is less than 70 million standard cubic feet of coke oven gas per day, a concentration of 70 grains per hundred dry standard cubic feet of coke oven gas or the concentration determined by the following formula whichever is less:

 $A = 156E^{-0.27}$  where A = allowable hydrogen sulfide content in grains

per hundred dry standard cubic feet of coke

oven gas, and

E = maximum coke oven gas production rate in

millions of cubic feet per day;

- 2. For all coke batteries installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978, where the rated production capacity of the coke plant producing such gas is equal to or more than 70 million standard cubic feet of coke oven gas per day, other than those subject to Paragraph h.3 of this Section, a concentration of ten (10) grains per hundred dry standard cubic feet of coke oven gas;
- 3. For the following battery, on and before December 31, 1996, a concentration of 45 grains per hundred dry cubic feet of coke oven gas, and after December 31, 1996, a concentration of 34 grains per hundred dry cubic feet of coke oven gas:

#### SPECIFIC COKE OVEN BATTERIES

	Source Name	<u>Location</u>
Α.	Coke Battery #1	Shenango Inc Neville PA

3 4. The standard set forth in Paragraph h.2 of this Section for the following coke oven batteries designated 13, 14, 15, 20, and B at the <u>U. S. Steel USX</u> Corporation <u>Mon Valley Works</u> Clairton <u>Plant Works</u> shall be deemed satisfied for such batteries if the coke oven gas from the following batteries and treated by the Clairton <u>Plant Works</u> coke oven gas desulfurization system in existence as of June 24, 1993, has a sulfur compound concentration, measured as H<sub>2</sub>S, of no greater than <u>35</u> 40 grains per hundred dry standard cubic feet of coke oven gas produced by the Clairton Works, when all sulfur emissions from its Claus Sulfur Recovery

Plant and the tail gas cleaning equipment thereon, expressed as equivalent  $H_2S$ , are added to the measured  $H_2S$ .

#### SPECIFIC COKE OVEN BATTERIES

Source Name		Location
A.	Coke Battery #1	U. S. Steel USX Corp. Clairton, PA
B.	Coke Battery #2	U. S. Steel USX Corp. Clairton, PA
C.	Coke Battery #3	U. S. Steel USX Corp. Clairton, PA
<del>D.</del>	Coke Battery #7	USX Corp. Clairton, PA
<del>E.</del>	Coke Battery #8	USX Corp. Clairton, PA
<del>F.</del>	Coke Battery #9	USX Corp. Clairton, PA
<b>D.</b> G.	Coke Battery #13	U. S. Steel USX Corp. Clairton, PA
E. H.	Coke Battery #14	U. S. Steel USX Corp. Clairton, PA
<u>F.</u> <del>I.</del>	Coke Battery #15	U. S. Steel USX Corp. Clairton, PA
	-	
<u>G.</u> J.	Coke Battery #19	U. S. Steel USX Corp. Clairton, PA
H. K.	Coke Battery #20	U. S. Steel USX Corp. Clairton, PA
<u>I.</u> <del>L.</del>	Coke Battery B	U. S. Steel USX Corp. Clairton, PA

**4** 5. For all other coke batteries, where the rated production capacity of the coke plant producing such gas is equal to or more than 70 million standard cubic feet of coke oven gas per day, other than those subject to Paragraph h.2 or h.3 of this Section, a concentration of **fifty** (50) grains per hundred dry **standard** cubic feet of coke oven gas.

The concentration of sulfur compounds specified by this Subsection shall include tail-gas sulfur, measured as hydrogen sulfide, emitted from sulfur removal equipment.

- i. Soaking. No person shall operate, or allow to be operated, any battery of coke ovens in such manner that:
  - 1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley

    Works Clairton Plant, at no time shall soaking emissions from a

    standpipe cap opening exceed ten percent (10%) opacity.
  - 2. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph, shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article.
  - 3. For any batteries, other than those subject to Paragraphs i.1 or i.2 of this Section, Aat no time shall soaking emissions from a standpipe cap opening exceed twenty percent (20%) opacity.

An exclusion from this the opacity limits of Paragraphs i.1 and i.3 shall be allowed for two (2) minutes after a standpipe cap is opened.—Compliance with this standard shall be determined through observing the standpipe from a position-where the observer can note the time the oven is dampered off and, following the two minute exclusion, read the soaking emissions from the open standpipe in accordance with Method 9. During the two (2) minute exclusion, all air pollution control equipment and control techniques shall be operated consistent with good air pollution control practices. For purposes of this Subsection, good air pollution control practices may include, but are not limited to, lighting or attempting to light the standpipe immediately following the opening of the standpipe.

- 4. Inspection Procedures. Compliance with the visible emission standard for soaking shall be determined in accordance with the following method:
  - A. The observer records the time the standpipe cap is initially opened or observed open and notes if the observer did not observe the opening of the standpipe cap;
  - B. The observer shall read the soaking emissions from the open standpipe in accordance with 40 CFR Part 60, Appendix A, Method 9;
  - C. The observer continues to conduct readings per Method 9

    except the provisions of Method 9 Sections 2.4 and 2.5 shall not apply in that observers need not record a minimum of 24

#### observations; and

For determining compliance with this Subsection, a two (2) minute exclusion from the opacity limit shall be allowed after the time the standpipe cap is initially opened. If the observer did not observe the opening of the standpipe cap, the observer may presume that the standpipe cap has been open for more than two (2) minutes unless the operator provides the time the standpipe cap was opened.

#### **Miscellaneous Topside Emissions**

- At no time may there be topside emissions from any point on the topside other than allowed emissions from charging port seals under Subsection c, offtake piping under Subsection d and soaking under Subsection i.
- At no time may there be visible emissions from the coke oven gas collector main.

#### **§2109.01 INSPECTIONS**

{Subsection d added by May 7, 1998 amendment, effective May 15, 1998. <u>Subsection e added October 26, 2022, effective November 5, 2022.</u>}

. . .

e. During an inspection by the Department, a source shall operate in a manner consistent with its normal air pollution control practices unless an alternative method or procedure is requested by the Department or if necessary for the protection of worker or public safety. It shall be a violation of this Article for any person to alter or modify a source's normal air pollution control practices during a Department inspection for the purpose of improving compliance with the requirements under this Article or any Department permit. Any person who deviates from a source's normal air pollution control practices during a Department inspection shall have the burden of demonstrating why the alternative or modified practices were required.

## 2. Technical Support Document

#### **Coke Ovens and Coke Oven Gas**

This submittal affects the Allegheny County Health Department (ACHD) Air Pollution Control Regulations, Article XXI, related to coke oven and coke oven gas.

The current regulations set forth in Article XXI, §2105.21, address the emissions standards for coke ovens and coke oven gas, while the test methods and inspection procedures for coke ovens are provided in the ACHD's Source Testing Manual. As part of a 2019 settlement agreement with U.S. Steel Corporation relating to violations at its coke oven batteries, the ACHD agreed to amend Article XXI to include the test methods and inspection procedures for coke ovens in the §2105.21 regulations. Accordingly, the ACHD Air Quality Program is amending its regulations to include the test methods and inspection procedures that are appropriate for determining compliance with the ACHD's coke oven standards in Article XXI, §2105.21.

The ACHD Air Quality Program is also amending its regulations based on issues of stringency with federal and Pennsylvania regulations. Section 12(a) of the Pennsylvania Air Pollution Control Act states that the ACHD may enact "ordinances with respect to air pollution which will not be <a href="less">less</a> stringent than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act." See 35 P.S. § 4012(a). During this regulatory review process, the ACHD determined that there were provisions in the Article XXI regulations pertaining to coke ovens and coke oven gas which were less stringent than the regulations promulgated under the Clean Air Act and the Pennsylvania Air Pollution Control Act. As a result, the ACHD Air Quality Program is amending the applicable provisions to be at least as stringent as the Pennsylvania and federal regulations.

Finally, the ACHD Air Quality Program is amending its regulations relating to coke ovens and coke oven gas to clarify regulatory language.

The following portions of Article XXI will be submitted as a SIP Revision:

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§2101.20 ("Definitions")
§2105.21.a-h, j ("Coke Ovens and Coke Oven Gas")
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The following portion of Article XXI will not be submitted as a SIP Revision:

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§2105.21.i ("Coke Ovens and Coke Oven Gas - Soaking")
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The following table provides further explanation for the amendments to Article XXI, §§2101.20 and 2105.21:

Section*	Explanation for Change
<b>§2101.20</b>	Section 12(a) of the Pennsylvania Air Pollution Control Act states that the ACHD may
(Definition of	enact "ordinances with respect to air pollution which will not be <u>less stringent</u> than the
"Charging	provisions of this act, the Clean Air Act or the rules and regulations promulgated
emissions")	under either this act or the Clean Air Act." See 35 P.S. § 4012(a). The U.S.
	Environmental Protection Agency's regulations on visible emissions from by-product
	coke oven batteries states in a note that "[visible emissions] from open standpipes of
	an oven being charged count as charging emissions." 40 CFR Part 63, Appendix A,
	Method 303, Section 11.1.4. The ACHD determined that its definition of "charging
	emissions" is "less stringent" because it does not include the language in the federal
	regulation. Therefore, the ACHD is amending the definition for "Charging emissions"
	to include the language "open standpipes of the oven being charge[d]."
<b>§2101.20</b>	As discussed above, the ACHD regulations cannot be "less stringent" than the
(Definition of	regulations promulgated under section 12(a) of the Pennsylvania Air Pollution Control
"Pushing	Act. See 35 P.S. § 4012(a). The Pennsylvania "Air Resources" regulations codified at
operation")	25 Pa. Code § 121.1 (relating to definitions) provide that "pushing operations" begin
	"when the coke side door is first removed from a coke oven." See 25 Pa. Code §
	121.1. Under the current Article XXI regulation, for coke oven batteries 13, 14, 15,
	20, and B at the U.S. Steel Corporation Mon Valley Works Clairton Plant, the push
	does not start until after the coke side door is first removed <u>and</u> the coke mass starts to
	move. For these batteries, the emissions between the time the coke side door is first
	removed and when the coke mass starts to move are not included in determining
	compliance with the pushing emissions standard. Because the ACHD regulation is
	less stringent, the ACHD is amending the definition of "Pushing" so that it is identical
	to the definition of "Pushing operation" in the Pennsylvania "Air Resources"
	regulations. See 25 Pa. Code § 121.1.
<b>§2101.20</b>	The ACHD added a definition of "Pushing emissions." This definition is identical to
(Definition of	the definition of "Pushing emissions" in the Pennsylvania "Air Resources" regulations.
"Pushing	See 25 Pa. Code § 121.1.
emissions")	
§2101.20	ACHD is deleting the words, "i.e., when the coke side door is removed" since that
(Definition of	portion of the definition is addressed in the definition of "pushing operation."
"Soaking	
emissions")	
§2105.21.a.1-2	The ACHD is adding the language "or fewer" to these sections. Currently, the ACHD
	inspectors are required to observe all 4 or 5 consecutive charges even if there is an
	exceedance of the coke oven charging standards after less than 4 or 5 charges. The
	change will allow the inspectors to stop observations and proceed with another
	inspection when the number of seconds of charging emissions observed exceeds the
82105.21 2	coke oven charging standard.
§2105.21.a.3;	Currently, the test methods for the inspection of coke oven batteries are set forth in the
§2105.21.b.8;	ACHD's Source Testing Manual. The Settlement Agreement and Order dated June
§2105.21.c.5;	27, 2019, between the ACHD and U.S. Steel Corp. provides that the ACHD will

§2105.21.d.5;	promulgate regulations to include the test methods for coke oven batteries in Article
§2105.21.e.7;	XXI. The regulations are being amended to include the test methods and inspection
§2105.21.i.4	procedures that are appropriate for determining compliance with the ACHD's coke
	oven battery standards in Article XXI, § 2105.21.
§2105.21.b.1;	In 2012, U.S. Steel Corp. installed Coke Oven Battery C. The ACHD is amending the
§2105.21.b.4;	regulations to incorporate the requirements set forth in the installation permit for
§2105.21.c.1;	Battery C. The following is a cross reference between the amended sections of the
§2105.21.d.1;	regulations and the applicable sections of the installation permit: §2105.21.b.1 (IP-11
§2105.21.f.1;	§ V.A.1.c); §2105.21.b.4 (IP-11 § V.A.1.d); §2105.21.c.1 (IP-11 § V.A.1.e);
§2105.21.i.1	§2105.21.d.1 (IP-11 § V.A.1.f); §2105.21.f.1 (IP-11 § V.A.1.i.1); §2105.21.i.1 (IP-11
	§ V.A.1.g)
§2105.21.b.2;	Article XXI, § 2105.21, currently includes standards for batteries installed, replaced,
§2105.21.c.2;	or reconstructed, or at which a major modification was made on or after January 1,
§2105.21.d.2;	1978. These standards were considered the Lowest Achievable Emission Rate
§2105.21.f.2;	(LAER) for coke batteries at the time the regulations were promulgated. On
,	November 1, 2012, U.S. Steel's Battery C was put into operation. During the
	permitting process, the ACHD determined that LAER for Battery C was lower than
	what is currently set forth in the regulations. The ACHD is amending the regulations
	to indicate that standards previously considered LAER only apply to batteries
	installed, replaced, or reconstructed, or at which a major modification was made
	between the dates of January 1, 1978, and October 31, 2012 (i.e., the day prior to when
	Battery C began operations).
§2105.21.b.5;	As discussed above, the ACHD is amending the regulations to indicate that standards
§2105.21.c.3;	previously considered LAER only apply to batteries installed, replaced, or
§2105.21.d.3;	reconstructed, or at which a major modification was made between the dates of
§2105.21.f.3;	January 1, 1978, and October 31, 2012. The ACHD is also including language to
§2105.21.i.2	address the standards for any batteries installed, replaced, or reconstructed, or at which
	a major modification is made on or after the effective date of the current proposed
	regulations. These batteries will be required to meet either Best Available Control
	Technology (BACT) (for sources located in an attainment or unclassified area) or
	LAER (for sources located in a nonattainment area).
§2105.21.b.1,	The ACHD provides a standard for visible emissions for the door areas, charging
b.2, b.3;	ports, and offtake piping sections. In order to clarify the noncompliance limit under
§2105.21.c.2,	these standards, the ACHD is amending the regulations to specify that the standards
c.4;	are to the tenth decimal point (".0").
§2105.21.d.1,	
d.2, d.4	
§2105.21.b –	The ACHD is deleting this language because the standard no longer applies to any
(current	operating batteries in Allegheny County.
Paragraph b.2)	
§2105.21.b.3.D-	The ACHD is deleting the references to Coke Battery Nos. 7, 8 and 9 because the
F, b.7.D-F;	batteries are no longer in operation.
§2105.21.e.2.D-	
F, e.6.D-F	
Numerous	The regulations identified the batteries as the "USX Clairton Coke Works, Clairton,
sections	Pennsylvania." This language was changed to "U.S. Steel Corporation Mon Valley
	Works Clairton Plant." The ACHD is also replacing "USX" with "U.S. Steel."
	• • •

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\$2105.21.e	Section 12(a) of the Pennsylvania Air Pollution Control Act states that the ACHD may enact "ordinances with respect to air pollution which will not be less stringent than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act." See 35 P.S. § 4012(a). Section 129.15 (relating to coke pushing operations) of the Pennsylvania "Air Resources" regulations states in subsection 129.15(a): "No person may permit the pushing of coke from a coke oven unless the pushing operation is enclosed during the removal of coke from a coke oven and pushing emissions are contained, except for the fugitive pushing emissions, that are allowed by subsections (c) and (e)." See 25 Pa. Code § 129.15(a). The ACHD's current regulations for pushing do not include this requirement. To avoid being less stringent than the Pennsylvania regulations, the ACHD is adding this
	language to its regulations.
\$2105.21.e.2.H; \$2105.21.h (current h.3)	The ACHD is deleting the references to the coke oven battery at Shenango Inc. because the facility is no longer in operation.
§2105.21.e.3	After reviewing the permits for the coke oven batteries identified in §2105.21.e.3, the ACHD determined that only Battery B is required to meet the particulate mass emission rate set forth in this Paragraph. The ACHD deleted the other coke batteries listed.
§2105.21.f.7	The current version of the regulations for combustion stacks provides that the measurement for opacity shall be performed according to the methods in Article XXI, §2107.11. Section 2107.11 required that for measuring visible emissions, the source must follow the methods in the Allegheny County Source Testing Manual or continuous opacity monitoring system. To clarify the regulations, the ACHD moved the methods set forth in §2107.11 and the Allegheny County Source Testing Manual into §2105.21.f.7.
§2105.21.g	Article XXI, §2107.07, pertains to test methods for coke oven emissions and includes the following requirement for coke ovens: "Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth." The ACHD is deleting §2107.07 and is moving the quoted language to §2105.21.g.
§2105.21.h.3	The coke oven gas concentration is being revised from 40 grains per hundred dry standard cubic feet of coke oven gas to 35 grains. The 40 grains standard was promulgated prior to the installation of Battery C. During the permitting process for the installation of Battery C, the grains standard was reduced to 35 grains based on Battery C being required to meet the 10 grains standard for LAER. (IP #0052-I011, Condition V.A.1.j).
§2105.21.i.3	The ACHD regulations allow for a two minute exclusion from the opacity limit for soaking emissions. Article XXI, §2105.03, and Condition IV.4 of U.S. Steel Clairton Plant's Operating Permit requires that all air pollution control equipment be properly installed, maintained, and operated consistent with good air pollution control practice. The ACHD is adding language based on this requirement which provides that during the two minute exclusion, all air pollution control equipment and control techniques shall be operated consistent with good air pollution control practices. The revised regulation further clarifies that good air pollution control practices may include, but are not limited to, lighting or attempting to light the standpipe immediately following the opening of the standpipe.
§2105.21.j	The ACHD is adding a new section titled "Miscellaneous Topside Emissions." The

requirements under this section, except those for soaking, are from the Pennsylvania "Air Resources" regulations codified at 25 Pa. Code § 123.44(a)(6) and (7), (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery). The ACHD is required to include these requirements so that the Article XXI regulations are not less stringent than the Pennsylvania "Air Resources" regulations as required by section 12(a) of the Pennsylvania Air Pollution Control Act. See 35 P.S. § 4012(a). The ACHD added the emission limitation requirement for soaking.

#### **Inspections**

This portion of the submittal affects the ACHD Air Pollution Control Regulations, Article XXI, related to inspections by the ACHD Air Quality Program.

The ACHD Air Quality Program is amending its regulations to include requirements that during an inspection, a source is required to operate in a manner consistent with its normal air pollution control practices. The regulation provides that it is a violation for any person to alter or modify a source's normal air pollution control practices during an ACHD inspection for the purpose of improving compliance with the requirements under Article XXI or any ACHD permit.

§2109.01, "Inspections," Subsection "e" will be submitted as a SIP Revision.

<sup>\*</sup> Unless otherwise indicated, the citations to the Article XXI regulations under the "Section" column are for the amended sections of the regulations and are not the citations to the current version of the regulations.

# **Documentation of Public Hearing and Certifications**

Notice of Public Hearing
Transmittals of hearing notice to EPA & PA DEP
Proof of publication of notice of hearing
Certification of hearing
Summary of Comments and responses
Certification of approval and adoption

#### NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD

# FOR PROPOSED AMENDMENTS TO ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS ARTICLE XXI, AIR POLLUTION CONTROL

The Allegheny County Board of Health will hold a public hearing on Wednesday, May 11, 2022, at 6:00 PM at the Clairton Municipal Building, 551 Ravensburg Boulevard, Clairton PA, 15025 to take testimony on proposed modifications to Allegheny County Health Department Article XXI, along with the corresponding sections of County Ordinance 16782, that will revise:

- §2105.21, "Coke Ovens and Coke Oven Gas" and related portions of §2101.20, "Definitions;" and
- §2109.01, "Inspections"

Portion of these changes will be submitted as revisions to Allegheny County's portion of the Pennsylvania State Implementation Plan as delineated in the associated Technical Support Document.

The proposed SIP revisions are available on the Allegheny County Health Department (ACHD) Air Quality web site at <a href="https://www.alleghenycounty.us/regs-sips">www.alleghenycounty.us/regs-sips</a>. Written copies may be obtained by calling 412-578-8103.

- Persons wishing to present testimony at the hearing must register by going to the ACHD's
  Air Quality website at <a href="https://www.alleghenycounty.us/regs-sips">www.alleghenycounty.us/regs-sips</a>. Persons who do not have
  access to the internet may register by calling 412-578-8103.
- You must register to present testimony no less than 24 hours in advance of the hearing.
- Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to agcomments@alleghenycounty.us.

The Board will also accept written comments, beginning on Friday, March 18, 2022, and concluding at 4:00 PM on Tuesday, May 17, 2022, by mail to ACHD Air Program, 301 39th Street, Bldg. 7, Pittsburgh, PA 15201-1811, or by email to accomments@alleghenycounty.us.

Please call 412-578-8103, if you have any questions or if you have any difficulty registering for the hearing.

FW: Formal Notice of Allegheny County Health Department hearing on proposed SIP change for Coke Ovens and Coke Oven Gas rules

Lattner, Tom <Tom.Lattner@AlleghenyCounty.US>

Thu 3/17/2022 4:09 PW

To: Hammond, Mark <mahammond@pa.gov>

Cc: Dalal, Kirit < kdalal@pa.gov>;Hepler, Stephen (shepler@pa.gov) < shepler@pa.gov>;'shoyle@pa.gov>;Graham, Jayme < Jayme.Graham@AlleghenyCounty.US>;Deluca, Dean < Dean.Deluca@AlleghenyCounty.US>;Dowd, Patrick < Patrick.Dowd@AlleghenyCounty.US>

1 attachments (176 KB)

DEP letter.Coke Oven Reg revisions.SIPB7. 3.15.2022.docx

Hello Mr. Hammond,

This is to formally advise you through the attached letter, that the Allegheny County Health Department will be holding a public comment period starting March 18, 2022 and ending May 17, 2022, and will hold a public hearing on May 11, 2022 on our proposed revision to Article 200 and the PA SIP related to the Coke Ovens and Coke Oven Gas regulation.

Details can be found in the attached letter which includes embedded files for the hearing notice and the proposed SIP change. Thank you for consideration of this matter.

Tom Lattner



Tom Lattner
A.P.C. Engineer III
Air Quality Program
301 39th St., Bidg. 7
Pittsburgh, PA 15201
412-578-7986

FW: Formal Notice of Allegheny County Health Department hearing on proposed SIP change for Coke Ovens and Coke Oven Gas rules

Lattner, Tom <Tom.Lattner@AlleghenyCounty.US>

Thu 3/17/2022 4:09 PM

To: Fernandez.Cristina@epa.gov <Fernandez.Cristina@epa.gov>

Cc: Goold.Megan <goold.megan@epamail.epa.gov>;Graham, Jayme <Jayme.Graham@AlleghenyCounty.US>;Deluca, Dean <Dean.Deluca@AlleghenyCounty.US>;Dowd, Patrick <Patrick.Dowd@AlleghenyCounty.US>

1 attachments (178 KB)

EPA letter.Coke Oven Reg revisions.SIP87. 11.20.2020.docx;

Hello Ms. Fernandez,

This is to formally advise you through the attached letter, that the Allegheny County Health Department will be holding a public comment period starting March 18, 2022 and ending May 17, 2022, and will hold a public hearing on May 11, 2022 on our proposed revision to Article XXII and the PA SIP related to the Coke Ovens and Coke Oven Gas regulation.

Details can be found in the attached letter which includes embedded files for the hearing notice and the proposed SIP change. Thank you for consideration of this matter.

Tom Lattner



Tom Lattner A.P.C. Engineer III Air Quality Program 301 39th 51, Bidg. 7 Pittsburgh, PA 15201 412-578-7986

Tom.Lattner/RAlleghenyCounty,US

March 16, 2022

Mr. Mark Hammond, Director Bureau of Air Quality Department of Environmental Protection Rachel Carson Building 400 Market Street P O Box 8468 Harrisburg, PA 17105-8468

Dear Mr. Hammond:

Attached is a Notice of Public Hearing for proposed revisions to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding revising §2105.21, Coke Ovens and Coke Oven Gas along with related changes to §2101.20, Definitions, and §2109.01, Inspections. The proposed coke oven regulations will incorporate inspections procedures for coke ovens, address issues of stringency with federal and state requirements, correct the coke oven gas standards, and remove outdated language.

These revisions will also be submitted as changes to Allegheny County's portion of the Pennsylvania State Implementation Plan under our Revision Tracking Number 87, as delineated in the Technical Support Document.

Information regarding the proposed SIP change may also be found on the ACHD website at: <a href="https://www.alleghenycounty.us/Health-Department/Programs/Air-Quality/Coke-Oven-Regulations.aspx">https://www.alleghenycounty.us/Health-Department/Programs/Air-Quality/Coke-Oven-Regulations.aspx</a>

The public comment period begins March 18, 2022 and concludes May 17, 2022 at 4:00 pm. The public hearing will be held May 11, 2022. Your comments are welcome.

ACHD SIP87 Hearing Notice Letter March 16, 2022 Page 2

Sincerely,

Jayme Graham, Manager Air Quality Program

cc: Kirit Dalal Steve Hepler

#### **Email Attachments**

Public Hearing Notice



Proposed Article XXI/SIP Revision 87



March 16, 2022

Ms. Christina Fernandez, Director Air Protection Division Region III (3AP00) U.S. Environmental Protection Agency 1650 Arch Street Philadelphia, PA 19103-2029

Dear Ms. Fernandez:

Attached is a Notice of Public Hearing for proposed revisions to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding revising §2105.21, Coke Ovens and Coke Oven Gas along with related changes to §2101.20, Definitions, and §2109.01, Inspections. The proposed coke oven regulations will incorporate inspections procedures for coke ovens, address issues of stringency with federal and state requirements, correct the coke oven gas standards, and remove outdated language.

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ACHD SIP87 Hearing Notice Letter March 16, 2022 Page 2

Sincerely,

Jayme Graham, Manager Air Quality Program

## **Email Attachments**

Public Hearing Notice



Public\_Hearing\_Not ice\_Coke Oven Regs

Proposed Article XXI/SIP Revision 87



	of Publication of Notice in Pittsburgh Post-Gaze	
Under Act No 587, Appro	oved May 16, 1929, PL 1784, as last amended by Act No 409 of	September 29, 1951
established in 1993 by the merging Gazette and Sun-Telegraph was est Pittsburgh Gazette established in 178	r of general circulation published in the City of Pittsburgh, County and of the Pittsburgh Post-Gazette and Sun-Telegraph and The Pittsburgh ablished in 1960 and the Pittsburgh Post-Gazette was established in 86 and the Pittsburgh Post, established in 1842, since which date the say and that a copy of said printed notice or publication is attached he regular editions and issues of the same	Press and the Pittsburgh Post- 1927 by the merging of the id Pittsburgh Post-Gazette has ereto exactly as the same was
17 of March, 2022		
Affiant further deposes that he/she is that, as such agent, affiant is duly aut	an agent for the PG Publishing Company, a corporation and publisher of horized to verify the foregoing statement under oath, that affiant is not in, and that all allegations in the foregoing statement as to time, place ar	interested in the subject matter
	1	COPY OF NOTICE
	Allin	OR PUBLICATION
March 17,  Con  My  Most	nmonwealth of Pennsylvania - Notary Ssal Karen Flaherty, Notary Public Allegheny County commission expires November 16, 2024 Commission number 1386128 nber, Pennsylvania Association of Notarios  ENT OF ADVERTISING COSTS NY CO HEALTH DEPT-LEGAL AVENUE	NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD FOR PROPOSED AMENOMENTS TO ALLEGHENY COUNTY HEALTH DEPARTMENT. RULES AND REGULATIONS ARTICLE XXI, AIR POLLUTION CONTROL. The Allegheny County Board of Health with hold a public hearing on Wednesday, May 11, 2022, et 6:00 PM at the Clariton Municipal Building, 551 Reversburg Boulevard, Clariton Municipal Building, 551 Reversburg Boulevard, Clariton PA, 15025 to take testimony on proposed modifications to Allegheny County Health Department Article XXI, along with the corresponding Sections of County Ordinance 16782, that will revise.  • 52103.21, "Coke Ovens and Coke Oven Gas" and related portions of \$2101.20, Definitions," and • \$2309.01, "Inspections" Portion of these changes will be submitted as revisions to Allegheny County's portion of the Pennsylvania State traplementation Plan as definested in the associated Technical Support Document. The proposed SP revisions are available on the Allegheny County Health Department (ACHO) Art Quality web site at
	To PG Publishing Company	www.allegheny.county.us/regs sps. Written copies may be obtained by calling 412-578-9103. Persons wishing to present testmony at the hearing must
	\$82.95	register by going to the ACHUS Air Quality website at www.alleghenycountyus/regs -sips. Persons who do not have access to the internet may register by calling 412-278-8103.  • You must register to present
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PG PUBLISHING COMPAN of general circulation, hereby a	s Receipt for Advertising Costs Y, publisher of the Pittsburgh Post-Gazette, a newspaper acknowledges receipt of the aforsaid advertising and that the same have been fully paid.	*Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to accomments@aleghenycount yus.  The Board wall also accept
Office	PG Publishing Company, a Corporation, Publisher of	written comments hoginning
2201 Sweeney Drive CLINTON, PA 15026 legaladvertising@post-gazette.com Phone 412-263-1440	Pittsburgh Post-Gazette, a Newspaper of General Circulation  By	on Friday, March 18, 2022, and concluding at 4:00 PM on Tuesday, May 17, 2022, by mail to ACHD Air Program, 301 39th Street, Bids. 7, Pittsburgh, PA 15:201-1811, or
	e original Proof of Publication and receipt for the Advertising costs in the	by email to appointments/fisalleghenycount yus. Please call 412-578-8103, if you have any questions or if you have any difficulty registering for the hearing.
-	Attorney For	

#### Revision 87

#### Article XXI

## Section 2105.21, "Coke Ovens and Coke Oven Gas"

#### Certification of Hearing

Dean DeLuca deposes and says that he is an Air Pollution Manager in the Air Quality Program of the Allegheny County Health Department and hereby certifies that a Public Hearing was held on May 11, 2022 on the proposed revisions to Article XXI, "Rules and Regulations of the Allegheny County Health Department for Air Pollution Control," and County Ordinance No. 16782 revising Section 2105.21, "Coke Ovens and Coke Oven Gas," Section 2101.20, "Definitions," and Section 2109.01, "Inspections;"

that these changes are to be incorporated as a change to Allegheny County's Portion of the Pennsylvania State Implementation Plan for Attainment and Maintenance of National Ambient Air Quality Standards;

that opportunity for written comments was given in accordance with the requirements of 40 CFR 51.102; that notice of such hearing was given by publication in a newspaper of general circulation on March 17, 2022; and to the best of his knowledge, belief and understanding, such proceedings were in full compliance with all applicable State and Federal laws, regulations, and other requirements.

## **Dean DeLuca**, electronically signed 7/13/2022

Dean DeLuca

Manager,

Planning and Data Analysis Air Program

Allegheny County Health D

## SUMMARY OF COMMENTS AND RESPONSES

for

# **Proposed SIP Revision 87**

Article XXI, §2105.21, Coke Ovens and Coke Oven Gas, Related §2101.20 Definitions and §2109.01 Inspections

Public Comment Period: March 18 to May 17, 2022 Public Hearing: May 11, 2022

#### **Comments and Responses**

1. **COMMENT:** The Allegheny County Health Department (ACHD) should do everything it can to improve air quality. The proposed ACHD regulations must be as strident as possible to protect the health of residents of the Mon Valley and all of Allegheny County from ongoing poor air quality from the Clairton Coke Works. (ID Nos. Group 1, 7)

#### **RESPONSE:**

Thank you for your comment. The goal of the ACHD continues to be to protect the air resources of the County by pollution prevention and pollution control for the protection of the health, safety and welfare of its citizens, and to ensure the attainment and maintenance of the ambient air quality standards. The Department continues to pay particular attention to air quality concerns in the Mon Valley area of Allegheny County.

2. **COMMENT:** Neither USS or ACHD is doing its job with regard to cleaning the air. USS management makes decisions on plant operating matters that are not conducive to clean air...the ACHD's job is to protect the health of the community not to protect corporate interests (ID Nos. 14, 24, 25, 27, 30)

#### **RESPONSE:**

Thank you for your comment. ACHD acts within the regulatory boundaries established by Article XXI. Article XXI, §2101.02.a.1 states that it is the policy of the County of Allegheny to protect the air resources of the County by pollution prevention and pollution control to the degree necessary for the: (1) Protection of the health, safety and welfare of all its citizens;...(4) Development, attraction and expansion of industry, commerce and agriculture."

3. **COMMENT:** ...the Department's new regulations (should) at least meet the standard federal requirements for clean air. The department attempts to pick around the edges of regulation, relegating itself to changing the language of its regulations to conform to the requirements of state regulations. In its responsive comments from the previous round of proposed regulations, the department never explained why state regulations do not already apply. (ID Nos. 26, 28)

### **RESPONSE:**

Thank you for your comment. Where practicable, the Department is adding regulatory language codifying federal and state standards that are already incorporated by reference, to capture the requirements in the specific section of Article XXI dealing with Coke Oven emissions.

4. **COMMENT:** ACHD should strengthen the regulation by going back to 2018 draft. In 2018, the ACHD took a step in the right direction in its decision to develop new coke oven regulations. The draft in 2018 would have created stricter requirements for leaking equipment. In the draft in 2020, the ACHD reversed these proposed stricter requirements, although other aspects of that draft were better than nothing. (ID Nos. Group 1, 26)

## **RESPONSE:**

Thank you for your comment. In some cases, the regulations were demonstrated to be impractical. However, in all cases an improved method of measuring and accounting for emissions was developed.

5. **COMMENT:** Current regulatory approach is insufficient. The current way that coke ovens are regulated, by allowing a certain percentage of leaking equipment and allowable seconds of visible emissions, is insufficient to protect public health. ACHD should amend the 2022 proposal to impose stricter requirements for leaking equipment. (ID No. Group 1)

#### **RESPONSE:**

Thank you for your comment. At this time, the intention of these regulation changes is to make the coke oven inspections more precise and clear.

6. **COMMENT**: ACHD should strengthen the regulation by enhancing monitoring. Increase transparency around Coke Works monitoring including real time pollution data that doesn't rely on US Steel. (ID Nos. Group 1, 4, 28)

#### **RESPONSE:**

Thank you for your comment. The intention of these regulation changes is to make coke oven inspections more precise and clear.

7. **COMMENT:** ACHD should strengthen the regulation by enhancing enforcement. There should be a clear date set in the regulations by which US Steel will permanently shut down Batteries 1, 2, and 3. US Steel has stated publicly that they will shut these batteries by the end of the first quarter in 2023, so we suggest the date of March 31, 2023. These batteries are 70 years old and far past their retirement date. The compliance history of these batteries demonstrates that US Steel is not capable of operating them in compliance with ACHD air quality regulations, even given the lax rules that are applied to batteries of this age. There needs to be an enforceable date by which the batteries will close. (ID Nos. Group 2, 4, 14, 34)

#### **RESPONSE:**

Thank you for your comment. The intention of these regulation changes is to make coke oven inspections more precise and clear. Requiring decommissioning of batteries is beyond the scope of this regulation revision.

8. **COMMENT:** ACHD cannot protect the health of the community if it merely issues enforcement orders and NOVs and USS Steel just pays fines instead of reducing emissions (pay to pollute). (ID Nos. 29, 34)

#### **RESPONSE:**

Thank you for your comment. ACHD has enforcement policies and procedures that address the actions to be taken by the agency upon the occurrence of failed inspections. The ACHD Penalty Policy addresses the type and level of fines imposed on a violator of ACHD rules. However, none of these policies is the subject of this regulation revision.

9. **COMMENT:** Strengthen regulations by requiring improved work practice standards. The Commenters urge ACHD to develop and propose coke oven regulations that are protective of public health and that incorporate the latest knowledge of health risks and advancements in technologies and practices to reduce harmful air pollution from coke oven facilities. This should include improving a required work practice plan that was prepared in the early 1990s that does not appear to have been used effectively to reduce emissions. ...the department does nothing to expand upon and enhance the work practice plan of requirements relating to leaking doors, lids and offtakes. (ID Nos. Group 1, 26)

## **RESPONSE:**

Thank you for your comment. At this time, the intention of the regulation revisions is to include the test methods in the regulation and to make the inspection procedures more precise and clear. The commenter's work practice standard suggestions are outside the scope of this regulation change.

10. **COMMENT**: Strengthen regulation stringency during adverse weather conditions. Require US Steel to reduce pollution with a Pollution Mitigation Plan when air quality reaches unhealthy levels. (ID No. Group 2)

## **RESPONSE:**

Thank you for your comment. ACHD has enacted Article XXI, §2106.06, "Mon Valley Air Pollution Episode," which implements requirements suggested by the commenter.

11. **COMMENT**: Strengthen by looking to other states and countries, and new technologies. The ACHD should also incorporate cutting-edge technologies and practices following the example of other countries regulating coke oven facilities. (ID No. Group 1)

#### **RESPONSE:**

Thank you for your comment. ACHD has looked at other states' regulations. In all that were reviewed, Allegheny County regulations are at least as stringent, if not more so, that the regulations in other states. This stringency is necessary due to the large size of this plant and its situation in a valley near public. The intention of these regulation changes is to make coke oven inspections more precise and clear. Addressing new technologies is beyond the scope of this regulation revision.

12. **COMMENT**: Strengthen by idling malfunctioning batteries. The Department should revise the proposed regulations to require US Steel to hot idle coke oven batteries to ensure compliance in the event of noncompliance or a malfunction. There needs to be a clear rule set out in these regulations that parts of the plant, whether an oven, battery, or other unit, cannot be operated if required pollution control equipment is incapacitated, destroyed, or unable to function in a reliable manner. When these situations occur, ACHD rules should require idling of the impacted unit until repairs can be made. (ID Nos. Groups 1 and 2, 14, 33)

### **RESPONSE:**

Thank you for your comment. The intention of these regulation changes is to make coke oven inspections more precise and clear. The subject of imposing hot idling requirements on individual coke ovens is beyond the scope of this regulation change.

13. **COMMENT**: ACHD should not limit its legal authority. The ACHD has unlawfully attempted to use an agreement with U.S. Steel, resulting from enforcement actions against the Clairton Coke

Works, to give up its rulemaking authority. The proposed regulations are flawed because the department has attempted abandon its legal authority to adopt more stringent standards for coke oven batteries in the 2019 settlement agreement with U.S. Steel...It is unlawful for the department attempt to abandon its authority to adopt more stringent coke oven regulations. (ID Nos. Group 1, 26)

#### **RESPONSE:**

Thank you for your comment. By placing requirements on the imposition of more stringent requirements, the Department did not give up or abandon its rulemaking authority. It has merely agreed to conditions for regulatory change.

14. **COMMENT**: The commenter states a list of examples of USS cooperation on meeting the NAAQS, and contends that ACHD did not work collaboratively to produce a regulation revision in a manner called for by the SAO. (ID No. 15)

#### **RESPONSE:**

Thank you for your comment. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD.

15. **COMMENT**: ...the Clairton plant already operates under the most stringent environmental standards for steel and coke operations in the United States. (ID No. 3)

#### **RESPONSE:**

Thank you for your comment. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD.

16. **COMMENT**: The regulations jeopardize jobs- If the Allegheny County Health Department continues to force more stringent, subjective and arbitrary regulations on the Clairton coke plant, it could jeopardize the future of the entire Mon Valley Works and the thousands of good-paying jobs it provides. ACHD, USS and stakeholders should work toward solutions that benefit jobs and environment. (ID Nos. 3, 5, 6, 8-13, 17-21, 31)

#### **RESPONSE:**

Thank you for your comments. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD. ACHD acts within the regulatory boundaries established by Article XXI. Article XXI, §2101.02.a.1 states that it is the policy of the County of Allegheny to protect the air resources of the County by pollution prevention and pollution control to the degree necessary for the: (1) Protection of the health, safety and welfare of all its citizens;...(4) Development, attraction and expansion of industry, commerce and agriculture."

17. **COMMENT**: Concern for impact of regulations on economic viability of plant. Ask that ACHD work with USS to find the means to meet environmental goals while maintaining good paying jobs. ... the Allegheny County Health Department (should) work more cooperatively with U.S. Steel and all stakeholders that rely on the future of this major employer. The Health Department needs to work with the company to find solutions that will not only continue to benefit the environment, but will also allow for good-paying manufacturing jobs and the continued production of coke, iron and steel in the Pittsburgh region. (ID Nos. 3, 5, 6, 8-10, 12, 13, 17-21, 31)

#### **RESPONSE:**

Thank you for your comments. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD. ACHD acts within the regulatory boundaries established by Article XXI. Article XXI, §2101.02.a.1 states that it is the policy of the County of Allegheny to protect the air resources of the County by pollution prevention and pollution control to the degree necessary for the: (1) Protection of the health, safety and welfare of all its citizens;...(4) Development, attraction and expansion of industry, commerce and agriculture."

18. **COMMENT:** Disease levels in area...The commenters states that the emissions from the Clairton plant are killing people by causing cancer, and questions claims made by others testifying that there have been improvements in air quality. The commenter states that there is a correlation between the types of illnesses people in the community suffer and the air pollution and makes a plea that the company comply, or leave. (ID Nos. 22, 23)

#### **RESPONSE:**

Thank you for your comment. ACHD appreciates the concerns voiced in the comment. The goal of the ACHD continues to be to protect the air resources of the County by pollution prevention and pollution control for the protection of the health, safety and welfare of its citizens, and to ensure the attainment and maintenance of the ambient air quality standards. The Department continues to pay particular attention to air quality concerns in the Mon Valley area of Allegheny County. The intention of these regulation changes is to make coke oven inspections more precise and clear.

19. **COMMENT:** Because regulations in Article XXI must be at least as stringent as corresponding regulations promulgated under the Clean Air Act, section 2105.21.e.1 must be revised so that emissions from the pushing emission control devices associated with Batteries 13, 14, 15, 19, 20, and C at the Clairton Plant are either limited to the 0.010 grains/dscf required by 40 CFR § 7290(a)(1) or to the appropriate measure of pounds per ton of coke produced as required by 40 CFR § 7290(a)(2) – (4). Alternatively, the Department must demonstrate that the 0.020 grains/dscf limit in section 2105.21.e.1 is at least as stringent as the appropriate limit established by 40 CFR § 7290(a)(2) – (4). (ID No. 35)

### **RESPONSE:**

Thank you for your comment. At this time, the intention of these regulation changes is to add the testing methods and the inspection procedures to make coke oven inspections more precise and clear. The facility is still required to comply with 40 CFR 63.7290, even if it is not specifically listed in Article XXI.

20. **COMMENT**: In the latest round of proposed regulations the department proposes to strike the particulate mass emission rates in the regulations applicable in Batteries 1 and 3, 13 and 15 and 19 to 20. Contrary to the department's explanation, these requirements already apply to these batteries. (ID No. 26)

#### **RESPONSE:**

Thank you for your comment.

21. **COMMENT:** Because sections 7296 and 2105.21.f use different bases to limit the opacity of visible emissions from combustion stacks, it is not clear that the limits established by Section 2105.21.f are at least as stringent as those established by section 7296. Because regulations in Article XXI must be at least as stringent as corresponding regulations promulgated under the Clean Air Act, the Department should either revise section 2105.21.f.5 and 6 so that they are at least as stringent as section 7296 or demonstrate that the limits in Section 2105.21.f.5 and 6 are already at least as stringent as the limits in section 7296. (ID No. 35)

#### **RESPONSE:**

Thank you for your comment. At this time, the intention of these regulation changes is to add the testing methods and the inspection procedures to make coke oven inspections more precise and clear. The facility is still required to comply with 40 CFR 63.7296, even if it is not specifically listed in Article XXI.

22. **COMMENT**: Because compliance with section 2105.21's limits is not determined on the same bases as compliance with Subpart L's limits, it is not self-evident that the limits in section 2105.21 are at least as stringent as their counterparts in Subpart L. The Department should demonstrate that they are. (ID No. 35)

### **RESPONSE:**

Thank you for your comment. At this time, the intention of these regulation changes is to add the testing methods and the inspection procedures to make coke oven inspections more precise and clear. The facility is still required to comply with Subpart L, even if it is not specifically listed in Article XXI.

23. **COMMENT**: The department proposes to retain a two door exclusion that effectively makes the door requirements less stringent than federal requirements. Ironically the department proposed to eliminate the exclusion last year, but now proposes to retain it. (ID No. 26)

## **RESPONSE:**

ACHD acknowledged that the regulations were being made more stringent than the PA DEP requirements in 25 Pa. Code § 123.44 where they deduct 2 doors from the number of doors with visible emissions and this would result in a violation of the 2019 Settlement Agreement.

24. **COMMENT:** The term "valid charge" is used repeatedly in revised section 2105.21.a, but not defined. EPA Method 303 does not define "valid charge", but it includes references to "valid observations," which only further confuses potential interpretations. Further, what constitutes a "valid charge" is not immediately clear from the term itself or from the context in which it is used in section 2105.21. Accordingly, to avoid ambiguity and confusion, Article XXI should define what constitutes a "valid charge." (ID Nos. 35, 37)

#### **RESPONSE:**

Thank you for your comment. Section 2105.21.a.3.G describes that if observations of emissions from a charge are interrupted, the data from that charge may become invalidated. Following from this section, a "valid charge" is a charge which has not been invalidated.

25. **COMMENT**: We don't know how to access funds to obtain air purifiers and other such items – The Commenter questions why community groups cannot access CAF money for programs that purchase air filters for residents. (ID No. 29)

#### **RESPONSE:**

Thank you for your comment. The commenter's comments are outside the scope of this regulation change.

26. **COMMENT**: On page 14, the offtake piping calculation in Condition I should have a comma in the last clause of the denominator, not a minus sign before "not to exceed three ovens." U. S. Steel requests that ACHD correct the following equation to replace the minus (-) sign with a comma (,). (ID Nos. 16, 36)

#### **RESPONSE:**

ACHD has removed the minus sign and replaced it with a comma.

27. **COMMENT**: On page 14, under pushing, ACHD incorporated a portion of PA Code § 129.15(a) but omitted the rest of the regulatory language in the PA Code. ACHD did not add the portion of PA Code language that specifies a device for the enclosure of pushing operations, which, in this case, would refer to the Pushing Emission Control (PEC) Baghouses previously installed at the Clairton Plant. (ID Nos. 16, 36)

A device for the enclosure of pushing operations shall be subject to the requirements of Chapter 127 (relating to construction, modification, reactivation and operation of sources) and the grant of plan approval.

## **RESPONSE:**

ACHD will not make any changes to address this comment. The commenter says that the ACHD needs to add the portion of 25 Pa. Code § 129.15(a) language that specifies a device for the enclosure of pushing operations, which, in this case, would refer to the Pushing Emission Control (PEC) Baghouses previously installed at the Clairton Plant. However, that portion of the code, 25 Pa. Code § 129.15(a) and (b) as written, reflects language to install new equipment. Article XXI is clearly addressing the operation of existing equipment. Additionally, the issues relating to these comments were resolved through the dispute resolution process set forth under the 2021 settlement agreement addendum.

- 28. **COMMENT**: On page 15, under pushing, ACHD deleted "determined by an outlet concentration" from Condition 3. This differs from the U. S. Steel/ACHD Coke Oven Regulation Settlement Agreement executed on April 16, 2021 and lacks the clarity needed to adequately determine compliance with the condition. U. S. Steel requests that ACHD add "determined by an outlet concentration" back into the Condition, based on the Settlement Agreement and to provide the necessary clarity needed to comply with the condition. (ID Nos. 16, 36)
  - 3. At any time, the particulate mass emission rate from the pushing emission control device, for any of the following batteries Coke Oven Battery B at the U. S. Steel Corporation Mon Valley Works Clairton Plant, exceeds a rate determined by an outlet concentration of 0.040 pounds per ton of coke:

#### **RESPONSE:**

ACHD will not make any changes to address this comment. The phrase "determined by an outlet concentration" is redundant and unnecessary, as the first portion of the paragraph "the particulate mass emission rate from the pushing emission control device," makes clear that it is an outlet concentration. Additionally, the issues relating to these comments were resolved through the dispute resolution process set forth under the 2021 settlement agreement addendum.

29. **COMMENT:** U. S. Steel requests that ACHD work collaboratively with the regulated community when developing new ACHD testing methods. The methods need to be based on facts and be accurate, transparent, fair, consistent, and objective. Consistent with the process adopted by USEPA and other jurisdictions, ACHD must consider: (a) averaging provisions to ensure appropriate and accurate readings; (b) provisions specifying the appropriate positioning of the inspector/observer for visible emission observations to ensure appropriate and accurate readings, including for pushing observations and for coke batteries doors equipped with sheds; and (c) recordkeeping requirements for inspections to support that the test methods were properly followed as well as to provide the regulated entity with the ability to identify any problem(s) and implement timely corrective actions. (ID Nos. 16, 36)

## **RESPONSE:**

ACHD will not make any changes to address this comment. Additionally, the issues relating to these comments were resolved through the dispute resolution process set forth under the 2021 settlement agreement addendum.

30. **COMMENT:** The commenter repeats their Comment 1 from the 2021 public comment period: The Department Should Explain How the Proposed Regulations Would Reduce Emissions of Fine Particulates and Sulfur Dioxide Under the State Implementation Plan. The draft coke oven regulations are intended to be a revision to the Department's portion of the state implementation plan. See Proposed Regulations (title page)... But the Department does not identify the state implementation plan to be revised...Presumably, fine particulates and sulfur dioxide are the primary criteria pollutants of concern... The Department does not attempt to quantify emissions reductions... The Department should provide more detail regarding how the proposed regulations will improve air quality.

The Commenter then adds this from the 2022 public comment period:

In the response to comments, the Department avoided the comment by asserting that the comments "do not include a specific comment regarding the proposed amendments to the coke oven regulations."

In fact, the comment was specific. Commenters want to know how the proposed regulations will cause specific reductions in air emissions from the Clairton Coke Works. The Department should answer the question. (ID No. 37)

## **RESPONSE:**

Thank you for your comment. The commenter quoted Comment Number 6 Response, which was not the correct comment. Comment Number 21 has the correct comment and response. Though that response is similar in that it also notes that the comment does not specifically address the regulations. But, it also notes that the Technical Support Document for the draft regulations addresses the basis for the amendments – to include the test methods and inspection procedures for coke ovens in the §2105.21 regulations, to amend the regulations based on issues of stringency with federal and Pennsylvania regulations, and to amend the regulations relating to coke ovens and coke oven gas to clarify regulatory language. Article XXI is incorporated into the Pennsylvania State Implementation Plan codified at 40 CFR 52.2020. EPA approved the overall Article XXI effective October 20, 1995, on November 14, 2002. See 67 FR 68935 (November 14, 2002). While it is the case that 40 CFR 50 Appendix V, "Criteria For Determining the Completeness of Plan Submissions" includes certain requirements under Section 2.2, "Technical Support," including quantification requirements, these are not always necessary for each change, just as there are requirements for modeling information that are seldom necessary. The necessity is to submit to the EPA the regulatory language changes being made that affect the document that EPA approved on November 14, 2002.

31. **COMMENT**: The commenter repeats their Comment 2 from the 2021 public comment period: The proposal to include requirements of federal and state law involves things the Department should already have been doing.

The Department proposes to make four amendments to its regulations to conform to the form of state and federal regulations. Because federal and state regulations are binding on the county, the Department should explain why there is a need to make these revisions at all. For proposed requirements that only repeat the requirements of federal and state regulations, the Department should explain why this is not an academic exercise.

- A. The Department should provide an explanation why it is necessary to make these four amendments.
- B. The Department is not exempt from federal requirements, even if they are not incorporated into the county's regulations.
- C. The Department is not exempt from state requirements, even if they are not incorporated into the county's regulations.

The Commenter then adds this comment from the 2022 public comment period: In the March 14, 2022 Comment/Response Document response to comments (Comment #6), the Department avoided the comment by asserting that the comments "do not include a specific comment regarding the proposed amendments to the coke oven regulations."

In fact, the comment was very specific. The Commonwealth has regulations on the books. It was a condition of its approval that the Department would implement the requirements of the state regulations. The Department has offered no legal authority demonstrating that it is not already required to implement these state requirements. If the Department is relying on any legal authority, it should explain. (ID No. 37)

## **RESPONSE:**

Thank you for your comment. The Commenter questioned why the Department is updating the definitions of "Charging emissions" and "Pushing operation," why it is revising §2105.21.e by adding language that will make the section consistent with 25 Pa. Code § 129.15, and why it is adding §2105.21.j titled "Miscellaneous Topside Emissions." The Commenter asked these questions while at the same time including the excerpts of the Technical Support Document that spell out the Department's reasons for doing so – i.e., to be consistent with federal or Pennsylvania regulations. The Commenter's implication is that there is no need to add these changes because the Department can and should already be enforcing these regulations. The Commenter rejects the Department's response to this comment during the first round of public comment when the Department stated that the comment was not on the specific regulation change but rather on the legal authority of the ACHD to enforce provisions of state and federal regulations. Nothing has changed. The commenter has not made a comment on the content of the regulation change, but on whether the Department could already be enforcing certain regulations. That is an enforcement issue, not an issue related to these particular regulation changes.

32. **COMMENT:** The Commenter repeats their Comment 3 from 2021 public period: **Section VII of the Settlement Agreement only purports to limit more stringent emission standards, not procedural requirements like inspections.** According to its terms, a settlement agreement with the regulated industry in 2019 that purports to limit the Department's regulatory authority to adopt more stringent regulations would not apply to proposed procedural requirements concerning inspections. This is because Section VII of the agreement ... relates to emission standards, not procedures. See ... Settlement Agreement dated June 27, 2019, paragraph 12, page 19 ("[t]he Department may pursue a rulemaking to impose more stringent limits on the coke batteries (except C Battery) only if the more stringent limits are determined to be, inter alia, technically feasible in accordance with this Paragraph."). In addition, Section VII is unlawful for reasons set forth in Comment #6, below.

The Commenter then adds this comment from the 2022 public comment period: In the (March 14, 2022) response to comments, the Department mischaracterized this comment as a request to "strengthen the regulations by enhancing inspection procedures":

13. COMMENT: The ACHD should strengthen the regulations by enhancing inspection procedures. (ID Nos. Group 1, Group 4, 90, 116, 171, 173, 177)

RESPONSE: The proposed amendments to the coke oven regulations incorporate coke oven inspection procedures into the regulations. The ACHD proposed regulations allow inspectors increased flexibility to perform inspections and investigate potential violations. Please be aware that the proposed draft regulations have been revised again and will be available for public comment starting on March 18, 2022. Please note that the ACHD will consider the comments submitted by the commenters which identify specific inspection and work practices that they believe should be included into the regulations at the conclusion of this comment period.

That was not the point of the comment. The point of the comment was that enhancing inspection procedures would not be a violation of the settlement agreement, assuming the settlement agreement were a lawful agreement. It is inappropriate for the Department to assume that all it needs to do is to add simple inspection requirements to outweigh the tremendous harm from not adopting more stringent standards for batteries. That is not sufficient. (ID No. 37)

#### **RESPONSE:**

Thank you for your comment. Comment Number 3 as expressed for the 2021 regulation makes no other point then to say that inspection procedures are not limited by the Settlement Agreement. As a result of the language in the comment, in its March 2022 comment response document, the Department could infer only that the Commenter desired that the regulation be strengthened by enhancing the inspection procedures. The Commenter seems to be now clarifying the initial comment. Finally, the Department clearly states in the Technical Support Document that one of the purposes of this regulation change is to incorporate the testing methods and inspection procedures into the regulation as agreed to in the 2019 Settlement Agreement.

33. **COMMENT**: The Commenter repeats their Comment Number 4 from the 2021 public comment period:

The proposed revision of the emission standard for hydrogen sulfide in coke oven gas would not make the standard more stringent than it should be, if it is merely correcting an error.

- A. The Department should provide more information regarding the nature of the error being corrected in the proposed regulations.
- B. A consent order executed in 1992 does not prevent the Department from lowering the emission standard for coke oven gas.
- C. The Department Should Explain How the Proposed Revision Will Have a Meaningful Impact on Emissions of Sulfur Dioxide from the Clairton Coke Works.

The Commenter then adds the following from the 2022 public comment period:

D. The decision of the Administrative Hearing Officer in the legal challenge by U.S. Steel did not address the lawfulness of Section VII of the 2019 Settlement Agreement.

In the legal challenge brought by U.S. Steel, the Administrative Hearing Officer held that the Department's proposal to impose a 23 grain standard for coke oven gas violated Section VII of the 2019 Settlement Agreement between the Department and U.S. Steel because it imposed a more stringent emissions standard without complying with the technical feasibility criteria... However, the Administrative Hearing Officer did not address the lawfulness of Section VII of the 2019 Settlement Agreement...

The Commenter states also that in the response to comments the Department does not attempt to respond to this comment. The Commenter states that, presumably, the Department has reversed its proposal in reliance on the decision of the Administrative Hearing Officer on December 6, 2021. However, Section VII of the 2019 Settlement Agreement is unlawful... (ID No. 37)

### **RESPONSE:**

Thank you for your comment. The Commenter is correct in stating that the March 14, 2022, Comment Response document does not have a readily obvious response to a comment from Commenter Number 171 (the number assigned to the Commenter). However, the responses to Comments number 26 and number 27 make clear that the language related to the lower hydrogen sulfide limits is no longer applicable. The hearing officer's decision stated that per the 2019 Settlement Agreement the Department must follow a certain procedure to set new more stringent emission limits.

34. **COMMENT:** The Commenter repeats Comment Number 5 from the 2021 public comment period: The Commenter states that the Department should reinstate proposed requirements in the first draft regulations (June 2018), which were reversed in the second draft regulations (July 2020) and the proposed regulations. In the first draft regulations in 2018, the Department proposed a number of requirements that would have made the regulations more stringent...Then it entered into a settlement agreement with the regulated industry in 2019. Now, it is reversing those proposals under the rationale that it has entered into a settlement agreement preventing it from making emission standards more stringent...The Department is required to provide a justification for its action. But it has not provided a reasonable justification for reversing proposals that it presumably believed to be in the public interest in the first place. (The commenter provides nine pages of examples of regulations that were reduced in stringency from the first draft to the second.)

The Commenter then adds the following from the 2022 public comment period: The Commenter states that in the March 14, 2022, response to comments, the Department avoided the comment by asserting that the proposed regulations "further that goal" of protecting the air sources of Allegheny County, and referencing responses 9 and 10 of the March 14, 2022, comment/response document. The Commenter calls the responses vague and conclusory statements that ignore the comment, and states that the Department should explain why more stringent standards were appropriate in 2018 but are not appropriate now. (ID No. 37)

**RESPONSE:** Thank you for your comment. Throughout the course of developing a regulation, it is not unusual for proposed changes to be contemplated and placed into initial drafts of the proposed regulation revision, but ultimately not find their way to the final version.

35. **COMMENT**: The Commenter repeats Comment Number 6 from the 2021 public comment period, repeating Comments 6A through 6G related to the Commenter's view of the legality of the Settlement Agreement, particularly Section 7 of that agreement.

The Commenter then adds the following from the 2022 public comment period: The Commenter states that the decision of the Administrative Hearing Officer in the legal challenge by U.S. Steel did not address the lawfulness of Section VII of the 2019 Settlement Agreement. The Commenter also states that Comment Response 20 from the March 14, 2022 Comment Response document avoided the comment by erroneously asserting that "[t]he issues relating to these comments were resolved through the dispute resolution process set forth under the 2019 settlement agreement." The Commenter states that nowhere in the decision of the Administrative Hearing Officer is there an analysis of the four reasons (set forth above) why Section VII of the Settlement Agreement is unlawful. The Department should provide an appropriate response to the comment. (ID No. 37)

**RESPONSE:** Thank you for your comment. The Settlement Agreement is not the subject of this public comment period.

36. **COMMENT**: The Commenter repeats their Comment Number 7 from the 2021 public comment period:

The Department's failure to propose any more stringent emission standards is not compelled by Section VII of the Settlement Agreement, even if it could lawfully restrict the Department's regulatory authority.

Even if Section VII of the 2019 settlement agreement could legally restrict the Department from adopting more stringent emission standards, it would not be a basis for doing nothing to improve emission standards for fine particulates -- which is what the Department is doing...To evaluate different compliance scenarios under more stringent emission standards, Commenters created their own spreadsheets... Using these spreadsheets, one can adjust emissions standards to any percentage, and then evaluate the corresponding rate of compliance for each battery for the calendar year 2017. The conclusion is that the Department can propose more stringent emission standards that would still result in a level of compliance of no less than 99%, as set forth in Section VII of the settlement agreement...What is important is that the Department has not performed an analysis evaluating alternate compliance scenarios...As a matter of law, this is unreasonable... Despite the numerous mathematical possibilities for lowering the percent of allowable leaking doors, lids, and offtakes even within the terms of the settlement agreement, the Department has not done this analysis. Accordingly, it has acted unreasonably as a matter of law. It has also failed to do things to protect public health even under its flawed interpretation of the settlement agreement.

The Commenter then states the following from the 2022 period:

That the Department did not attempt to respond to this comment in the March 14, 2022 Comment Response Document. (ID No. 37)

**RESPONSE:** The Department has clearly stated in the regulation revision Technical Support Document and in the March 14, 2022, Comment Response document that the main purpose of this regulation change was to incorporate test methods and inspection procedures into Article XXI §2105.21.

37. **COMMENT**: The Commenter repeats its Comment Number 8 from the 2021 public comment period:

The Department should revise the proposed regulations to require a meaningful work practice plan to facilitate emissions reductions at the Clairton Coke Works. The Commenter states that the 1993 U.S. Steel NESHAPS Work Practices Plan is inadequate with regard to specifying standards and criteria for repair, replacement, or corrective action with regard to door areas, charging, topside lids, and offtakes, and that these weaknesses could be improved by the Department through regulation.

The Commenter then states the following from the 2022 public comment period: That the Department avoids the question in its Comment Response document of March 14, 2022. (ID No. 37)

**RESPONSE:** At this time, the intention of the regulation revisions is to include the test methods in the regulation and to make the inspection procedures more precise and clear. The Commenter's work practice standard suggestions are outside the scope of this regulation change.

38. **COMMENT**: The Commenter repeats its Comment Number 9 from the 2021 public comment period:

The Department should develop more stringent emission standards, including technology-forcing standards. To explore areas for improvement of its coke oven and coke oven gas regulations, the Department should look to present and future innovations made by steel industries in other countries, particularly Japan and members of the European Union. The European Union's BAT document provides numerous potential improvements to requirements for inspections and maintenance programs. ...Most of this maintenance is centered around repairing brickwork at coke ovens, which has been contemplated at the Clairton Coke Works in the past, including in the settlement agreement in 2019. Rather than simply requiring repairs in settlement agreements, the Department should include such work as a part of a regulatory work practice plan, as discussed above...Japan's Scope21 program is a comprehensive overhaul of how coke is produced...While the technological improvements demonstrated at Japanese facilities would likely require large scale overhauls, there are other technologies that would likely be much more manageable... It would be responsible to recognize the potential application of new technologies outside the United States.

The Commenter then states the following from the 2022 public comment period: That the Department confused the question in its Comment Response document of March 14, 2022. The Department has not provided an analysis of the applicability of control techniques in other countries to the Clairton Coke Works. The Department should do this. (ID No. 37)

**RESPONSE:** In its response in the March 14, 2022 Comment Response document, the Department stated that addressing new technologies is beyond the scope of this regulation revision. That is still the case.

39. **COMMENT**: The Commenter repeats its Comment Number 10 from the 2021 public comment period:

The Department should provide a reasonable justification for not strengthening water quality standards for water in quenching operations.

Nearly one-fifth of the emissions of fine particulates at the Clairton facility are from the quench towers (103 tpy out of 554 tpy). The Department should be considering regulatory measures to reduce fine particulates from quenching, through improved water quality standards or other means. The current regulations prohibit quenching unless the water meets water quality standards for the nearest stream or river...See Current Regulations, Section §2105.21(g)...Similar language is found in the facility's Title V permit...(dated March 27, 2012, Section V.I.1.a)...Despite what appears to be a prohibition, the word "except" in the regulations and the permit might lead one to suggest that if the facility takes water from the Monongahela River for quenching operations, then it is not subject to water quality standards. But the "except" language in the regulations and the permit is not repeated in the review memorandum for the Title V permit, indicating that the facility is indeed subject to water quality standards: All quench towers are equipped with baffles and the water used for quenching the incandescent coke will be equivalent to or better than the water quality standards established for the Monongahela River per Article XXI, §2105.21.g...The Department should clarify whether it believes the facility is subject to water quality standards for the water used in quenching operations. It is not clear what is the Department's position because the supporting document says nothing on this subject. See Technical Support Document.

If the Department believes that the facility is excepted from water quality standards, it should use the opportunity of the present regulatory initiative to make water quality standards more stringent. If the Department believes that the facility is not excepted from water quality standards, then it should identify applicable water quality standards and provide a background on the history of the

facility's compliance with such standards. It should also provide an explanation as to why it is doing nothing in the proposed regulations to improve the quality of the water used in quenching operations.

The Commenter then states the following from the 2022 public comment period:

That the Department addresses the wrong portion of the regulation in its Comment Response document of March 14, 2022, when it responded that it was adding 40 CFR 63 Subpart CCCCC to section 2105.21.g.

The comment was directed to the applicability of water quality standards for the intake water, rather than to the applicability of 40 CFR 63 Subpart CCCCC. In any event, subpart CCCCC already applies. Those requirements are federal requirements, not state requirements. The comment was directed at the applicability of state water quality standards. (ID No. 37)

**RESPONSE:** The Department clarifies that it believes that notwithstanding the words "except that" in the phrase "except that water from the nearest stream or river may be used for the quenching of coke," the facility is subject to the water quality standards for the water used in quenching operations. Any other analysis of the issues of water quality are beyond the scope of this regulation change.

40. **COMMENT**: The Commenter repeats its Comment Number 11 from the 2021 public comment period:

For the sake of clarity, the Department should preserve material in the Source Testing Manual even if it is also incorporated into the regulations.

The Commenter then states the following from the 2022 period:

In the response to comments, the Department does not attempt to respond to this comment. (ID No. 37)

**RESPONSE:** Because the comment is related to the Source Testing Manual, the Department addresses those comments with other comments on SIP96, which addresses the change to Article XXI Part G, "Methods" found in §2107.

41. **COMMENT**: The Department should not strike the particulate mass emission rates in the regulations, applicable to batteries 1-3, 13-15, and 19-20.

The Department proposes to strike particulate mass emission rates for batteries other than battery B, under the flawed premise that air permits do not contain these emissions limitations. This is not a matter of the Department attempting to amend its own regulations to be similar to the state regulations. Rather, this is an effort to affirmatively strike from the regulations emission rates that have been in the regulations since 1997. For a number of reasons, this effort is flawed and should be abandoned.

The ostensible rationale from the Department is that the air permits (not the regulations) do not contain these emissions limitations:

(From the Technical Support Document for Section 2105.21.e.3-)

After reviewing the permits for the coke batteries identified in §2105.21.e.3, the ACHD determined that only Battery B is required to meet the particulate mass emission rate set forth in this Paragraph. The ACHD deleted the other coke batteries listed.

It is not necessary that a requirement first be contained in a permit before it is codified in a regulation. If the Department believes there is legal authority for the proposition that the Department can have a requirement in a regulation only if it is in an air permit, the Department should identify

that legal authority. Also, if the Department believes there is legal authority for the proposition that the Department should affirmatively delete emissions rates that have been in the regulations for a period of years, the Department should identify that legal authority. These emission rates were added to the regulations in 1997 – nearly 25 years ago.

There are two different emission rates that apply to different sets of batteries. The first is a rate of 0.010 grains for dry standard cubic foot, which applies to batteries 1-3, 7-9, and 19.

The second is a rate of 0.040 grains for dry standard cubic foot, which applies to batteries 13-15, 20, and B.

Moreover, it is simply incorrect that these emission rates are not in air permits for the Clairton Coke Works.

The draft Title V permit prepared in January 2022 also includes these emission limits for batteries 1-3, 13-15, and 19-20.

In short, the proposal to strike these emissions rates was based on a flawed legal premise and a misstatement of fact. (ID No. 37)

**RESPONSE:** The Department first notes that the emission rates for Batteries 1-3 and 19, found in \$2105.21.e.2, are not being revised. The Department does grant that the emission rates regulation at \$2105.21.e.3 is being revised by deleting Batteries 13-15 and 20, such that the paragraph will only apply to Battery B. The Department is removing these batteries from \$2105.21.e.3 because U.S. Steel Clairton's 2012 Operating Permit #0052 requires that batteries 13-15 and 19-20 PECs meet a limit of 0.02 lb/ton of coke.

42. **COMMENT**: The Department should reinstate its proposed elimination of the two-door exclusion from requirements for door emissions from September 2020.

In fact, in September 2020 the Department proposed to eliminate this exclusion because it made the county regulations for calculating the percent of leaking doors less stringent than the federal regulations.

ACHD's rationale for removing two-door exclusion in TSD from 2020 draft:

When determining compliance with the emissions standards for door areas, the regulations currently provide that the ACHD must exclude the "two door areas of the last oven charged and any door areas obstructed from view." As noted above, any regulations promulgated by the ACHD cannot be less stringent that the EPA regulations promulgated under the Clean Air Act. When calculating the percent of leaking doors, the federal regulations for determination of visible emissions from byproduct coke oven batteries does not include a two door exclusion. 40 C.F.R. Part 63, Appendix A, Method 303, Section 12.5.3.1. In order to avoid being less stringent than the federal regulation, the ACHD is proposing to remove the two door exclusion.

Under the Pennsylvania Air Pollution Control Act (APCA), the county may enact "ordinances with respect to air pollution which will not be less stringent than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act." ... The federal regulations promulgated under the Clean Air Act do not contain a two door exclusion. Having previously concluded that the two door exclusion should be removed for the county regulations, the Department has provided no explanation for its decision to retain a two door exclusion that is less stringent than and which therefore violates the federal regulations. This change cannot be justified by the decision of the Administrative Hearing Officer in the legal challenge of U.S. Steel. The two door exclusion was not at issue in that decision. In fact, the Hearing Officer held that the Department is required to include in the county regulations requirements that are at least as

stringent as the regulations required by the APCA. See U.S. Steel Corp. v. ACHD, ACHD-21-037, 15-16 (Dec. 9, 2021) (decision and order) (holding that the Department must incorporate more stringent language on pushing and topside emissions as required by the APCA). Because the two door exclusion makes the county regulations less stringent than the federal regulations, the Department should remove the exclusion. (ID No. 37)

**RESPONSE:** Thank you for your comment. ACHD acknowledged that the regulations were being made more stringent than the PA DEP requirements in 25 Pa. Code § 123.44 where they deduct 2 doors from the number of doors with visible emissions and this would result in a violation of the 2019 Settlement Agreement.

43. **COMMENT**: The Department should reinstate its proposed change from September 2020 to measure sulfur compounds "expressed as equivalent hydrogen sulfide" in coke oven gas.

In the proposed regulations in September 2020, the Department proposed to amend the county regulations because they do not include a state requirement that compliance with the emission standards for coke oven gas must be determined by measuring sulfur compounds "expressed as equivalent hydrogen sulfide."

ACHD's rationale for removing two-door exclusion in TSD from 2020 draft:

...the ACHD regulations cannot be "less stringent" than the regulations promulgated under the Pennsylvania Air Pollution Control Act. 35 P.S. § 4012(a). Under Section 123.23 ("Byproduct coke oven gas") of the Pennsylvania "Air Resources" regulations, compliance with the emission standards for coke oven gas is determined by measuring sulfur compounds "expressed as equivalent hydrogen sulfide." 25 Pa. Code § 123.23(b). The current version of the ACHD regulations are less stringent because it does not include this language. The ACHD is proposing to revise its regulations to state "expressed as equivalent hydrogen sulfide" which is consistent with the Pennsylvania regulations.

As discussed above, the county is required to enact regulations that will not be less stringent than the regulations under the APCA. See 35 P.S. § 4012(a). The current county regulations provide that "no person shall flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed, or combusted, unless the concentrations of sulfur compounds, *measured as hydrogen sulfide*, in such gas is less than or equal to the following concentrations . . . ." Article XXI, §2105.21.h (emphasis added). In contrast, the state regulations governing byproduct coke oven gas under the APCA provide that "[n]o person may permit the flaring or combustion of a coke oven byproduct gas which contains sulfur compounds, *expressed as equivalent hydrogen sulfide*, in concentrations greater than . . . ." 25 Pa. Code § 123.23(b) (emphasis added). To be consistent with the more stringent state regulations, in 2020 the Department proposed to change the language "measured as hydrogen sulfide" to "expressed as equivalent hydrogen sulfide." Attachment 7 – Third Draft Regulations, dated September 2020, page 16; Technical Support Document, page 25.

In the current proposed revisions, the Department has reversed this proposal, proposing to keep the language "measured as hydrogen sulfide." See 2022 Proposed Regulations Redlined, page 20. The Department does not provide a justification for this change.

The Department's reversal is not justified by the decision of the Administrative Hearing Officer in the legal challenge by U.S. Steel. That decision only addressed two other proposed changes to the regulation of coke oven gas: (1) changing the emission standard of coke oven gas from 40 grains to 23 grains; and (2) adding five specific sulfur compounds in addition to hydrogen sulfide to measure compliance with the limits in Article XXI §2105.21.h. See U.S. Steel Corp. v. ACHD, ACHD-21-037, 4-5, 8-13 (Dec. 9, 2021) (decision and order). The Hearing Officer only held that those two

proposed revisions did not comply with the Settlement Agreement and that the state regulations did not require these changes. See id. at 12-13.

However, the decision did not address the proposal to change the language "measured as hydrogen sulfide" to "expressed as equivalent hydrogen sulfide," which was intended to make the county regulations consistent with the more stringent state regulations. The Administrative Hearing Officer only addressed the Department's decision to specifically include five additional compounds in the regulations. See id.

In fact, the decision made it clear that county regulations cannot be less stringent than state regulations. See id. at 15-16. Accordingly, the Department should retain the previously proposed more stringent "expressed as equivalent hydrogen sulfide" language in Article XXI, §2105.21.h, which is what is required in the state regulations.

As a policy matter, the Department should interpret the regulatory language "sulfur compounds, expressed as equivalent hydrogen sulfide" in an appropriate manner to properly regulate sulfur compounds. (ID No. 37)

**RESPONSE:** Thank you for your comment. The Hearing Officer determined that ACHD was not allowed to add or include additional sulfur compounds.

44. **COMMENT**: The Department should reinstate the proposed requirement to monitor and record sulfur compounds concentrations on an hourly basis, and apply it to all sulfur emissions as it does in the Title V permit.

In the proposed regulations in September 2020, the Department proposed the addition of language that would require the measurement of sulfur compounds concentrations to be monitored and recorded on an hourly basis:

For determining compliance with the standards in this Subsection, the measured sulfur compounds concentration, expressed as equivalent  $H_2S$ , shall be monitored and recorded on an hourly basis.

The rationale was that there was a need to impose a frequency requirement. See id., page 26. But now it intends to withdraw this proposal. The Department has provided no reasonable basis for withdrawing this proposal.

The proposal should be reinstated because the wholesale removal of a hydrogen sulfide monitoring requirement is not necessary to comply with the Administrative Hearing Officer's decision. The hourly monitoring requirement was not at issue in that decision. The facility still monitors hydrogen sulfide daily averages to comply with its permit, taken from hourly measurements.

The hourly hydrogen sulfide monitoring requirement is necessary for the facility to accurately calculate and report daily averages as required by its Title V Permit. This requirement is present in different versions of the Title V permit for the Clairton Coke Works, though only daily averages are specified under their monitoring requirements. Without a regulatory requirement specifying hourly measurements, this permitting requirement may result in fewer data points being recorded and poorer data on hydrogen sulfide concentrations as a result. The facility should not be allowed to only measure once per day and record it as a daily average. Rather, the Department should amend the regulation such that these measurements are taken hourly and reported as daily averages.

In addition, the Department should require that "all sulfur emissions" be included in this regulatory requirement, consistent with the requirements of the 2012 Title V permit.

As discussed above (i.e. Comment 14), the Department should revise the regulations to include "expressed as equivalent to H2S" rather than "measured as H2S" as required by the state regulations, and also as consistent with the facility's Title V Permit. (ID No. 37)

**RESPONSE:** Thank you for your comment. A facility is still required to meet all of their applicable permit conditions, even if the conditions are not specifically listed in the regulation.

45. **COMMENT**: The Department should delete the word "uncombusted" in the definition of soaking emissions.

"Soaking emissions from a standpipe cap" means uncombusted emissions from an open standpipe which has been dampered off in preparation of pushing the coke mass out of the oven and shall end when pushing begins, i.e., when the coke side door is removed.

In initial versions of the proposed regulation revision, the Department proposed to delete the term "uncombusted."

Without explanation, the Department now proposes to reinstate the proposed term "uncombusted." The Department has provided no reasonable basis for doing this.

The Department should delete the term "uncombusted" because it mischaracterizes emissions from soaking operations and is inconsistent with the substantive requirements for soaking emissions.

To illustrate, the soaking requirements include an opacity requirement, which is an indicator for measuring particulate matter. Clearly, the emissions of particulate matter are intended to be addressed by these requirements. But the phrase "uncombusted material" might be interpreted to apply very narrowly to only volatile organic compounds, causing a loophole in the regulatory requirements.

To avoid ambiguity, the Department should simply delete the term "uncombusted." (ID No. 37)

**RESPONSE:** As a part of the 2021 addendum to the 2019 settlement agreement, the Department agreed to keep the word "uncombusted."

# **List of Commenters**

<u>Commenter Group 1</u> consists of the following list of names of those that emailed a Form Letter to ACHD.

Richard Geiger
Kerri Allen
Patrick Pagano
Laura Horowitz
Eugene Mariani
Kathie Westman
Hannah Rosche
Maria Bajzek
Fayten El-Dehaibi
Jordan Papale
Jessica Bellas
Jennifer Goeckeler-Fried
Savannah Pailloz
Susan Peterson
Jeanne Zang
Catherine Anderson
Virginia Kelly
Stephanie Ulmer
Nancy O
Lynn Glorieux
Bryan Mills
Jon Wilson
Eitan Shelef
Gabrielle Corson
Joan Vondra
Richard Surdyk
Peter Adams
Constantina Hanse
Shawn Conlon
Felecia Bute
Mary Carol Kennedy
Joan Gordon
Kyle Young
Susan Nauhaus
Melanie Meade
Ross Carmichael
Melissa McSwigan
Myra Kazanjian
Kenneth Bickel
Gerard Rohlf
Mari McShane
Al Ferrucci
Emily Willner
Regina Brooks
Don Hawkins
Harry Hochheiser

<u>Commenter Group 2</u> consists of the following list of names of those that hand-signed a list of comments on forms that were submitted at the May 11 hearing by Ms. Germain Gooden-Patterson.

C.D. Long

J.E. McKenzie

Wesley Sutton

Regina McKenzie

Brandon Small

Meme Atenwood

Anita Tobe

Patricia Batton

Kiy Meachan

Kim Meachan

Bernadette Holly

Jeiyn Milesie

Erika Wanzo

Thomas Spell

Tara Booker

Breona Johnson

Marla Hampton

Tehiran McDougald

Gabriana Glover

Symphonie

Angel Spell

Theresa Morigon

Vincent Mosley

Denise Linner

DaQuan Holly

Jymere Stevenson

Kimblyn Johnson

Nikkia Griffin

Jerome Tobe

Stephanie Flowers

Ashton Reck

Barry Nelson

Rev. Charles Wade

Elaine McCray

Sancerae

Christie Cromell

Royce Stewart

Melba Calloway

Kelli Johnson

Adam Walker

Ellen Dailey

Linda Randall

**Robin Prince** 

Cierra Hilliary

Lisa Ebo

**Taylor Stessrey** 

**David Headings** 

Karl Zellars

Nicolette Kier Seth Bush Kristin Breiding Victoria Baggot Jacqualyn Harris Teddy Miti Sandra Baldwin

## **The remaining numbered commenters:**

- 3. Sam DeMarco
- 4. Thomas Bailey
- 5. Elaina Skiba
- 6. Lee Lasich
- 7. Matthew Mehalik
- 8. Richard Lattanzi
- 10. James Beisler
- 11. Ginny Hunt
- 13. Brian Kuba
- 14. Myron Arnowitt, Pennsylvania Director, Clean Water Action
- 15. Michael Rhoads
- 16. Brett Tunno
- 17. Jonelle Scheetz
- 18. R. Tony Kurta
- 19. Tammy Firda
- 20. Ken Zapinski, Pittsburgh Works Together
- 21. Richard Ford
- 22. Art Thomas
- 23. Kim Meacham
- 24. David Meckel
- 25. Cindy Meckel
- 26. Jay Ting Walker
- 27. Johnie Perryman
- 28. Qiyam Ansari
- 29. Germaine Patterson
- 30. Matthew Nemeth
- 31. Bob Macey
- 32. Patrick Campbell, Executive Director, GASP
- 33. Christine Graziano, Co-founder, Plant Five for Life
- 34. Melanie Meade
- 35. Ned Mulcahy
- 36. Christopher Hardin, Environmental Manager, U.S. Steel
- 37. Christopher Ahlers, Clean Air Council

## CERTIFICATION of APPROVAL and ADOPTION

To the best of my knowledge, information, and belief, I the undersigned hereby certify that the amendments revising §2101.20 and §2105.21.a-h & j of Article XXI, Rules and Regulations of the Allegheny County Health Department, Air Pollution Control, adopted by the Allegheny County Board of Health on September 7, 2022, ratified by the Allegheny County Council on October 25, 2022 (Ordinance 33-22-OR, Bill No. 12455-22), approved by the Allegheny County Chief Executive on October 26, 2022, and effective November 5, 2022, as a revision to the County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards, were duly and properly enacted as prescribed by the Local Health Administration Law and the Allegheny County Home Rule Charter, and as such, are fully and legally enforceable by the Allegheny County Health Department and the County of Allegheny as provided for by the within authority.

Jason Willis, Esq.

Solicitor

Allegheny County Health Department