BEFORE THE HEARING OFFICER
ALLEGHENY COUNTY HEALTH DEPARTMENT

UNITED STATES STEEL CORPORATION, *Petitioner,* ALLEGHENY COUNTY HEALTH DEPARTMENT, *Respondent.*	In re Settlement Agreement and Order, executed June 27, 2019 and entered February 10, 2020, resolving Appeals of Enforcement Orders 180601, 190305, and 190501, and Administrative Order 181002-Revised

ALLEGHENY COUNTY HEALTH DEPARTMENT'S REPLY TO UNITED STATES STEEL CORPORATION'S REQUEST FOR SUMMARY GRANT OF RELIEF

Respondent, Allegheny County Health Department ("Department"), by and through its undersigned counsel hereby submits its Reply to Petitioner, United States Steel Corporation's ("U.S. Steel"), Request for Summary Grant of Relief. For the reasons set forth below, the Department requests that U.S. Steel's Request be denied.

I. INTRODUCTION

U.S. Steel initiated this dispute resolution process to resolve alleged violations of the June 27, 2019 Settlement Agreement and Order (hereinafter "SOA")[1] relating to the Department's draft revisions to the Coke Ovens and Coke Oven Gas regulations at Article XXI, §§ 2101.20 and 2105.21[2] (hereinafter referred to as "Amended Coke Oven Regulations"). On November 4, 2020, after several months of meetings with U.S. Steel, the Department presented the Amended Coke Oven Regulations to the Allegheny County Board of Health who approved the draft regulations for public comment. On January 20, 2021, following the public comment period, U.S.

[1] A copy of the SOA is attached as Ex. "A" to U.S. Steel's Petition for Dispute Resolution.
[2] A copy of the Department's proposed revisions to the coke oven regulations is attached as Ex. "A" to the Department's Statement of Position.

Steel advised the Department that it was initiating the informal dispute resolution process pursuant to Section XI, Paragraph 25, of the SOA and identified numerous sections of the Amended Coke Oven Regulations with which it took issue. After multiple meetings with the Department, U.S. Steel narrowed its grievances to only three sections: "Pushing" (Sections 2101.20, 2105.21.e), "Coke Oven Gas" (Sections 2101.20, 2105.21.h), and "Miscellaneous Topside Emissions" (Section 2105.21.j). *See* U.S. Steel's "Statement of Position" dated May 5, 2021.[3] On May 24, 2021, the Department submitted its Written Statement of Position pursuant to the SOA in which it addressed the issues in dispute.[4] U.S. Steel submitted a "Petition for Dispute Resolution" (hereinafter "Petition") to this tribunal on June 23, 2021 and a "Request for Summary Grant of Relief" (hereinafter "Request for Relief") on September 8, 2021. The Department incorporates by reference its Statement of Position dated May 24, 2021.

Throughout its Petition and Request for Relief, U.S. Steel paints the Department as acting in bad faith and willfully ignoring the provisions of the SOA. This is wrong. In 2018, one year prior to the SOA, the Department had proposed amendments to the coke oven regulations which would have imposed more stringent emissions standards for the coke over batteries. Following the execution of the SOA, the Department withdrew these proposed amendments and drafted the current Amended Coke Oven Regulations in conformity with the requirements of the SOA. During this regulatory review process, the Department added hundreds of lines of new regulatory language of which U.S. Steel is disputing only a small fraction. Throughout this process, the Department has acted in good faith with regard to the terms of the SOA and the only divergence from the terms was in order to comply with Pennsylvania law. Therefore, for the reasons discussed below, the

[3] A copy of U.S. Steel's "Statement of Position" is attached as Ex. "D" to U.S. Steel's Petition for Dispute Resolution.
[4] A copy of the Department's Statement of Position is attached as Ex. "F" to U.S. Steel's Petition for Dispute Resolution.

Department requests a finding that the proposed Amended Coke Oven Regulations are in conformity with SOA and the Pennsylvania laws and regulations applicable to the Department.

II. BURDEN OF PROOF

U.S. Steel erroneously contends that the Department has the burden of proof in this matter even though the Department's regulations very clearly state otherwise. Article XXI provides that "[i]n any proceeding arising out of the provisions of this Article, … or who claims that a provision or interpretation other than the one resulting in the lowest permissible emission rate was intended to prevail pursuant to this Section shall bear the burden of proof and the burden of going forward with respect to such claim." Article XXI, §2101.06.f. As U.S. Steel's appeal was initiated in response to the Department amending its regulations under Article XXI,§ 2101.07.b, it effectively arises out of a provision of Article XXI. That U.S. Steel is advocating for an interpretation of Article XXI which will result in a limit higher than the lowest possible emission rate for coke oven gas, further bolsters that they bear the burden of proof.

Additionally, the Department's regulations governing appeals state:

> [T]he ***burden of proof*** shall be the same as at common law, in that ***the burden shall normally rest with the party asserting the affirmative of an issue***. It shall generally be the burden of the party asserting the affirmative of the issue to establish it by ***a preponderance of the evidence***. In cases where a party has the burden of proof to establish the party's case by a preponderance of the evidence, the Hearing Officer may nonetheless require the other party to assume the burden of proceeding with the evidence in whole or in part if that party is in possession of facts or should have knowledge of facts relevant to the issue.

Article XI 1105(C)(7) (emphasis added).[5] As this appeal has been initiated by U.S. Steel in response to the Department's usual and ordinary course of action as a regulatory agency, U.S. Steel, as "Petitioner," is "asserting the affirmative," i.e., that the Department has violated the terms

[5] This provision mirrors the burden of proof for appeals to the Pennsylvania Environmental Hearing Board as established by 25 Pa. Code § 1021.122.

of the parties' SOA. Accordingly, the burden of proof is properly placed on U.S. Steel to demonstrate the affirmative of its complaint.

III. ARGUMENT

A. The Department's air quality regulations cannot be less stringent than the Pennsylvania "Air Resources" regulations

On October 30, 1998, the Pennsylvania Department of Environmental Protection ("PA DEP") approved the Department as an air pollution control agency under Section 12 of the Air Pollution Control Act (APCA), 35 P.S. § 4012.[6] The Pennsylvania "Air Resources" regulations state that when the PA DEP grants approval to an air pollution control agency, "the approval may contain the **conditions** that the [PA DEP] deems proper to insure the effective implementation of the program of the agency." 25 Pa. Code § 133.6(a) (emphasis added). The PA DEP document approving the Department as an air pollution control agency includes the following "General Conditions":

> b. **Allegheny County shall implement regulatory requirements promulgated by the Department applicable to air contaminations sources** including mobile sources located in Allegheny County. **Allegheny County shall also promulgate regulations to implement regulations promulgated by the [PA DEP].** Allegheny County will describe the process and timing for implementation of these regulations in the Annual Program Plan.

"Allegheny County Air Quality Program Approval with Conditions" (hereinafter "Approval with Conditions") (emphasis added).[7] Moreover, the Pennsylvania Air Resources regulations state that the PA DEP may rescind approval of an air pollution control agency if the "agency is not operating its program in conformity with the approval granted by the Department, or as set forth in the

[6] The Department included in its Statement of Position much of the same background information contained in this section and under the subsequent sections. Rather than merely cite to Statement of Position, the Department has included the language in its Reply in order to make it easier for this tribunal to understand the arguments.
[7] A copy of the Approval with Conditions is attached as Ex. "B" to the Department's Statement of Position.

application of the agency." 25 Pa. Code § 133.8. Thus, an abdication of the Department's duty to regulate can result in a loss of its authority to regulate. Additionally, the APCA states as follows:

> (d) Whenever the [PA DEP] finds that violations of this act or the **rules and regulations promulgated under this act** are so widespread that such violations appear to result from **a failure of the local county control agency involved to enforce those requirements**, the department may assume the authority to enforce this act in that county.
>
> (e) The [PA DEP] shall have the power to refuse approval, or to **suspend or rescind approval**, once given, to any county air pollution control agency if the department finds that such county agency is unable or unwilling to conduct an air pollution control program to abate or reduce air pollution problems within its jurisdiction in accordance with the requirements of this act, the Clean Air Act or the **rules and regulations promulgated under both this act** and the Clean Air Act.

35 P.S. §§ 4012(d), (e) (emphasis added). Under these provisions, if the Department fails to enforce the regulations promulgated under the APCA (i.e., Pennsylvania Air Resources regulations), the PA DEP may rescind its approval of the Department as a local agency.

The APCA provides additional requirements with respect to the Department's adoption of regulations relating to air pollution. The APCA states that the Department 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." 35 P.S. § 4012(a) (emphasis added). While the Department is required under the Approval with Conditions to implement regulatory requirements promulgated by the PA DEP, the Department is not required to promulgate the exact regulations that are adopted by the PA DEP. The APCA permits the Department to enact regulations which "will not be less stringent" than the provisions of the APCA and Pennsylvania Air Resources regulations. It is also important to note that if the Department's regulations are determined to be "less stringent," then the APCA requires the Department to amend its regulations to address this deficiency.

During the review of the Article XXI regulations relating to coke ovens and coke oven gas, the Department identified several sections that are less stringent than the Pennsylvania Air Resources regulations. Per APCA requirements, the Department proposed revisions to these sections so that they are not less stringent than the Pennsylvania regulations. U.S. Steel challenged these amendments under the formal dispute resolution process based on Section VII of the SOA titled "Adoption of More Stringent Emission Standards." This section provides that the Department may impose more stringent emission standards for coke batteries if the revisions are technically feasible and meet additional criteria. As discussed in greater detail below, it is the Department's position that the proposed amendments are required under the APCA stringency mandates and, therefore, given well-established Commonwealth precedent, do not violate the SOA.

U.S. Steel maintains that even if the Department's current regulations are less stringent than the Pennsylvania Air Resources regulations, the Department is still required to go through the exercise of determining whether the regulations satisfy the criteria under the SOA. This argument is nonsensical and ultimately raises the question, if the Department were to find that its regulations did not conform with the requirements of the APCA, why would it need to go through the additional steps outlined in the SOA given that the Department **must** meet and may not contractually dispose of its statutory obligations? Moreover, the SOA contemplates the present situation where a Pennsylvania statute renders a provision of the SOA unenforceable. SOA at ¶ 20 ("The paragraphs of this Settlement Agreement are severable, and should any part hereof be

declared invalid or unenforceable, the remainder shall remain in full force and effect between the Parties.").[8]

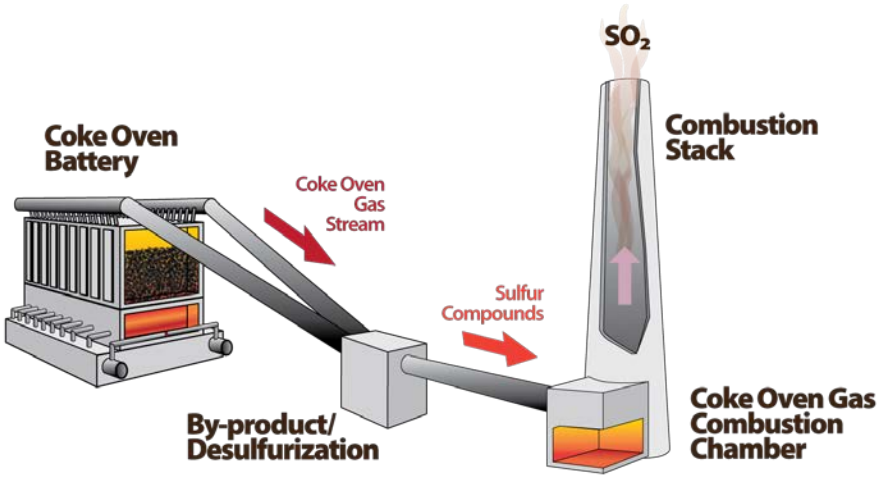
In its Petition, U.S. Steel makes the specious claim that even if the Department's regulations are less stringent, the Department is not in violation of the APCA until the PA DEP actually "initiate[s] a proceeding and make[s] a formal finding that the Department is not operating its Air Quality Program in accordance with the Approval." (Petition at ¶¶ 33-34). U.S. Steel is essentially requesting that the Department knowingly violate the APCA but wait to correct the violation until it is caught by the PA DEP. The Department expects all of the sources it regulates to take prompt corrective action after becoming aware of a violation rather than wait until the Department discovers the violation. The Department must set an example for these sources and correct its regulations when they are discovered to be in contravention of state and federal law.

Even more perplexing is U.S. Steel's next argument which reasons that the Department must follow all the requirements of SOA even if it results in PA DEP "assume[ing] enforcement authority over air quality in Allegheny County." (Petition at ¶ 34). U.S. Steel then obtusely states: "While this outcome may not be **palatable** to the Department, that does not mean it is clearly 'illegal' or contrary to the Air Pollution Control Act." *Id*. (emphasis added). This argument is absurd and contrary to the implicit purpose of the APCA which is for the Department to avoid violating the statute so as to keep the PA DEP from having to step into its shoes. The Department is not willing to wait for the PA DEP to assume the air quality program before correcting its regulations. Therefore, the Department must amend the sections of its regulations that are less stringent than the APCA and Pennsylvania Air Resources regulations.

[8] This is not to say that the Department is seeking to sever any provisions of the SOA relating to stringency, but rather that such requirements not be enforced in the unique circumstance where enforcement would result in a violation of Pennsylvania law, as is the case here.

B. The Department is amending the regulations to include "Measured sulfur compounds" (Sections 2101.20, 2105.21.h) to be consistent with Pennsylvania "Air Resources" regulations

During the coke-making process, coke oven gas is produced when volatile products and gases are driven off from the coal. The volatile products and gases include benzene, tar, sulfur compounds, ammonia and methane. One of the sulfur compounds produced is hydrogen sulfide (H_2S), a colorless gas which smells like rotten eggs. U.S. Steel utilizes a by-products recovery and desulfurization process which removes most of the volatile products in the coke oven gas before it is combusted at the facility to heat the coke ovens, boilers and blast furnaces. The remaining sulfur compounds that are in the gas stream are flared[9] at a stack on the U.S. Steel facilities. During the combustion process, the sulfur compounds convert to sulfur dioxide (SO_2). The following diagram is a simplistic explanation of the process:



According to the United States Environmental Protection Agency (EPA), exposure to SO_2 can cause harm to the human respiratory system and make breathing difficult, particularly for individuals with asthma.[10] Pursuant to such finding, EPA has established national ambient air

[9] Flaring is generally the process in which air pollutants are piped to an elevated location, such as a stack, and burned in the open air.
[10] *See* https://www.epa.gov/so2-pollution/sulfur-dioxide-basics.

quality standards (NAAQS) for SO_2 which are designed to protect the public health within an adequate margin of safety. 42 U.S.C. § 7409(b). In order to ensure that the Department is meeting these standards, it is incumbent that the Department regulate the sulfur compounds that are converted to SO_2 during the combustion process.

Article XXI, §2105.21.h ("Coke Oven Gas"), sets forth the limits for concentrations of sulfur compounds in coke oven gas. Section 2105.21.h limits the "concentration of sulfur compounds, **measured as hydrogen sulfide**" in coke oven gas. Under this language, the only sulfur compound required to be "measured" is H_2S. By measuring only H_2S, a whole host of other sulfur compounds that may be contributing to SO_2 emissions are not being counted. During the regulatory review process, the Department obtained data from U.S. Steel which indicates that there are other sulfur compounds in the coke oven gas. [11] The following coke oven gas sample was taken July 7, 2016 at the Clairton Plant:

12:15:42 07-Jul-16
GCC: [Downriver Grains] PGC 0.29 at 0.1.0.29

Inject 12:05:38 THU 7 JUL 2016, B-LINE TOTAL (04)
PGC #9
GRAINS OF H2S IN DOWNRIVER GAS
Regular Analysis Report Method Table 02

Name	RT	Conc
H2S	131.5	44.06 PPM
GRAINS H2S	0.0000	2.806 Clc
COS	210.0	33.55 PPM
M. MERCAPT	348.3	7.377 PPM
E. MERCAPT	438.8	0.0682 PPM
CS2	481.5	63.41 PPM

The additional sulfur compounds, primarily carbon disulfide (CS_2) and carbonyl sulfide (COS), contribute significantly to the total amount of sulfur present in coke oven gas combusted in the U.S. Steel Clairton Plant. Methyl mercaptan (CH_3SH) and ethyl mercaptan (C_2H_5SH) are also present in minor amounts in coke oven gas. All sulfur compounds in coke oven gas are

[11] A copy of select portions of the data is attached as Ex. "C" to the Department's Statement of Position.

converted to SO_2 upon combustion. Therefore, to count solely H_2S in combusted coke oven gas is to actually undercount total SO_2 emissions.

The Pennsylvania Air Resources regulations specifically address coke oven gas byproducts. Under Section 123.23 ("Byproduct coke oven gas"), 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). Under the Pennsylvania Air Resources regulations, H_2S and other sulfur compounds are measured to determine compliance with the coke oven gas standard. For the above coke oven gas sample taken July 7, 2016, the H_2S concentration was only **2.806 grains per 100 dry standard cubic feet (dscf)**. However, the calculation of "equivalent" H_2S concentration was **13.12 grains per 100 dscf.**[12] [13] This example illustrates how H_2S itself may make up only a small percentage of total sulfur compounds in the coke oven gas that is combusted and converted to SO_2.

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[12] Equivalent H_2S calculation

H_2S equivalent = (H_2S + COS + CH_3SH + C_2H_5SH + 2 CS_2)

H_2S equivalent = (44.06 + 33.55 + 7.377 + 0.0682 + 2 * 63.41) ppmdv

= 211.88 ppmdv

H_2S equivalent, mass basis

= 211.88 ppmdv * 0.000001 ÷ 385.4 scf/lb mole * 34.1 lb H_2S / lb mole H_2S * 7000 gr/lb * 100

= 13.12 gr/100 dscf

U.S. Steel criticized the Department for not explaining in its Statement of Position how the above equation was derived. (U.S. Steel Petition at ¶ 20). The numbers in the second line are volume concentrations (ppmdv) of each species in the first line, taken for a specific gas sample. The concentration of carbon disulfide is doubled because one molecule of CS_2 reacts to form two molecules of SO_2, whereas one molecule of H_2S reacts to form one molecule of SO_2. The total concentration in parts per million is converted to a mass concentration (gr/dscf) by dividing by one million, multiplying by the standard molar volume (385.4 scf/lb mole), multiplying by the molecular weight of H_2S (34.1 lb H2S/lb mole H_2S), and finally converting pounds to grains by multiplying by 7000 gr/lb. The molecular weight of H_2S is used rather than the molecular weights of the actual species, because the calculation is of the amount of H_2S containing the same amount of sulfur as the actual combination of measured sulfur compounds in the fuel gas.

[13] Please note that the above gas sample is Downriver B gas. Part of the downriver gas is burned in the boilers at the Clairton Plant; the other part is piped to the U.S. Steel Edgar Thomson and Irvin Plants. There are multiple coke oven gas streams produced at the Clairton Plant due to the design of the desulfurization plant. Underfire gas (the gas stream that is burned underneath the coke ovens to provide heating for the coking process) does not normally contain significant amounts of sulfur compounds other than H_2S. Only Downriver B and Downriver A (which is a mixture of Downriver B gas with underfire gas and/or natural gas) contain these sulfur compounds. Downriver B gas amounts for approximately 55% of total coke oven gas produced and combusted.

It is the Department's position that the current version of Article XXI, §2105.21.h, is less stringent than the Pennsylvania Air Resources regulations because it only requires the measurement of H_2S.[14] The fact that under the above example, Pennsylvania Air Resources regulations would result in a sulfur compound concentration of 13.12 grains per 100 dscf versus 2.806 grains per 100 dscf under the Article XXI requirements clearly supports a finding that the Department regulations essentially undercount the concentration of sulfur compounds contained in coke oven gas and are thus less stringent. As discussed above, the Department regulations cannot be "less stringent" than the Pennsylvania Air Resources regulations. 35 P.S. § 4012(a). Therefore, the Department is proposing to revise its regulations to state: "concentration of measured sulfur compounds, expressed as equivalent hydrogen sulfide," which is consistent with the Pennsylvania regulations.

Another issue which the Department addressed in the proposed regulations is which sulfur compounds U.S. Steel must measure in the coke oven gas. The Department reviewed test data obtained from U.S. Steel for the Clairton Plant for the past several years and determined that there are six sulfur compounds that comprise an appreciable amount of the total sulfur compounds in the coke oven gas. The Department is only requiring U.S. Steel to measure these six sulfur

[14] U.S. Steel contends that the PA DEP regulation must be less stringent than the Department's current standard because it applies a 50 grains per hundred dscf standard. U.S. Steel fails to note that the 50 grains standard was adopted by the PA DEP nearly 50 years ago, on October 25, 1974, and Section 123.23 was last amended in 1979. 4 Pa.B. 2283 (amended Oct. 25, 1974, effective Nov. 11, 1974) *available at* http://digitalcollections.powerlibrary.org/cdm/compoundobject/collection/slppadocs/id/48495/rec/28; 9 Pa.B. 1534 (amended April 27, 1979, effective Aug. 1, 1979). Based on federal Clean Air Act requirements for new sources, any coke oven battery installed would be subject to a grains standard lower than prescribed in Pennsylvania Air Resources regulations. *See* 25 Pa.Code § 127.203a (relating to installation permits for major sources locating in or impacting a nonattainment area); 40 CFR § 52.21 (relating to installation permits for major sources locating in an attainment or unclassified area). However, the requirement to measure all sulfur compounds would not be impacted by a change in the grains limit.

compounds in the coke oven gas. The six sulfur compounds are included in the proposed definition of "measured sulfur compounds" in Section 2101.20:

> "Measured sulfur compounds" means hydrogen sulfide (H_2S), carbon disulfide (CS_2), carbonyl sulfide (COS), methyl mercaptan, ethyl mercaptan and sulfur dioxide (SO_2) measured in any gas stream.

Article XXI, § 2101.20 ("Definitions"). By requiring U.S. Steel to measure additional sulfur compounds, and not just H_2S, the Department regulations will be consistent with Pennsylvania regulations and ensure that the Department has accurate data as to the sulfur compounds in the coke oven gas that are converted to SO_2 on combustion.

U.S. Steel disputes that the language "expressed as equivalent hydrogen sulfide" in the PA DEP's regulations require the testing of all sulfur compounds and not just H_2S. 25 Pa. Code § 123.23(b) (U.S. Steel Petition at ¶ 20). The term "equivalent" is commonly used in the chemistry field and in general terms means the amount of a specified substance "a" that reacts to form the same amount of a substance "b" as a given amount of a substance "c." In this case, a = H_2S, b = SO_2, and c = sulfur compound of interest. For example, if the sulfur compound of interest is carbon disulfide (CS_2), then the "equivalent" H_2S is the amount of H_2S that would combust to form the same amount of SO_2 as formed by complete combustion of CS_2 to SO_2. The Department does recognize that its proposed definition is inconsistent with the PA DEP in that the Department only requires the monitoring of six sulfur compounds and not all possible sulfur compounds. The Department believes that limiting to the six compounds will significantly reduce the burden placed on U.S. Steel in its monitoring.

Notwithstanding the above arguments, the dispute resolution procedures under the SOA requires U.S. Steel to submit "to the Department a written statement of position on the matter in dispute, **including any available factual data, analysis,** or opinion supporting that position, and including any supporting affidavits and/or documentation relied upon by U.S. Steel." (SOA at XI,

¶ 26). The Statement of Position submitted by U.S. Steel provides allegations but no actual "data or analysis" to support its position. *See* U.S. Steel's Statement of Position – attached as Ex. "E" to U.S. Steel's Petition. Considering that U.S. Steel has been aware for more than a year of the Department's proposed regulation, there is no justification for failing to provide the data. Thus, U.S. Steel's request to strike the language relating to "measured sulfur compounds" must fail and this tribunal should find that the Department's proposed amendment complies with Pennsylvania law and regulations, and the SOA.

C. The Department is amending "Pushing" (Sections 2101.20, 2105.21.e) and "Miscellaneous Topside Emissions" (Section 2105.21.j) to incorporate language from the Pennsylvania "Air Resources" regulations

U.S. Steel also seeks to strike the Department's proposed amendments to the "Pushing" (§§ 2101.20, 2105.21.e) and "Miscellaneous Topside Emissions" (§ 2105.21.j) sections and the related definitions under Section 2101.20. These sections were amended by the Department in order to be consistent with the Pennsylvania Air Resources regulations:

Article XXI Proposed Amendment	Pennsylvania Air Resources Regulations
Section 2101.20 ("Definitions"): "Pushing emissions" means an air contaminant emitted into the outdoor atmosphere which is generated by or results from the pushing operation."	**25 Pa.Code § 121.1:** "Pushing emissions-An air contaminant emitted into the outdoor atmosphere which is generated by or results from the pushing operation."
Section 2105.21.e: 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 . . ."	**25 Pa.Code 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)."

Section 2105.21.j ("Miscellaneous Topside Emissions"):	**25 Pa.Code §123.44(a)(6),(7):**
1. 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.	(6) At no time may there be topside emissions from any point on the topside other than allowed emissions from charging port seals and offtake piping under paragraphs (4) and (5).
2. At no time may there be visible emissions from the coke oven gas collector main.	(7) At no time may there be visible emissions from the coke oven gas collector main.

U.S. Steel argues that "even if the Proposed Coke Rule's revisions for pushing and topside emissions are assumed to be less stringent than the Pennsylvania DEP's standards, this does not authorize the Department to disregard the SOA." (Petition at ¶ 60). U.S. Steel's position is contrary to the requirement in the APCA that the Department's regulations cannot be "less stringent" than the Pennsylvania Air Resources regulations. 35 P.S. § 4012(a). Because both parties agree that the language relating to pushing and topside emissions in the Pennsylvania Air Resources regulations are more stringent, then the Department is required to incorporate the language in Article XXI.

D. The Department is correcting the standard for sulfur compound concentration and is not making the standard more stringent

The coke oven gas standards for coke batteries are set forth in Article XXI, § 2105.21.h, and provide the following emission standards:

1. Coke batteries installed, replaced, or reconstructed, or at which a major modification was made **on or after January 1, 1978**, operate at less than or equal to a concentration of **10 grains** per hundred dry standard cubic feet of coke oven gas.
2. **All other coke batteries** operate at less than or equal to a concentration of **50 grains** per hundred dry standard cubic feet of coke oven gas.

Article XXI, §§ 2105.21. h.1 and 2.[15] U.S. Steel currently operates 10 coke oven batteries at the Clairton Plant. Due to the design of the Clairton Plant, U.S. Steel is unable to measure the individual coke oven batteries to determine compliance with the 10 and 50 grains per 100 dscf standards set forth in Paragraphs 2105.21.h.1 and h.2. In lieu of testing each individual battery, Paragraph 2105.21.h.3 allows the Clairton Plant to measure the coke oven gas stream after it comes from all of the operating batteries. The current regulation provides that the 10 grains and 50 grains per 100 dscf standards are met at the Clairton Plant if the concentration for the facility is not greater than 40 grains per hundred dscf of coke oven gas. Article XXI, § 2105.21.h.3. Allowing a facility-wide standard and not requiring U.S. Steel to measure each individual battery for compliance with either the 10 or 50 grains per 100 dscf standard is a significant concession by the Department.

Section 2105.21.h was last amended in 1994 during which time the 40 grains per 100 dscf standard was established for coke oven batteries at the U.S. Steel Clairton Plant.[16] Since the amendment, U.S. Steel shut down Batteries 7, 8 and 9 in 2009 and installed Battery C in 2012. As part of the regulatory review process, the Department decided to update the coke oven gas standard to account for the changes in the operating batteries at the Clairton Plant. Importantly, U.S. Steel agrees that 40 grains is no longer the correct standard for the coke oven batteries at the Clairton Plant. *See* Request for Relief at p. 4, FN 1. Thus, the issue in dispute is not whether the limit needs to be changed, but what method should be employed to recalculate the coke oven gas standard.

[15] During the regulatory review process, the Department removed language that was no longer applicable which resulted in the renumbering of the paragraphs in Section 2105.21.h. Paragraphs 2105.21.h.1, 2, and 3 in the proposed coke oven regulations were renumbered from Sections 2105.21.h.2, 5, and 4, respectively. In order to avoid confusion, the citations to Article XXI regulations in this Reply are for the proposed amended regulations and are not the citations to the current version of the regulations, unless specifically noted.

[16] As noted by U.S. Steel, it appears that the origination of the 40 grains standard was a 1992 settlement agreement between U.S. Steel, U.S. EPA, PA DEP, Group Against Smog and Pollution, and the Department. (Attached as Ex. "B" to U.S. Steel's Petition).

It is U.S. Steel's position that the coke oven gas standard for the Clairton Plant should be 35 grains per hundred dscf of coke oven gas. U.S. Steel bases this interpretation on the recalculation of the standard as part of the 2012 installation permit for Battery C. (Petition at ¶ 6). During the permitting process, Department staff made the following determination as to the coke oven gas standard for Battery C:

> According to Article XXI, §2105.21.h.2, no person shall flare, mix, or combust coke oven gas unless the concentration of sulfur compounds, measured as hydrogen sulfide in such gas is less than or equal to **10 grains** per 100 dry standard cubic feet of coke oven gas for all batteries installed after January 1, 1978. **Therefore, C Battery must comply with §2105.21.h.2**[17].

(Exhibit "D" to Department's Statement of Position, at p. 38) (emphasis added). The Department then made the following calculation as to the facility-wide standard for the Clairton Plant:

Average H_2S Concentration with the Operation of C Battery

Battery	Annual Coal Charge	COG H_2S Conc.	Coal Charge X H_2S Concentration
	tons	gr/100 dscf	
Nos. 1 - 3	1,553,805	40	62,152,200
Nos. 13-15	1,637,025	40	65,481,000
Nos. 19-20	2,004,580	40	80,183,200
B	1,491,025	40	59,641,000
C	1,379,059	10	13,790,590
Total	8,065,494		281,247,990
	Avg. H_2S Concentration (gr/100 dscf)		**34.87**

Based on this calculation, the Department set the standard for sulfur compound concentration at 35 grains per 100 dry standard cubic feet of coke oven gas. (IP #0052-I011, Condition V.A.1.j).[18]

[17] This citation is for the current coke oven regulations. In the proposed revisions, this Paragraph is now numbered as 2105.21.h.1.
[18] IP #0052-I011 is attached as Ex. "E" to the Department's Statement of Position.

The Department now recognizes that it made an error when it calculated the 35 grains per hundred dscf standard for the Battery C installation permit.[19] The Department is proposing to **correct** the standard for concentration of sulfur compounds in the coke oven gas (COG) so that it is in conformity with the **current** 10 and 50 grains per 100 dscf standards in Article XXI, §§ 2105.21. h.1 and 2. In the calculation used for Battery C, all the batteries, except Battery C, were incorrectly provided a standard of 40 grains per 100 dscf. This is clearly not correct based on the requirements of Paragraphs 2105.21.h.1 and h.2. The following chart identifies the batteries at the Clairton Plant and the applicable standard based on when the battery was installed:

Battery	**Coke Oven Gas Concentration Standard (gr/100 dscf)**	**Article XXI Citation**
Nos. 1 - 3	50	§ 2105.21. h.2
Nos. 13-15	10	§ 2105.21. h.1
Nos. 19	50	§ 2105.21. h.2
Nos. 20	10	§ 2105.21. h.1
B	10	§ 2105.21. h.1
C	10	§ 2105.21. h.1

During the regulatory review process, the Department recalculated the grains standard by taking the weighted design capacity for the coke oven batteries in operation and using the emissions limits under Paragraphs h.1 (10 grains) and h.2 (50 grains). The Department calculated that the grains standard under Paragraph h.3 should be 23 grains per hundred dscf of coke oven gas. The following table details the Department's calculation of the grains standard:

[19] The Department acknowledges that subsequent permits issued by the Department continued this error by including a 35 grains per hundred dscf standard.

Batteries	Capacity of Annual Coal Charge (tons)	Coke Oven Gas Concentration Standard (gr/100 dscf)	Weighted Capacity
Nos. 1 - 3	1,553,805	50	77,690,250
Nos. 13-15	1,637,025	10	16,370,250
Nos. 19	1,002,290	50	50,114,500
Nos. 20	1,002,290	10	10,022,900
B	1,491,025	10	14,910,250
C	1,379,059	10	13,790,590
Total	**8,065,494**		**182,898,740**
	Weighted Gas Concentration (gr/100 dscf)		**22.68**

The Department believes that it is necessary to correct the error in the calculation of the grains standard considering that the U.S. Steel facility is currently benefiting by not having to test each of its batteries. It is not appropriate for U.S. Steel to further benefit by having a higher grains standard than it would have to meet if each battery was tested individually. In order to allow time for U.S. Steel to adjust to the corrected concentration standard, the Department is allowing U.S. Steel until January 1, 2025, to meet a concentration of 23 grains per hundred dry standard cubic feet of coke oven gas. Prior to January 1, 2025, U.S. Steel is required to meet a concentration of 35 grains per hundred dscf, which is the standard set forth in the Battery C installation permit. The Department is also adding language which will explain the process for revising the emission limit in the event that the Clairton Plant retires, shuts down, cold idles, installs, replaces, reconstructs, or performs a major modification of any of the coke oven batteries.

U.S. Steel contends that the Department is violating Section VII of the SOA by adopting more stringent emissions standards. The Department disagrees that the proposed coke oven gas standard is more stringent. Rather, the **standards** remain the same, it is the method used to

recalculate the coke oven gas standard that is changing. The Department is merely applying the current 10 and 50 grains per 100 dscf standards in Paragraphs 2105.21.h.1 and h.2 based on the batteries currently operating at the Clairton Plant. It is the Department's interpretation of the regulations that the facility-wide standard under Paragraph 2105.21.h.3 is to be based on the 10 and 50 grains per 100 dscf standard in Paragraphs 2105.21.h.1 and h.2. It is well established that deference must be accorded to an administrative agency's reasonable interpretation of its own regulation. *Port Auth. of Allegheny Cty. v. Unemployment Comp. Bd. of Review*, 48 A.3d 1288, 1292 (Pa. Cmwlth. 2012). Furthermore, it is important to emphasize that "[w]hen an agency interprets its own regulation, the Court, as a general rule, defers to it 'unless that interpretation is plainly erroneous or inconsistent with the regulation.'" *Decker v. Nw. Envtl. Def. Ctr.*, 133 S. Ct. 1326, 1337 (2013) (quoting *Chase Bank USA, N.A. v. McCoy*, 562 U.S. 195 (2011)).

Article XXI also addresses when more than one interpretation is reasonably possible:

> In the event that more than one interpretation is reasonably possible as to any provision of this Article, **the interpretation which results in the lowest permissible emission rate shall prevail**, absent clear and convincing evidence that a different interpretation is intended to prevail.

Article XXI, § 2101.06.d.2 (emphasis added). The Department is seeking to lower the standard to 23 grains while U.S. Steel seeks for the limit to be 35 grains per hundred dscf. Under Article XXI, the Department's interpretation should prevail.

The Department's interpretation is reasonable and not plainly erroneous or inconsistent with the regulation. The current language in Section 2105.21.h.4[20] states that "[t]he 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 USX Corporation Clairton Works shall be deemed satisfied for such batteries. . ."

[20] This citation is for the current coke oven regulations. In the proposed revisions, this Paragraph is now numbered as 2105.21.h.3.

This language specifically references the 10 grains per 100 dscf standard in Paragraph h.2[21] and its applicability to Batteries 13, 14, 15, 20, and B. It is reasonable to interpret this language as requiring a recalculation of the limit at the Clairton Plant be based on the 10 grains per 100 dscf standard for these batteries and not apply a 40 grains per 100 dscf standard as requested by U.S. Steel.

It is important to note that U.S. Steel does not allege that the Department's interpretation is "plainly erroneous or inconsistent with the regulation," nor does it dispute the Department's calculation. U.S. Steel's primary argument against the Department's corrected coke oven gas standard is that it is "inconsistent" with the Department's previous method of calculating the standard in the Battery C Permit. (Petition at ¶ 46). However, the prior method incorrectly applied a 40 grains per 100 dscf standard for all the batteries, except Battery C. Notably, U.S. Steel concedes that the "40 grains per hundred dscf was determined through negotiations **rather than strict mathematical calculation**." (Petition at ¶ 46). The "negotiations" to which U.S. Steel refers is a settlement agreement that is nearly 30 years old. Without citing any support, U.S. Steel contends that the agreement continues for perpetuity and controls all subsequent regulatory changes made by the Department. This is contrary to well established precedent which recognizes that an agency may change its interpretation of a regulation.

Regarding the extent to which an agency may deviate from its prior interpretation, most authorities include a qualification as to the extent this impacts the amount of deference an authority may be afforded. U.S. Steel erroneously characterizes a court's hesitancy to defer to an agency's re-interpretation of its regulations as an absolute prohibition. U.S. Steel cites to, among other

[21] This citation is for the current coke oven regulations. In the proposed revisions, this Paragraph is now numbered as 2105.21.h.1. Paragraph h.1 refers to the 10 grains per 100 dscf of coke oven gas for all batteries installed after January 1, 1978.

cases, *Mazza v. Secretary Dept. Of Health and Human Services* in its Petition for the proposition that Courts will not afford an agency any deference where its interpretation contradicts an earlier interpretation. 903 F.2d 953, 958-959 (3d Cir. 1990). However, the Third Circuit in *Mazza* also stated that:

> While the weight given to "an administrative interpretation will depend, among other things, upon 'its consistency with earlier and later pronouncements' of an agency." *Morton v. Ruiz*, 415 U.S. 199, 237, 94 S.Ct. 1055, 1075, 39 L.Ed.2d 270 (1974) (quoting *Skidmore v. Swift & Co*., 323 U.S. 134, 140, 65 S.Ct. 161, 164, 89 L.Ed. 124 (1944)). ***But we note that agencies must be able to "adapt their rules and policies to the demands of changing circumstances***." *Permian Basin Area Rate Cases*, 390 U.S. 747, 784, 88 S.Ct. 1344, 1369, 20 L.Ed.2d 312 (1968).

Id. (emphasis added). Such changing circumstances are clearly present in the context of the Department's enforcement of Coke Oven Regulations given the recent and future decommissioning of coke batteries and the installation of Battery C at the Clairton Plant.

Similarly, *Dauphin County Indus. Dev. Auth. V. Pa. Public Utilities Commission*, also cited by U.S. Steel, contains the qualification that even though it will not be "entitled to ***very much*** deference," an administrative agency may nonetheless "***revise and correct*** its prior interpretation of a statute." 123 A.3d 1124, 1135 (Pa Commw. Ct. 2015) (emphasis added) *citing Mazza*, 903 F.2d 953, 958. In instances where agencies are afforded deference (i.e., those situations where there is ambiguity), the Pennsylvania Supreme Court has recently examined the Third Court's decision in *Mazza* and provided a concise articulation of its position on deference:

> Following *Mazza*, the Third Circuit reaffirmed its explanation that inconsistent administrative interpretations are given lower deference, but an agency is not "locked into the first interpretation it espouses" as long as the agency provides a "***reasoned justification***" for its revision.

Crown Castle v. Pennsylvania Utility Commission, 234 A.3d 665, 679 (Pa. 2020) (emphasis added) *quoting* Sullivan, 958 F.2d at 543. It should be noted that deference is only relevant in instances

where ambiguity exists in the statute the agency is interpreting. *Id*. at 678. In instances where no ambiguity exists, the agency must follow the plain language of the statute. *Id.* at 679.

As discussed above, the Department's justification for the change in interpretation is to align the coke oven gas standard at the Clairton Plant with the 10 and 50 grains per 100 dscf standard applicable to coke oven batteries. Contrary to what U.S. Steel espouses, the plant-wide standard should be based on a "strict mathematical calculation" and not on a thirty-year-old settlement agreement with negotiated terms. U.S. Steel should not benefit by being permitted a plant wide limit while also being allowed a laxer standard. Therefore, because the Department has provided a reasoned justification for the amendment, this tribunal should give deference to the Department's revised interpretation of its regulation.

Finally, U.S. Steel argues that the principle of equitable estoppel precludes the Department from correcting the standard. U.S. Steel contends that it relied on the imposition of the 35 grains per hundred dscf standard when constructing Battery C in 2012. (Petition at ¶ 55). U.S. Steel cites[22] to the Pennsylvania Environmental Hearing Board decision *Kane Gas Lighting and Heating Co. v. Pa. Dept. of Environmental Protection* for a general recital of the rule that "equitable estoppel dictates that a regulated entity should not be deprived 'of the fruits of a reasonable expectation when the party inducing the party knew or should have known, that the other would rely.'" 1997 EHB 451, 454-55. However, U.S. Steel omits that the additional element that the party negligently or intentionally made some material misrepresentation inducing the party to act to its detriment while knowing that the party would be induced to act to his or her detriment. *Id.* at 1995 EHB at 26.

[22] U.S. Steel also cited in its Petition to the Pennsylvania Environmental Hearing Board (EHB) decision in *PQ Corporation v. Department of Environmental Protection*, EHB No. 2015-198-l, 2016 WL 7048958 (November 17, 2016). It is unclear how this case is applicable considering that the EHB determined that PQ's estoppel argument lacked merit. *Id.* at *4.

U.S. Steel offers no evidence in its Statement of Position that the Department either negligently or intentionally misrepresented the coke oven gas standard in 2012. Importantly, the Department did not propose to revise the coke oven gas standard until 2020, long after Battery C was constructed. Given the Department's authority to revise its regulations, U.S. Steel should have known that a change to the coke oven regulations could occur in the future. Further, U.S. Steel acknowledges in its Petition that it was aware in 2012, during the permitting process, that Battery C was subject to a 10 grains per 100 dscf limit:

> The Department calculated the current 35 grains per hundred dscf limit by applying an averaging calculation based on the previous limit of 40 grains per hundred dscf for all batteries at the Clairton Works **except for Battery C, which was assigned an individual limit of 10 grains per hundred dscf. Battery C was assigned this value based on application of the Department's new source review permitting program for the proposed Battery C.**

(Petition at ¶ 41) (emphasis added). U.S. Steel's equitable estoppel claim may have some value if the Department lowered the standard to below 10 grains per 100 dscf. However, because the Department is only correcting the standard to 23 grains per 100 dscf, U.S. Steel's equitable estoppel claim lacks any merit.

Accordingly, based on the Department's interpretation and calculation of the coke oven gas standard, the amendment to Article XXI, § 2105.21.h.3, is not creating a more stringent standard. Instead, the Department is merely correcting an error in a previous calculation based on the existing standards in Article XXI. Therefore, U.S. Steel's argument must fail.

IV. CONCLUSION

Over the past year, the Department and U.S. Steel engaged in productive discussions relating to the proposed amendments to the Coke Ovens and Coke Oven Gas regulations at Article XXI, §§ 2101.20 and 2105.21. However, there are still outstanding disputes with regard to Section VII of the SOA. While the Department recognizes the importance of complying with the

provisions of the SOA, the Department cannot ignore the statutory requirements under the Pennsylvania Air Pollution Control Act. The APCA prohibits the Department from adopting regulations which are less stringent than the Pennsylvania Air Resources regulations. The requirements under the APCA takes precedence over the contractual provisions under the SOA. Therefore, it is the Department's Position that the proposed Coke Ovens and Coke Oven Gas regulations are consistent with Pennsylvania law and regulations and that they do not violate the enforceable provisions of the SOA.

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Respectfully submitted,

Jeffrey R. Bailey, Esq.
PA ID No.: 203023
Jason K. Willis, Esq.
PA ID No.: 86752
Brendan Turley, Esq.
PA ID No.: 326538
Allegheny County Health Department
301 39th Street, Building 7
Pittsburgh, PA 15201-1811
412-578-2658 (telephone)
412-578-8144 (facsimile)

Counsel for Respondent

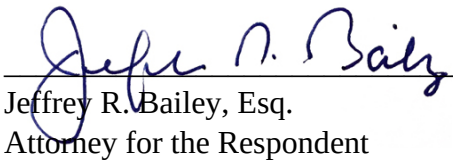
CERTIFICATE OF SERVICE

I hereby certify that on October 8, 2021, I served a true and correct copy of the Allegheny County Health Department's Reply to United States Steel Corporation's Request for Summary Grant of Relief was served on the following persons by electronic mail:

Michael H. Winek, Esq.
Mark K. Dausch, Esq.
Varun Shekhar, Esq.
Babst, Calland, Clements & Zomnir, P.C.
Two Gateway Center, 6th Floor
Pittsburgh, PA 15222
mwinek@babstcalland.com
mdausch@babstcalland.com
vshekhar@babstcalland.com

David W. Hacker, Esq.
United States Steel Corporation
600 Grant Street, Suite 1500
Pittsburgh, PA 15219
dwhacker@uss.com

(*Counsel for Petitioner*)



Jeffrey R. Bailey, Esq.
Attorney for the Respondent
Allegheny County Health Department