UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

PENNENVIRONMENT, INC. and CLEAN AIR COUNCIL, Plaintiffs, ALLEGHENY COUNTY HEALTH DEPARTMENT, Plaintiff-Intervenor, v. UNITED STATES STEEL CORPORATION, Defendant.	)	Civil Action No. 2:19-cv-00484-WSH

PLAINTIFFS' AND PLAINTIFF-INTERVENOR'S PRE-TRIAL STATEMENT

Pursuant to L.R. 16.1.C.1, Plaintiffs PennEnvironment, Inc., and Clean Air Council ("Citizen Groups"), and Plaintiff-Intervenor Allegheny County Health Department ("Health Department" or "ACHD") (collectively, "Plaintiffs") jointly submit this pre-trial statement.

INTRODUCTION

A facility is strictly liable for violating a permit issued to it under the authority of the federal Clean Air Act ("CAA" or "Act"). *E.g.*, *United Steelworkers of Am. v. Ore. Steel Mills, Inc.*, 322 F.3d 1222, 1229, n.4 (10th Cir. 2003). Congress has authorized citizens (and groups such as the Citizen Groups) to bring enforcement suits against violators of CAA permits. 42 U.S.C. § 7604(a)(1). The Health Department is authorized to implement and enforce the CAA (and CAA permits) in Allegheny County under a federally-approved State Implementation Plan. 66 Fed. Reg. 55,112-15 (November 1, 2001).

Plaintiffs bring this suit against U.S. Steel because preventable equipment failures cause pollution control systems at its Mon Valley Works plants ("MVW") to be taken offline. When that happens, U.S. Steel continues to operate the MVW without the required pollution control

systems, thereby illegally releasing hydrogen sulfide (H_2S), sulfur dioxide (SO_2), and fine particulate matter ($PM_{2.5}$) into surrounding communities. Plaintiffs will prove that both operating without pollution controls and releasing excess levels of pollutants violates U.S. Steel's permits; that communities surrounding the MVW – and Citizen Groups' members in particular – are harmed by these CAA violations; and that an injunction (including a court-appointed monitor) and a significant monetary penalty are warranted and necessary. Under the CAA, the entire penalty would be paid to the federal government, unless the Court uses its discretion and directs up to $100,000 of a penalty to beneficial mitigation projects.

I. BRIEF STATEMENT OF MATERIAL FACTS TO BE OFFERED AT TRIAL.[1]

A. Overview of the case.

It will be undisputed that the MVW includes three integrated plants:

- Clairton Coke Works in Clairton, PA, which heats coal in ovens to produce coke used in the steel making process;
- Edgar Thomson Plant in Braddock, PA, where basic steel production takes place; and
- Irvin Plant in West Mifflin, PA, which rolls and treats the steel slabs produced at Edgar Thompson.

It is undisputed that each of the three Mon Valley Works plants has permits to control the emission of air pollution, issued by the Health Department per its authority under the CAA. The three plants have operating permits known as "Title V permits" (issued under Title V provisions of the CAA) and "installation permits," which supplement Title V permit provisions.

[1] The narrative below includes references to stipulated facts and data. These are found in the parties' Trial Stipulations of Fact (ECF No. 181) and attached exhibits. The exhibits contain relevant CAA permits (Exs. A-F, ECF Nos. 181-1 – 181-6), semi-annual permit "deviation reports" that U.S. Steel submitted to the Health Department (Ex. G, ECF No. 181-7 – 181-10), Weekly Update reports that U.S. Steel submitted to the Health Department (Ex. H, ECF No. 181-11), and a spreadsheet of emissions data that U.S. Steel submitted to the Health Department (Ex. I, ECF No. 181-12).

It will be undisputed that (a) the coking process at the Clairton Plant generates coke oven gas ("COG") which contains impurities released from the coal as it is heated, and (b) COG contains various chemical compounds – among them hydrogen, methane, carbon monoxide, ammonia, hydrogen sulfide, and benzene – and is extremely hazardous. COG is used to fuel operations in all three MVW plants, though some COG is also burned off in open flares. During relevant times, U.S. Steel produced approximately 215 million cubic feet of COG per day.

It will also be undisputed that the Clairton Plant has three "Control Rooms" (numbered 1, 2, and 5) that house equipment whose purpose is to remove the coal impurities from COG before COG is used as fuel or sent through a flare. When the equipment in the Control Rooms is shut down, harmful compounds in the COG are not removed and are emitted (sometimes in altered form, as a result of combustion) as air pollutants into the atmosphere and the surrounding communities. Evidence will also show that U.S. Steel has not properly maintained the Control Rooms and has not made adequate capital investments in pollution control equipment and associated critical systems for the MVW. Moreover, the MVW is designed to keep producing coke and steel *even when the Clairton Plant pollution control equipment is totally shut down*.

It will be undisputed that on December 24, 2018, a fire at the Clairton Plant resulted in a shutdown of pollution control equipment in Control Rooms 2 and 5 for 102 straight days ("December Outage Period"); that on June 17, 2019, another set of fires at the Clairton Plant resulted in the shutdown of pollution control equipment in Control Rooms 1, 2, and 5; and that on July 4, 2022, an electrical outage at the Clairton Plant resulted in yet another (two-day) shutdown of pollution control equipment in Control Room 5 (collectively, the "Outage Periods"). It will be undisputed that U.S. Steel continued production during these pollution control Outage Periods. Evidence will show that the December Outage Period in particular was a public health

disaster for the surrounding communities.

Evidence will show that these Outage Periods occur because U.S. Steel has failed to sufficiently maintain and upgrade the Clairton Plant so as to prevent or mitigate them. For example, evidence will show that the December Outage Period occurred after U.S. Steel allowed a steel support to corrode so significantly that heavy fire suppression piping broke free and fell to the floor of Control Room 2. This triggered a chain of events – involving a fractured axial compressor rotor (that U.S. Steel had failed to identify and repair) and a check valve corroded to the point of failure – that ultimately caused flammable COG to flow into Control Room 2 and ignite from an already burning fire. Similarly, evidence will show that the June 2019 outage was caused by the catastrophic failure of an electronic switchgear that U.S. Steel installed in the 1960s, never upgraded, and kept in service well beyond its useful life.

Additional evidence of design flaws and longstanding, systemic maintenance deficiencies will be presented, along with additional evidence on the operations, coke oven gas, and pollution control equipment at Mon Valley Works.

B. Facts proving that U.S. Steel violated the Clean Air Act.

The CAA authorizes citizens to bring enforcement suits against those who "have violated" their CAA permits prior to commencement of the suit, provided the violations have been repeated, or, alternatively, against those who are "in violation" at the time a suit is commenced. 42 U.S.C. § 7604(a)(1)(A). Regarding the latter, proof that a defendant is "in violation" can be made in either of two ways: (1) "by proving that violations continue on or after the date the complaint is filed," or (2) by proving that there is a "continuing likelihood of recurrence in intermittent or sporadic violations" when the complaint is filed. *Carr v. Alta Verde Indus., Inc.*, 931 F.2d 1055, 1062 (5th Cir. 1991) (citation omitted) (construing "in violation"

provision of the Clean Water Act citizen suit provision); *accord*, *Natural Resources Defense Council v. Texaco Ref. and Marketing, Inc.*, 2 F.3d 493, 501-502 (3d Cir. 1993) (same). Plaintiffs will prove both that U.S. Steel repeatedly violated its permits prior to the commencement of this suit, and that U.S. Steel is "in violation."

Proving U.S. Steel "has violated" repeatedly. Each of U.S. Steel's permit violations was repeated numerous times prior to the filing of the Citizen Groups' Complaint, establishing the company "has violated" each permit condition.

Proving U.S. Steel is "in violation" (using evidence of post-Complaint violations).[2] Because U.S. Steel continued these permit violations after the Complaint was filed, it also meets the alternate "in violation" requirement, as "'[p]roof of one or more post-complaint violations is itself conclusive' of the ongoing nature of the pre-complaint violations." *PennEnvironment v. PPG Indus., Inc.*, 127 F. Supp. 3d 336, 374 (W.D. Pa. 2015) (citing *Texaco).* Notably, the test is limited to whether the same permit limit is again violated after the complaint is filed; the *cause* of each permit limit violation need not be the same to maintain a CAA citizen enforcement suit. *E.g.*, *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, Civil Action H-10-4969, 2013 U.S. Dist. LEXIS 194479, at **11-15 (S.D. Tex. April 3, 2013), *adopted* 2013 U.S. Dist. LEXIS 194474 (May 2, 2013) (CAA case).

For each count and claim for relief of their Complaints, Plaintiffs will prove U.S. Steel's pre- and post-Complaint permit violations with stipulated information derived from the company's submittals to the Health Department. Determining whether U.S. Steel violated its

[2] Though not necessary (given the clear proof of post-Complaint violations), Plaintiffs will also prove U.S. Steel is "in violation" because outages of pollution control equipment were likely to recur as of the date the Complaint was filed. Further, Plaintiffs will prove that such violations remain likely to recur. Among other witnesses, Dr. Ranajit Sahu – an engineering expert – will provide evidence on this point.

permits will be straightforward. When a permit requires pollution control equipment to be operational and it is not, a violation occurs. U.S. Steel has stipulated the dates on which such equipment was not operational. When a permit term is expressed as a numerical limit, the Court need only determine whether the emission numbers already stipulated by U.S. Steel are above, and hence in violation of, that limit.

To simplify the Court's review, Plaintiffs provide Claims and Violations Tables (attached hereto as Exhibit 1, submitted separately in native format) which identify: (1) each applicable permit term at issue; (2) the count, claim for relief, and paragraph numbers of each Complaint alleging violations of those permit terms; (3) the dates on which Plaintiffs allege that U.S. Steel violated each permit term; and (4) the stipulated data supporting Plaintiffs' allegations that violations occurred. Pursuant to the Court's instruction, Plaintiffs and U.S. Steel are in the process of reaching a stipulation regarding the Claims and Violations Tables and will supplement this portion of the Pre-Trial Statement as soon as it is finalized.

1. Count I:[3] Failure to operate pollution control devices.

It will be undisputed at trial that whenever the Clairton Plant's operations generate COG, its CAA operating permit (*i.e.*, its CAA "Title V permit") requires U.S. Steel to operate four types of pollution control units in Clairton Plant's Control Room 5: the SCOT Plant incinerator, one of two Claus Plants, the Hydrogen Cyanide ("HCN") Destruction Unit, and one of two Vacuum Carbonate Units (including its adsorber columns and its axial compressor). It is undisputed that from December 24, 2018, through the present, these four pollution control units

[3] For purposes of clarity, in this narrative the claims are organized according to the Counts in the Citizen Groups' Complaint. Easy cross-references to the corresponding Claims for Relief and paragraph numbers in the Health Department's Complaint-in-Intervention are provided in the Claims and Violations Tables attached hereto as Exhibit 1.

did not operate on 105 days that COG was generated. Claims and Violations Table 1 (Ex. 1) contains stipulated evidence supporting these claims.

2. Count II: Creation of prohibited air pollution.

The Title V permits for the Clairton, Edgar Thomson, and Irvin Plants each provide that U.S. Steel "shall not...through the failure to...operate necessary control equipment or take necessary precautions, operate any source of air contaminants in such manner that emissions from such source...[e]xceed the amounts permitted by this permit or by any order or permit issued pursuant to [Health Department regulations]." The facts establishing the permit violations alleged in Counts I (failure to operate necessary control equipment) and Counts III and IV (exceedances of permitted emission limits) also establish the violations alleged in Count II. Claims and Violations Table 2 (Ex. 1) details the 105 days of violations at each Plant under this count.

3. Count III: Mixing, flaring and burning coke oven gas with excessive hydrogen sulfide concentrations.

It will be undisputed that the Title V and installation permits for the Clairton, Edgar Thomson, and Irvin Plants prohibit U.S. Steel from mixing, combusting, or flaring COG containing more than 35 grains of hydrogen sulfide per 100 dry standard cubic feet ("dscf") at specified emission units. Evidence will show that the purpose of these permit terms is to reduce air emissions of hydrogen sulfide, sulfur dioxide, and fine particulate matter. Claims and Violations Table 3 (Ex. 1) contains stipulated evidence supporting a total of 7,807 days of violations under these claims.[4]

[4] Claims and Violations Table 3 identifies: each emission unit (or collection of units) subject to the 35-grain emission limits in the Clairton, Irvin, and Edgar Thomson Title V and installation permits; the applicable permit requirement; the count, claim for relief, and paragraph numbers of each complaint alleging violations of these emission limits; and, for each date on which the H_2S

4. Count IV: Violations of sulfur dioxide emission limits.

The Title V and installation permits for the Clairton and Irvin Plants prohibit U.S. Steel from emitting sulfur dioxide above hourly, daily, and monthly rates specified for individual emission units. Evidence will show that U.S. Steel calculates SO_2 emissions using an accepted formula specifically prescribed by the Health Department for determining compliance or non-compliance with permitted SO_2 emission limits. Claims and Violations Table 4 (Ex. 1) contains stipulated evidence supporting 3,081 days of Citizen Group Count IV violations and a total of 3,305 days of violations alleged by the Health Department in its First and Third Claims (the Health Department claims include an additional emission unit).[5]

C. Facts proving U.S. Steel's illegal emissions are harmful.

Evidence of the harm that can be caused by the pollutants emitted from the Mon Valley Works facilities and why U.S. Steel's permits limit emissions of those pollutants will be

---

limit was exceeded, the level of H_2S as actually measured and stipulated to by U.S. Steel and the number of days of violation of each limit. Plaintiffs assert 1,146 days of violation of H_2S limits at Clairton; 6,241 days of violation of H_2S limits at Irvin; and 420 days of violation of H_2S limits at Edgar Thomson, for a total of 7,807 days of violation.

[5] Table 4A, which covers SO_2 violations at the Clairton Plant, identifies: each coke oven battery subject to SO_2 emission limits in the Clairton Title V and installation permits; each applicable permit requirement setting forth the SO_2 emission limits; the count, claim for relief, and paragraph numbers of each complaint alleging violations of these emission limits; and, for each date on which an SO_2 limit was exceeded, the SO_2 emission calculation stipulated to by U.S. Steel showing an exceedance of the limit. The Health Department asserts 3,145 days of violation of SO2 limits at Clairton; the Citizen Groups assert 2,921 days of violation of SO2 limits at Clairton (the Citizen Groups did not allege SO_2 violations at Battery C).

Table 4B, which covers SO_2 violations at the Irvin Plant, identifies: the boilers and Hot Strip Mill Furnaces subject to SO_2 emission limits in the Irvin Title V and installation permits; each applicable permit requirement setting forth the SO_2 emission limits; the count, claim for relief, and paragraph numbers of each complaint alleging violations of these emission limits; and, for each date on which an SO_2 limit was exceeded, the SO_2 emission calculation stipulated to by U.S. Steel showing an exceedance of the limit. Plaintiffs assert 160 days of violation of SO2 limits at Irvin. *See* Ex. 1.

presented in the form of government findings and reports,[6] the expert testimony of Dr. Deborah Gentile, and lay testimony from government regulators and U.S. Steel employees. Should U.S. Steel call their expert witnesses Dr. Robert J. McCunney and Christopher Long, their testimony will support Plaintiffs' evidence of the harm caused by the types of pollutants illegally emitted by U.S. Steel. Evidence on the harm of the illegally emitted pollutants will include, among other evidence, the following:

1. Hydrogen sulfide.

Hydrogen sulfide has a rotten egg or burnt matches odor. The evidence will show that even at concentrations below so-called "irritation levels," pollutants that produce odors can trigger physical symptoms such as dizziness, watery eyes, coughing, wheezing, sleep problems, and nausea. Additionally, people can smell H_2S at levels as low as 0.0005 to 0.3 parts per million (ppm). Plaintiffs will prove that exposure to even low levels of hydrogen sulfide may cause irritation to the eyes, nose, and throat, and cause headaches, poor memory, tiredness, and balance problems.

2. Sulfur dioxide.

The evidence will show that sulfur dioxide also has a pungent odor similar to rotten eggs and burnt matches, which can cause the same physical symptoms described in the subsection above. Plaintiffs will also establish that U.S. EPA concluded that short-term exposures to airborne SO_2 can harm the human respiratory system and make breathing difficult, and that

[6] The government reports Plaintiffs intend to introduce into evidence are self-authenticating under Fed. R. Evid. 902(5) and are admissible as public records under Fed. R. Evid. 803(8) (and thus are not excluded by the rule against hearsay). *See, e.g., Castiac Lake Water Agency v. Whittaker Corp.,* 272 F. Supp. 2d 1053, n.6 (C.D. Cal. 2003) (EPA Toxicological Review and Risk Characterization for perchlorate is self-authenticating); *PennEnvironment v. GenOn Ne. Mgmt. Co.,* 2011 WL 1085885, at *8-*10 (W.D. Penn. Mar. 21, 2011) (EPA and state environmental agency reports on the effects of chemical pollution admissible as public records).

people with asthma, particularly children, are sensitive to the effects of SO_2. Plaintiffs will also prove that SO_2 precipitates out of the atmosphere as fine particulate matter and deposits on surfaces, mainly as sulfuric acid.

Sulfur dioxide is one of six "criteria pollutants" identified under the Clean Air Act, and Congress directed EPA to develop a National Ambient Air Quality Standard ("NAAQS") for SO_2 in an effort to minimize airborne exposure and protect human health. Allegheny County is in "non-attainment" status with the SO_2 NAAQS.

3. Particulate matter.

Evidence will show that SO_2 reacts with other air pollutants to form sulfate particles, which are components of airborne fine particulate matter ("$PM_{2.5}$," which refers to particulate matter that is 2.5 microns or less in width). Evidence will also show that inhalation of $PM_{2.5}$ has been associated with various cardiovascular and respiratory health effects. Plaintiffs will prove that short-term exposures to $PM_{2.5}$ (hours or days) can aggravate lung disease, causing asthma and acute bronchitis, and may also increase susceptibility to respiratory infections. Plaintiffs will also prove that there is no known safe level of exposure to $PM_{2.5}$.

Like sulfur dioxide, $PM_{2.5}$ is a "criteria pollutant" for which EPA has developed a NAAQS to minimize airborne exposure and protect human health. Allegheny County is in "non-attainment" status with the $PM_{2.5}$ NAAQS.

D. Facts proving the Citizen Groups' standing.

Plaintiffs do not anticipate that the Health Department's standing to enforce its own permits will be in dispute.

The Citizen Groups bring this suit on behalf of their members and thus standing is associational. A group has associational standing when: (1) its members would have standing to

sue in their own right; (2) the interests the suit seeks to protect are germane to the organization's purposes; and (3) neither the claim asserted nor the relief requested requires the participation of individual members. *Hunt v. Wash. Apple Adver. Comm'n*, 432 U.S. 333, 343 (1977). Plaintiffs anticipate that the second and third elements will not be in dispute.

As for the first element, a group's members have standing under Art. III of the Constitution when: (1) they have suffered an "injury in fact," *i.e.*, a concrete and particularized injury that is either actual or imminent; (2) the injury is "fairly traceable" to the defendant's actions; and (3) the injury will be redressed by a favorable decision. *E.g., Interfaith Cmty. Org. v. Honeywell Int'l, Inc.*, 399 F.3d 248, 257 (3d Cir. 2005).[7]

Per the Court's direction, the Citizen Groups are setting forth with particularity the evidence they will offer to prove standing. A detailed "Standing Roadmap" is attached as Exhibit 2 (and submitted separately in native format). Exhibit 2 organizes descriptions of the Article III injuries suffered by each of six Citizen Groups members who intend to testify at trial,[8] and the evidence tracing those injuries to U.S. Steel's violations, into four tables. The tables correspond to each of the four Counts in the Citizen Groups' complaint and to each of the four Claims and Violations Tables in Exhibit 1.

Within each table, violations under each Count are grouped by MVW Plant, that is, each geographical location from which pollutants were emitted. Then, as to the violations occurring at each Plant, the table summarizes: how alleged violations generated emissions from that Plant; which pollutants were emitted as a result of the violations; and the effects that each of those

[7] Only one member of a group needs to meet these requirements for the group to have standing. *E.g., Sierra Club v. Tenn. Valley Auth.*, 430 F.3d 1337, 1344 (11th Cir. 2005).

[8] The members who are expected to testify are Art Thomas, Johnie Perryman, David Meckel, Cindy Meckel, Edith Abeyta, and Jonathan Reyes.

pollutants can cause when emitted to the ambient air. Next, below the pollutant descriptions, the table lists each member of the Citizen Groups who trace their injuries to *this* set of violations at *this* Plant. For each of these members (*i.e.*, each "standing witness"), the table then describes: the dates during the Outage Periods when they were present at their home; the types of injuries they suffered; evidence that will establish those injuries (along with a short list of cases recognizing them as Article III injuries); and evidence that will establish that each injury is fairly traceable to this set of violations at this Plant (along with a short list of cases in which this type of evidence supported a finding of traceability).

Because facts supporting the redressability prong of the standing analysis are similar for each type of violation and each witness, they are set forth below and not repeated in the tables.

In sum, the evidence will show, among other things:

1. Citizen Group members suffered injuries in fact.

Plaintiffs will prove by members' testimony that during the Outage Periods members smelled a rotten egg odor; experienced increased breathing difficulty; suffered burning and stinging eyes, fatigue, heavy chest, headaches, wheezing, coughing, and runny nose; saw increased flaring, smoke, and haze; and had an increased amount of soot deposited on their property. Additional evidence will establish their exposure to heightened levels of air pollutants. Plaintiffs will also prove that during the Outage Periods members cut short activities outside; bought air filters and air monitors; and warned their children to stay indoors.

2. Members' injuries are traceable to U.S. Steel's violations.

The parties disagree on the standard used to establish traceability in an environmental citizen suit. The Citizen Groups maintain that the Third Circuit standard (which is uniform in all Circuits) applies: to satisfy the "fairly traceable" element of standing, a plaintiff must show that

a defendant has emitted pollutants in amounts greater than allowed by its permit, into an area in which plaintiff has an interest, that are capable of causing or contributing to the types of injuries asserted. *Pub. Interest Res. Group of New Jersey v. Powell Duffryn Terminals, Inc.*, 913 F.3d 64, 72 (3d Cir. 1990). U.S. Steel has thus far maintained that "but for causation" applies to traceability. No court has required but for causation in an environmental citizen suit; to the contrary, it has been expressly rejected. *Env't Tex. Citizen Lobby, Inc. v ExxonMobil Corp.*, 47 F.4th 408, 417 (5th Cir. 2022); *see also id.* at 423 (Oldham, J., in dissent, agreeing that but for causation does not apply, citing then-Judge Samuel Alito in *Khodora Env't, Inc. v. Blakey*, 376 F.3d 187, 195 (3d Cir. 2004), as support).

Plaintiffs will prove that their members' injuries during the Outage Periods are fairly traceable to U.S. Steel's violations. As discussed above, Citizen Group members did in fact experience injuries that can be caused by the pollutants illegally emitted by U.S. Steel into their neighborhoods. In addition, Plaintiffs will prove that members live close enough to each of the plants to recognize, breathe, and smell its emissions. Member testimony will prove that the injuries they suffered increased during the Outage Periods and abated when the pollution control equipment was restored. Members will also testify about experiencing constant flaring during the Outage Periods.

Stipulated emissions data show that daily emissions of SO_2 during each of the three Outage Periods ranged from 10 to 30 *times* higher than emissions when Control Room 5 is operating normally. H_2S levels in COG were as much as 50 *times* higher during the Outage Periods – and since not all H_2S is converted to SO_2 during combustion, H_2S emissions necessarily increased. U.S. Steel has stipulated that Health Department air monitoring stations detected elevated levels of SO_2 and $PM_{2.5}$ in the ambient air during the prolonged December

Outage Period: the health-based NAAQS for sulfur dioxide was violated nine times and the NAAQS for fine particulate matter was violated three times. The Health Department's air modeling and monitoring expert Jason Maranche will testify that these NAAQS violations were caused by emissions from the Plants.

Plaintiffs will also present evidence that the members' changes in behavior were reasonable, given, among other things, Health Department directives to residents of their communities advising them to limit outdoor activities while U.S. Steel's pollution control equipment was down, and warning that high concentrations of sulfur dioxide can affect breathing and aggravate existing respiratory and cardiovascular disease.

3. Members' injuries can be redressed by this Court.

Plaintiffs will present evidence that US. Steel refuses to admit it violated the Act. U.S. Steel instead claims it cannot even determine whether it is complying with its permits, and views compliance as a matter for the Health Department to determine. Accordingly, a declaratory judgment establishing the rights of the parties – that is, that U.S. Steel indeed violated its permits and will do so again the next time there is a pollution control equipment outage – is warranted.

A civil penalty will deter future violations by helping to remove any economic benefit the company gains by violating the law and substituting a financial disincentive to violate.

Injunctive relief, including an order to comply, appointment of a third-party monitor to oversee CAA compliance, and an order to take specific remedial measures, will address Citizen Group members' concern that equipment breakdowns and illegal emissions will recur.

E. Facts establishing the need for an injunction.

1. The injunction requested.

Plaintiffs currently intend to ask for the following injunction:

a. An order to retain an independent third party to audit critical systems affecting the reliable functioning of the Clairton Plant Control Rooms, to include (a) a thorough assessment of the baseline condition of equipment and infrastructure, and (b) a thorough assessment of US. Steel's maintenance program for such systems, including staffing, monitoring and testing of equipment, available supplies for replacement and repair, and budgeting.

b. An order to obtain an independent third-party engineering study to present options for addressing the most serious design flaws in the Clairton Plant Control Room systems and to ascertain what remedial, supplemental, and/or redundant measures can be taken in order to ensure that COG leaving the batteries will undergo desulfurization, even in the event of a planned or unplanned outage of any portion of the Control Room operations. This study would include (a) an evaluation of options for enhanced or expedited procedures for putting coke batteries on "hot idle" within 30 days of a Control Room outage, or other methods to very rapidly reduce or eliminate COG production; and (b) an evaluation of options for design and installation of a COG recovery system to prevent flaring of untreated COG when any Control Rooms is not operating.

c. An order to implement measures recommended by the third-party auditor/engineer within 90 days after receipt of the recommendations, so long as the recommendations do not exceed 3% of U.S. Steel's net revenues for the year in which the audit is completed. If the recommendations exceed 3% of U.S. Steel's net revenue, U.S. Steel would be ordered to develop a plan whereby recommendations will be implemented at a cost of 3% of U.S. Steel's net revenue every year until such time as the recommendations are complete.

d. Appointment of a third-party monitor to oversee the CAA compliance measures described in sections a through c, above.

e. Funding for a medical facility for residents of the area near the MVW.

f. An order to comply with the Title V and installation permit requirements at issue in this case.

2. Facts supporting an injunction.

The evidence that will establish standing (injuries in fact and traceability of those injuries to U.S. Steel's violations) will also establish that the Citizen Groups' members and the general public suffer irreparable injuries when pollution control outages occur.

Other evidence Plaintiffs will present to show that their requested injunction is warranted includes: (a) U.S. Steel refuses to accept responsibility for CAA violations; (b) U.S. Steel refuses to be proactive in preventing pollution control outages; (c) its long history of deficient maintenance and deferred attention to identified reliability risks in the Control Rooms, which will be established with substantial amounts of factual evidence and expert testimony; (d) U.S. Steel is investing in the purchase and development of other steel mill facilities to the detriment of pollution control at the MVW.

F. Facts supporting a substantial penalty.

The Court has discretion to set an appropriate penalty amount for violations of the Act, within the bounds of the statutory maximum of approximately $100,000 for each day of violation. The penalty would be paid to a special fund in the U.S. Treasury designated for EPA use, though the Court can direct up to $100,000 for "beneficial mitigation projects" related to air pollution reduction. 42 U.S.C. § 7604(g)(1) & (2). Plaintiffs currently intend to ask the Court to impose a penalty of $42 million (with $100,000 directed to mitigation projects).

The CAA requires courts to consider the following criteria when determining a penalty:

> the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as

> established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

42 U.S.C. § 7413(e). The evidence at trial will show that each factor points to a substantial penalty, and that the Health Department's internal penalty assessment policy supports the requested civil penalty amount.

1. Only a large penalty will alter U.S. Steel's behavior.

Evidence will show that U.S. Steel is a large company that is investing resources in new facilities and turned the largest profits in its history in 2021 and 2022. Plaintiffs' expert economist will testify that U.S. Steel has the ability to pay a penalty of tens of millions of dollars.

2. U.S. Steel's compliance efforts and history are extremely poor.

Evidence will show that U.S. Steel fails to make sufficient efforts to achieve sustained compliance with the emission standards and limitations at issue in this case. Even during the extremely lengthy December Outage Period, U.S. Steel made only limited efforts to decrease production of COG, never initiated hot idling of a single coke battery, and diverted COG to flares that, as expert testimony will establish, are extremely poor pollution control devices.

Furthermore, Plaintiffs will prove that U.S. Steel's overall history of CAA compliance at the Mon Valley Works is abysmal. Evidence will include the large number and high degree of severity of enforcement actions initiated against it by the Health Department and EPA over the past ten or more years, as well as the testimony of former Health Department officials with knowledge of U.S. Steel's track record as compared to other regulated facilities.

3. U.S. Steel gained a substantial economic benefit.

Under the CAA, economic benefit is the amount by which a company is financially better

off as a result of not having complied with environmental requirements in a timely manner. As will be explained by Plaintiffs' expert economist, economic benefit is "no-fault" in nature: U.S. Steel need not have deliberately chosen to delay compliance to have accrued the economic benefit of noncompliance. In order to remove any financial incentive to violate and await the possibility of getting caught, a civil penalty must be larger than the economic benefit gained.

Here, Plaintiffs will provide expert engineering testimony detailing the measures U.S. Steel needed to implement in order to keep its pollution control system operational and avoid violations, and when those measures should or could have been implemented. Expert testimony and information provided by U.S. Steel will document the cost of such measures. Plaintiffs' economist will then provide expert testimony establishing that, as of the start of trial, U.S. Steel's delayed implementation of these measures has provided an economic benefit to U.S. Steel of approximately $21 million. This is the most conservative estimate of economic benefit among four scenarios evaluated by Plaintiffs' economist.

4. U.S. Steel's violations are serious and of long duration.

The seriousness of U.S. Steel's violations will be established at trial in many ways.

First, the degree by which U.S. Steel exceeded the H_2S and SO_2 limits is substantial and egregious. And the absolute amount of SO_2 emissions, in terms of tons per day, was orders of magnitude higher than emissions during normal operations. Pollution controls were not simply deficient; they were not running at all.

Second, the duration of violations is substantial. The pollution control devices required to be operated at all times were idle for 102 consecutive days during the December Outage Period, and then for nearly three full days in the later incidents. Moreover, the period of time over which U.S. Steel has failed to implement the operational, maintenance, and design measures

needed to keep these devices in continual operation extends over many years.

Third, Allegheny County is in non-attainment with the EPA-set NAAQS for both SO_2 and $PM_{2.5}$. Any unpermitted contribution to this overall level of air pollution is serious, and it is stipulated that repeated NAAQS violations occurred at two different ambient air monitors downwind of the Plants during the December Outage Period. Expert testimony will prove that these violations were caused by U.S. Steel's emissions.

Fourth, evidence will show that the Mon Valley is subject to atmospheric inversions, which trap air pollutants near the ground for extended periods of time. Unpermitted emissions into Mon Valley communities are thus particularly serious, and U.S. Steel knows this.

Fifth, expert testimony will establish that the violations likely caused real harm to Mon Valley residents, and at a minimum exposed them to much higher levels of risk. Evidence will further show that residents in communities with reduced access to health care and other services, like many in the Mon Valley, are more vulnerable to impacts from elevated levels of air pollution. Plaintiffs will introduce studies of Mon Valley communities documenting increased rates of emergency department visits and exacerbations of asthma symptoms during the December Outage Period.

II. STATEMENT OF CIVIL PENALTIES AND INJUNCTIVE RELIEF SOUGHT.

This has been described above.

III. PLAINTIFFS' TRIAL WITNESSES.

Plaintiffs' trial witness list is attached as Exhibit 3. Because this is not a suit for damages, the list identifies whether witness testimony relates to liability and/or to remedy (injunctive relief and civil penalty).

IV. PLAINTIFFS' EXHIBIT LIST.

Plaintiffs' Exhibit List is attached as Exhibit 4. A Joint Trial Exhibit List was previously submitted by the parties (ECF 182).

V. LEGAL ISSUES TO BE ADRESSED AT FINAL PRE-TRIAL CONFERENCE.

Plaintiffs do not currently anticipate that any legal issues need to addressed.

VI. EXPERT DISCLOSURES.

Plaintiffs' expert disclosures are attached as Exhibit 5. Although the Health Department's expert designations include former Air Quality Program Manager Dean DeLuca, Plaintiffs currently intend to offer him only as a fact witness at trial.

Dated: February 15, 2023

Respectfully submitted,

/s/ Joshua R. Kratka
Joshua R. Kratka (MA Bar #544792)
Matthew J. Donohue (MA Bar #686191)
Charles C. Caldart (MA Bar # 547064)
Admitted pro hac vice
National Environmental Law Center
294 Washington Street, Suite 500
Boston, MA 02108
(617) 747-4304
Email: josh.kratka@nelc.org

For PennEnvironment and Clean Air Council

David A. Nicholas (MA Bar #553996)
Admitted pro hac vice
20 Whitney Road
Newton, MA 02460
(617) 964-1548
Email: dnicholas100@gmail.com

For PennEnvironment and Clean Air Council

Michael Comber (PA ID No. 81951)
Reisinger Comber & Miller, LLC
300 Koppers Building
Pittsburgh, PA 15219
(412) 894-1380
Email: mcomber@reisingercomber.com

For PennEnvironment and Clean Air Council

/s/ Jason K. Willis
Jason K. Willis, Esq. (PA ID No.: 86752)
Brendan Turley, Esq. (PA ID No.: 32653)
Wesley Speary, Esq. (PA ID No.: 321201)
Allegheny County Health Department
301 39th Street Building 7
Pittsburgh, PA 15201-1811
412-578-8124 (telephone)
412-578-8144 (facsimile)

For Plaintiff-Intervenor Allegheny County Health Department

CERTIFICATE OF SERVICE

I hereby certify that on February 15, 2023, I filed a copy of this document with the Court's ECF system, which will cause an electronic notice of such filing to be sent to all counsel who have appeared in this case.

/s/ Joshua R. Kratka
Joshua R. Kratka