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May 2, 2019

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Via Certified Mail, Return Receipt Requested

Re: Notice of Intent to Sue United States Steel Corporation for Violation of Section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act

Dear Mr. Barshick and Mr. Burritt:

We write on behalf of the Environmental Integrity Project, the Breathe Project, and Clean Air Council (“Parties”) to provide you with notice of their intent to file suit against United States Steel Corporation (“USS”) for violation of the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) at USS’s Mon Valley Works facilities in Allegheny County, Pennsylvania (“Mon Valley Works”), including the Clairton Plant, in the city of Clairton, Pennsylvania, the nearby Irvin Plant in West Mifflin, Pennsylvania, and the Edgar Thomson Plant in Braddock, Pennsylvania.

USS has violated section 103(a) of CERCLA by its failure to immediately notify the U.S. Coast Guard National Response Center (“NRC”) as soon as USS had knowledge of its daily unpermitted releases of hydrogen sulfide, benzene, and coke oven emissions, all of which are hazardous substances in exceedance of the reportable quantity threshold and none of which were federally permitted releases exempt from reporting. To date, USS has not reported these releases to NRC since USS first had knowledge of the daily releases exceeding the reportable quantities on December 24, 2018.

By failing to comply with section 103(a)’s emergency notification requirements, USS has injured the health, environmental, aesthetic, and economic interests of Parties and their members. These injuries or risks are traceable to USS’s violations at the Mon Valley Works, and correcting and preventing future such violations will redress Parties’ injuries and risks.

In accordance with section 310(a)(1) of CERCLA, this letter hereby notifies you that Parties intend to file suit in the U.S. District Court for the Western District of Pennsylvania any time beginning sixty (60) days after service of this letter.

I. BACKGROUND

USS operates the Mon Valley Works in Allegheny County. The Mon Valley Works includes the Clairton Plant at 400 State Street in Clairton, Allegheny County, Pennsylvania, the Irvin Plant, located off Camp Hollow Road in West Mifflin, Allegheny County, Pennsylvania, and the Edgar Thomson Plant, located at 13th Street and Braddock Avenue in Braddock, Allegheny County, Pennsylvania.

The Clairton Plant is the largest by-products coke plant in North America. It operates nine coke batteries and produces approximately 10,000 tons of coke per day from the destructive distillation of more than 16,000 tons of coal. The coke produced is used in the blast furnace operations in the production of molten iron for steel making. The process of creating the coke produces approximately 215 million cubic feet of coke oven gas.¹ The Clairton Plant normally processes this coke oven gas before its use as fuel gas, including through its by-products recovery plant, which removes volatiles such as light oil,² and the desulfurization plant, which removes sulfur from the coke oven gas.³ The processed coke oven gas is used as fuel for processes across the three Mon Valley Works facilities.⁴

The Irvin Plant is a secondary steel processing facility. It receives steel slabs and performs one of several finishing processes on those slabs. The facility includes four coke oven gas flares and four natural gas-/coke oven gas-fired boilers.⁵

The Edgar Thomson Plant is an iron- and steel-making facility that primarily produces steel slabs from raw materials such as coke, iron-bearing materials, and fluxes. There are three Riley boilers at the Edgar Thomson Plant, which are used to generate steam, heat, and electricity

¹ See Allegheny County Health Dep't, U.S. Steel Clairton Works Title V Operating Permit No. 0052, at 5 (issued Mar. 27, 2012) [hereinafter Clairton Operating Permit], *available at* <https://gasp-pgh.org/wp-content/uploads/2014/05/U.-S.-Steel-Clairton-Works.pdf>.

² *Id.* at 5, 188; Letter from Michael S. Rhoads, USS, to Jayme Graham, ACHD 2 (Jan. 7, 2019) [hereinafter Jan. 7 Letter], *available at* <http://pacokeovens.org/wp-content/uploads/2019/01/4.-US-Steel-First-Mitigation-Report.pdf>. Light oil is primarily comprised of benzene (between 60 and 85 percent), along with toluene and xylene. See EPA, *Benzene Emissions from Coke By-Product Recovery Plants: Background Information for Proposed Standards 3-34-3-35* (May 1984), *available at* <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=00002ASU.txt>.

³ See Clairton Operating Permit, *supra*, at 5; Jan. 7 Letter, *supra*, at 2.

⁴ See Jan. 7 Letter, *supra*, at 2

⁵ See Allegheny County Health Dep't, U.S. Steel Mon Valley Works – Irvin Plant Title V Operating Permit No. 0050, at 4 (issued Dec. 9, 2016) [hereinafter Irvin Operating Permit], *available at* <https://gasp-pgh.org/wp-content/uploads/uss-irvin-tvopr.pdf>.

for the plant. The three primary fuels for these boilers are blast furnace gases, coke oven gas, and natural gas.⁶

On December 24, 2018, a fire at the Clairton Plant caused the shutdown of the No. 2 and No. 5 Control Rooms, which process coke oven gas to remove light oil—consisting of benzene and other volatiles—and sulfur, respectively.⁷ Specifically, the No. 2 control room recovers light oil from the coke oven gas stream and “separate[s] and concentrate[s] the acid gas components in the coke oven gas stream into a small fraction of the coke oven gas.”⁸ This small fraction of coke oven gas containing high-sulfur acid gas then flows from the No. 2 control room to the No. 5 control room for sulfur removal.⁹ Without the No. 2 control room’s separation and concentration of acid gas components and its direct connection to the No. 5 control room, the facility cannot operate the No. 5 control room’s desulfurization process.¹⁰

As a result of USS’s continued operation of the Clairton Plant’s coke oven batteries in spite of the shutdown of those control rooms, USS generated and used unprocessed coke oven gas as fuel at the Clairton Plant and also sent this unprocessed coke oven gas to the Edgar Thomson and Irvin Plants for combustion and use as fuel.¹¹ Since the fire, USS continued to operate the Clairton Plant’s coke oven batteries, generate coke oven gas, combust this coke oven gas without first processing it to remove sulfur, light oil, and other pollutants, and release hazardous substances into the ambient air from the Clairton Plant, the Irvin Plant, and the Edgar Thomson Plant.¹²

II. USS HAS VIOLATED CERCLA SECTION 103(A) BY FAILING TO REPORT RELEASES OF HAZARDOUS SUBSTANCES

A. Applicable Requirements

Section 103(a) of CERCLA requires that any person in charge of a facility “shall, as soon as he has knowledge of any release (other than a federally permitted release) of a hazardous substance from such vessel or facility in quantities equal to or greater than those determined pursuant to section 9602 of this title, immediately notify the National Response Center.” 42 U.S.C. § 9603(a). Based on that notification, “[t]he National Response Center shall convey the notification expeditiously to all appropriate Government agencies, including the Governor of any affected State.” *Id.*

⁶ See Allegheny County Health Dep’t, U.S. Steel Edgar Thomson Plant Title V Operating Permit No. 0051, at 4 (issued Apr. 13, 2016) [hereinafter Edgar Thomson Operating Permit], *available at* <https://gasp-pgh.org/wp-content/uploads/uss-et-tvop.pdf>.

⁷ Jan. 7 Letter, *supra*, at 2.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ See ACHD, Enforcement Order No. 190202, at 2 (Feb. 28, 2019) [hereinafter ACHD Order].

¹² *Id.*

CERCLA defines “facility” as “any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft,” as well as “any site or area where hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.” 42 U.S.C. § 9601(9).

“Release” means “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant).” 42 U.S.C. § 9601(22). “Environment” is broadly defined as “the navigable waters, the waters of the contiguous zone, and the ocean waters,” and “any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.” 42 U.S.C. § 9601(8).

“Federally permitted release,” in relevant part, includes “any emission into the air subject to a permit or control regulation under section 111, section 112, Title I part C, Title I part D, or State implementation plans submitted in accordance with section 110 of the Clean Air Act . . . including any schedule or waiver granted, promulgated, or approved under these sections.” 42 U.S.C. § 9601(10)(h) (internal citations omitted).

As provided by the U.S. Environmental Protection Agency’s (“EPA”) regulations under CERCLA, the reportable quantity for hydrogen sulfide is 100 pounds, the reportable quantity for benzene is 10 pounds, and the reportable quantity for coke oven emissions is 1 pound. 40 C.F.R. § 302.4, Tbl. 302.4.

Under CERCLA section 103(f), the typical reporting requirements do not apply to “a continuous release, stable in quantity and rate,” provided the person in charge makes certain other notifications.¹³ 42 U.S.C. § 9603(f). EPA’s regulations under CERCLA define “continuous release” as “[a] release that occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes.” 40 C.F.R. § 302.8(b). “Stable in quantity and rate” is defined as “a release that is predictable and regular in amount and rate of emission.” *Id.*

Under section 310 of CERCLA, “any person may commence a civil action on his own behalf . . . against any person . . . who is alleged to be in violation of any standard, regulation,

¹³ Once the person in charge establishes “sound basis” for qualifying the release for continuous release reporting, the person must make initial telephone notification to the National Response Center, identifying “the notification as an initial continuous release notification report.” 40 C.F.R. § 302.8(c)(1), (d). Thereafter, within 30 days of the initial notification, the person in charge must submit an initial written report to the EPA Regional Office, as well as state and local authorities. 40 C.F.R. § 302.8(c)(2), (e). Then within 30 days of the first anniversary of the initial written report, the person in charge must submit a written follow-up report to the EPA Regional Office. 40 C.F.R. § 302.8(c)(3), (f).

condition, requirement, or order which has become effective pursuant to this chapter.” 42 U.S.C. § 9659(a). Prior to the commencement of the citizen suit, the potential plaintiff must provide notice of sixty days to the alleged violator, the government of the state in which the violation occurs, and EPA. 42 U.S.C. § 9659(d)(1).

Section 109 of CERCLA, as adjusted by the Civil Monetary Penalty Inflation Adjustment Rule, authorizes penalties of \$55,907 per day for violations of CERCLA section 103(a) occurring before January 15, 2019, and \$57,317 per day for violations on or after January 15, 2019. *See* 42 U.S.C. § 9609(b); 40 C.F.R. § 19.4, Tbl. 2, 84 Fed. Reg. 2,058, 2,059 (Feb. 6, 2019).

B. USS Failed to Notify the NRC Immediately of Hazardous Releases above Reportable Quantities, as Required by CERCLA Section 103(a)

On December 24, 2018, USS’s Clairton Plant experienced a fire that required the immediate shutdown of the No. 2 and No. 5 Control Rooms, which are responsible for the removal of light oil and sulfur from raw coke oven gas. As a result of USS’s continued operation of the Clairton Plant without the processing provided by these control rooms, USS combusted unprocessed coke oven gas as fuel or through flares at the Clairton Plant, the Edgar Thomson Plant, and the Irvin Plant. This caused releases of coke oven gas, hydrogen sulfide, benzene, and other hazardous components into the ambient air from all three plants. As a consequence of USS’s failure to report these hazardous releases to the NRC, only select information is available to the public regarding the full extent of releases, including their hazardous constituents, amounts, and emissions rates.

These releases started on the date of the fire, December 24, 2018, and occurred for at least the subsequent 102 days, during which time USS operated its coke oven batteries, generated coke oven gas, and combusted and released this coke oven gas without first processing it to remove sulfur and other pollutants. On April 4, 2019, the Allegheny County Health Department (“ACHD”) reported that it received notification from USS “that 100% desulfurization equipment is back online and is fully operational at its Clairton Coke Works facility.”¹⁴ The operation of USS’s facilities without the proper pollution control devices caused hazardous substances to be released into the ambient air for at least 102 days.

Based on information and data from the ACHD and reasonable inferences, Parties believe that these releases included unpermitted emissions of hydrogen sulfide, benzene, and coke oven gas, in amounts that exceed the reportable quantities for these hazardous substances. Based on recent reports, information, and data, Parties also believe that certain hazardous releases have continued since April 4, 2019, and may be continuing to the present.

In an enforcement order dated February 28, 2019, ACHD reported that across all three Mon Valley Works facilities, USS emitted 74,099.81 pounds of sulfur dioxide on January 29, 2019.¹⁵ These releases occurred 36 days after the fire and can therefore be fairly attributed to the

¹⁴ *See* Press Release, ACHD, Dr. Hacker Statement Regarding Clairton Coke Works Repairs (April 4, 2019), *available at* <https://www.alleghenycounty.us/news/index.aspx>.

¹⁵ *See* ACHD Order, *supra*, at 4-5.

continued daily operation of the facilities without proper pollution-control equipment rather than to a non-representative event. ACHD compared these emissions to data from several days before the fire and found that the 74,099.81 pounds of sulfur dioxide emissions exceeded the pre-fire emissions (2,118.18 pounds of sulfur dioxide) by a factor of 35.

The specific sources to which ACHD attributed these releases were:

- At the Clairton Plant:
 - Underfire for Batteries 1 through 3, 13-15: **8,166.31 lbs.;**
 - Underfire for Batteries 19, 20, B, C: **15,082.00 lbs.;**
 - Clairton Boilers (A Line): **3,731.33 lbs.;**
 - Clairton Boilers (B Line): **0 lbs.;**

- At the Irvin Plant:
 - Irvin HSM (Hot Strip Mill) and Boilers 1 through 4: **2,109 lbs.;**
 - Irvin Galvanizing Line, HPH (High Pressure Hydrogen), OCA (Open Coil Annealing), CA (Continuous Annealing): **271.92 lbs.;**
 - Irvin COG (Coke Oven Gas Flares) and Flares: **40,132.79 lbs.;** and

- At the Edgar Thomson Plant:
 - Edgar Thomson Boilers and “Misc”: **4,605.98 lbs.**¹⁶

Based on the emissions of these sources, ACHD attributed 26,979.64 pounds of the sulfur dioxide emissions to the Clairton Plant, 42,514.19 pounds to the Irvin Plant, and 4,605.98 pounds to the Edgar Thomson Plant.¹⁷

Based on these emissions figures, as well as ambient air monitoring data, Parties believe that US Steel released and may be continuing to release hydrogen sulfide, benzene, and coke oven gas above reportable quantities and not otherwise authorized as federally permitted releases.

1. USS Released Hydrogen Sulfide in Amounts Greater than the Reportable Quantity

The three Mon Valley Works facilities released hydrogen sulfide above the reportable quantity of 100 pounds per day from the sources listed above. *See* 40 C.F.R. § 302.4, Tbl. 302.4. As provided in detail below, none of these releases are federally permitted releases.¹⁸

Given that sulfur dioxide emissions are a product of the Mon Valley Works facilities' combustion of hydrogen sulfide, one can estimate the original amount of hydrogen sulfide and the ultimate released amount by molecular balance using the substances' molar masses and an assumed destruction efficiency. Conservatively assuming a destruction efficiency of 99 percent

¹⁶ *Id.* at 4-5.

¹⁷ *Id.*

¹⁸ *See infra* Part II.B.4.

across all facilities and control devices—which is highly unlikely, given that the emissions are from many sources and not just high-destruction-efficiency flares and given observations as to certain flares’ sporadic operation—the facilities’ emissions of 74,099.81 pounds of sulfur dioxide mean they also released a total 398.18 pounds of hydrogen sulfide per day. Using ACHD’s source-by-source breakdown, this means the Clairton Plant released 144.78 pounds per day, the Irvin Plant released 228.14 pounds per day, and the Edgar Thomson Plant released 24.72 pounds per day.¹⁹

USS’s monthly reporting of the Clairton Plant’s coking and desulfurization process information during January and February 2019 supports these conclusions.²⁰ Starting from the daily average flow rate of coke oven gas produced for each month (160.2 MMscf for January, 161.9 MMscf for February), multiplying this by the monthly average concentration of hydrogen sulfide in the coke oven gas (136 grains/dscf for January, 144.6 grains/dscf for February), and converting to pounds per day, one again can assume 99 percent destruction efficiency to estimate releases of hydrogen sulfide across all three plants.²¹ For January 2019, these releases are an estimated 311.25 pounds per day, and for February 2019, these are an estimated 334.44 pounds per day. These estimates agree well with the total 398.18 pounds per day, as calculated above from the reported sulfur dioxide emissions.

By any count—in the aggregate emissions across all three facilities, in the individual emissions attributed to the Clairton Plant and the Irvin Plant, or in the total emissions calculated from the monthly reporting—USS released hydrogen sulfide above the reportable quantity of 100 pounds per day.

2. USS Released Benzene in Amounts Greater than the Reportable Quantity

The three Mon Valley Works facilities also released well over the 10-pound reportable quantity of benzene. 40 C.F.R. § 302.4, Tbl. 302.4. As provided below, none of these releases are federally permitted releases.²²

Starting again from the data ACHD provided in its enforcement order, all three Mon Valley Works facilities released 74,099.81 pounds of sulfur dioxide.²³ Based on these known emissions of sulfur dioxide—which by USS’s account are a result of the shutdown of the Nos. 2 and 5 control rooms and their processes—there are several methodologies to estimate the facilities’ benzene emissions.

¹⁹ *Id.* at 5.

²⁰ See USS, Monthly Report to Allegheny County Health Department: Coke Plant Operation Data, USS Clairton Works (Jan. 2019) [hereinafter Clairton Plant Jan. 2019 Report]; USS, Monthly Report to Allegheny County Health Department: Coke Plant Operation Data, USS Clairton Works (Feb. 2019) [hereinafter Clairton Plant Feb. 2019 Report].

²¹ See Clairton Plant Jan. 2019 Report, *supra*, at 2, 3; Clairton Plant Feb. 2019 Report, *supra*, at 2, 3.

²² See *infra* Part II.B.4.

²³ *Id.* at 4-5.

First, in EPA's AP-42 emissions factors for coke production, Table 4-13 provides emissions factors for bypassed coke oven gas, expressed both in factors for uncontrolled emissions and emissions from flaring bypassed coke oven gas.²⁴ EPA explains that Table 4-13 is based on data that:

were generated to provide estimates of emissions of various compounds when the raw coke oven gas is bypassed directly through a bleeder stack and *not sent to the byproduct plant for recovery of tar and other byproducts*. The composition of this gas should be similar to or the same as the raw coke oven gas that leaks from doors, lids, and offtakes.²⁵

That is, the Table 4-13 emissions factors are based on operating conditions that reflect the circumstances following shutdown of the Nos. 2 and 5 control rooms at the Clairton Plant: the bypass of coke oven gas from the by-products recovery processes.²⁶ In fact, the basis for the Table 4-13 emissions factors is a "memorandum [that] provides additional data submitted by USS Clairton to EPA Region III on the composition of raw coke oven gas."²⁷

Table 4-13 estimates both uncontrolled and flared emissions of bypassed coke oven gas. For flared emissions, the table estimates 0.22 pounds of benzene emissions and 13 pounds of sulfur dioxide emissions per ton of coal.²⁸ Applying ACHD's estimate that the Clairton Plant conducts "the destructive distillation (carbonization) of more than 16,000 tons of coal" per day, the flaring of the bypassed coke oven gas resulted in an estimated 3,520 pounds of benzene emissions per day.²⁹ This is clearly above the reportable quantity of 10 pounds per day.

Using USS's monthly reporting of actual coal the Clairton Plant charged in January and February 2019 supports this estimate. According to the reports, the Clairton Plant charged 13,311 tons of coal per day in January 2019 and 13,043 tons of coal per day in February 2019.³⁰

²⁴ See EPA, *Emission Factor Documentation for AP-42: Section 12.2, Coke Production* 4-152 Tbl. 4-13 (May 2008) [hereinafter *AP-42 Coke Production*], available at https://www3.epa.gov/ttnchie1/ap42/ch12/bgdocs/b12s02_may08.pdf

²⁵ *Id.* at 4-8 (describing "Reference 10") (emphasis added).

²⁶ See Jan. 7 Letter, *supra*, at 2 ("The emergency shutdown of the Nos. 2 and 5 control rooms requires the by-pass of coke oven gas to the downriver system."); ACHD Order, *supra*, at 2 ("The shutdown of these two control rooms resulted in the diversion of coke oven gas away from the desulfurization process of the facility's by-products operation.").

²⁷ *AP-42 Coke Production*, *supra*, at 4-8; *id.* at 4-286 ("Memorandum from Ackerman, E., USEPA Region III, to A. Agnew, EPA/OAQPS. Transmitting information on bypassed coke oven gas. April 8, 1991."). EPA assigned a "D" rating to these emission factors, which means they are not particularly reliable for predicting emissions from coke ovens throughout the industry. *Id.* at 4-8. But the data in Table 4-13 is based on test results from the Clairton Plant, which makes them more useful in predicting emissions from coke oven gas generated at that facility.

²⁸ *Id.* at 4-152 Tbl. 4-13.

²⁹ See ACHD Order, *supra*, at 1-2.

³⁰ See Clairton Plant Jan. 2019 Report, *supra*, at 2; Clairton Plant Feb. 2019 Report, *supra*, at 2.

Using Table 4-13's flared emissions estimate of 0.22 pounds of benzene per ton of coal, this corresponds to 2,928.4 pounds per day in January 2019 and 2,869.5 pounds per day in February 2019.³¹ These estimates of daily benzene emissions agree well with the estimate of 3,520 pounds per day, as based on the estimated 16,000 tons of coal charged per day, and clearly exceed the reportable quantity of 10 pounds per day.

Another methodology of estimating benzene emissions is to apply the ratio of the Table 4-13 factors (0.22 pounds of benzene to 13 pounds of sulfur dioxide) to the facilities' reported emissions of sulfur dioxide. Based on this ratio, the facilities' release of 74,099.81 pounds of sulfur dioxide would correspond to 1,254 pounds of benzene.³² This is also well above the 10-pound reportable quantity. Using ACHD's source-by-source breakdown of the emissions, each of the three facilities also individually surpasses the reportable quantity for benzene: 457 pounds per day from the Clairton Plant, 719 pounds per day from the Irvin Plant, and 78 pounds per day from the Edgar Thomson Plant.³³

One final methodology would be to apply the emissions limits of the Clairton Plant—54.0 tons per year of benzene and 3,694.0 tons per year of sulfur dioxide—as a ratio to estimate benzene emissions from the 74,099.81 pounds of sulfur dioxide emissions.³⁴ Based on this methodology, all three plants emitted 1,083 pounds of benzene per day—also well above the reportable quantity. This is also true using ACHD's source-by-source breakdown for emissions by plant: 394 pounds per day from the Clairton Plant, 621 pounds per day from the Irvin Plant, and 67 pounds per day from the Edgar Thomson Plant.

Direct measurements of ambient air data supports using the sulfur dioxide emissions as a correlation for benzene emissions. In a dataset consisting of benzene and sulfur dioxide samples taken at a site in Glassport between February 28 and March 26, 2019, the days with the highest values for benzene and sulfur dioxide regularly corresponded with each other.³⁵

By any of these methodologies, it is apparent that USS has continually released benzene from all three of the facilities well above reportable quantities.

3. USS Released Coke Oven Emissions in Amounts Greater than the Reportable Quantity

With respect to coke oven emissions, there is little doubt that the facilities released coke oven emissions in quantities well above the one-pound per day reportable quantity. 40 C.F.R. § 302.4, Tbl. 302.4. As provided below, none of these releases are federally permitted releases.³⁶

³¹ *AP-42 Coke Production, supra*, at 4-152 Tbl. 4-13.

³² ACHD Order, *supra*, at 4-5.

³³ *Id.*

³⁴ *See Clairton Operating Permit, supra*, at 258 Tbl. VII-1.

³⁵ *See Carnegie Mellon Univ. Community Robotics, Education and Technology Empowerment (CREATE) Lab Dataset (Feb.-March 2019) [on file with Parties].*

³⁶ *See infra* Part II.B.4.

Based on the facts that USS diverted coke oven gas from the by-products plant to a variety of sources across the three facilities where it was flared and otherwise combusted and that these releases resulted in 74,099.81 pounds of sulfur dioxide and an estimated 1,000 pounds of benzene, as provided above, it is on Parties' information and belief that USS released coke oven emissions in daily quantities that exceeded the one-pound reportable quantity for coke oven emissions.

4. USS's Releases of Hydrogen Sulfide, Benzene, and Coke Oven Emissions are Not Federally Permitted Releases

The federally permitted release exemption does not relieve USS of the duty to have reported these releases of these three hazardous substances, as the releases of these three hazardous substances were not federally permitted. *See* 42 U.S.C. § 9601(10)(h), 9603(a).

For hydrogen sulfide, none of the three facilities' permits authorize emissions of any amount.³⁷ While the three facilities' permits impose a facility-wide hydrogen sulfide throughput limit of 35 grains/100 dscf for any coke oven gas produced at the Clairton Plant to be flared, mixed, or combusted at the three facilities, USS clearly exceeded this limit while the desulfurization equipment was offline.³⁸ On January 29, 2019, the average daily grains were 100.28 for Batteries 1 through 3 and 13 through 15 and 161.97 for Batteries 19, 20, B, C at the Clairton Plant, exceeding the limit of 35 grains/100 dscf many times over.³⁹

For coke oven emissions, none of the facilities' permits authorize the emission of any amount of coke oven gas.⁴⁰ In fact, the Installation Permits issued in September 2017 for the Clairton Plant and the Edgar Thomson Facility expressly require that "the permittee shall not operate, or allow to be operated, any source in such manner that unburned coke oven gas is emitted into the open air."⁴¹ In the alternative, to the extent the permits can be construed as allowing some emissions from the flaring or combustion of coke oven gas, the permits prohibit any flaring or combustion "unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 35 grains per hundred dry standard cubic feet of coke

³⁷ *See* Clairton Operating Permit, *supra*, at 258 Tbl. VII-1; Irvin Operating Permit, *supra*, at 94; Edgar Thomson Operating Permit, *supra*, at 107 Tbl. VII-1.

³⁸ *See* ACHD Order, *supra*, at 4 ("U.S. Steel has acknowledged an exceedance of the H2S limit of 35 grains/100 dscf (grains per hundred dry standard cubic feet).").

³⁹ *Id.*

⁴⁰ *See* Clairton Operating Permit, *supra*, at 258 Tbl. VII-1; Irvin Operating Permit, *supra*, at 94; Edgar Thomson Operating Permit, *supra*, at 107 Tbl. VII-1.

⁴¹ ACHD, U.S. Steel Mon Valley Works Clairton Plant Installation Permit No. No. 0052-I017, at 18 (issued Sep. 14, 2017) [hereinafter Clairton Installation Permit]; ACHD, U.S. Steel Mon Valley Works Edgar Thomson Plant Installation Permit No. No. 0051-I006, at 18 (issued Sep. 14, 2017) [hereinafter Edgar Thomson Installation Permit].

oven gas.”⁴² As provided above, the coke oven gas combusted and flared at all three facilities exceeded this limit many times over while the desulfurization equipment was offline.⁴³

For benzene, neither the permits for the Irvin Plant nor the Edgar Thomson Plant authorize any emissions of benzene. The Clairton Plant’s Operating Permit is the only of the three that authorizes any emission of benzene, with a limit of 54 tons per year.⁴⁴ However, the Operating Permit only authorizes these emissions from “sources in the by-products recovery area.”⁴⁵ Given that this area—namely the No. 2 control room—was offline and that all emissions of benzene resulted from the diversion of unprocessed coke oven gas elsewhere for combustion or flaring, none of the emissions of benzene from the Clairton Plant—or any of the three plants—were federally permitted.

None of the facilities’ hazardous releases described above were federally permitted, and therefore USS was required to report all such releases under CERCLA section 103.

5. USS Failed to Report Hazardous Releases to the NRC

Although USS likely released reportable quantities of at least three hazardous substances from its three facilities for at least 102 days, USS has yet to make a single report of these releases to the NRC as required by section 103(a) of CERCLA. As of the date of this letter, there are no reports from USS regarding these releases of hazardous substances.⁴⁶ The only two reports pertaining to any of the Mon Valley Works facilities are one report on February 4, 2019, reporting a discharge of light oil onto the ground due to unknown causes and one report from a citizen on March 15, 2019, reporting emissions of hydrogen sulfide, sulfur dioxide, and volatile organic compounds resulting from the fire and shutdown of the control rooms.⁴⁷

Additionally, USS has not taken any steps to report these releases pursuant to the continuous release exemption, which requires as a first step that the person in charge make “initial telephone notification” to the NRC. 40 C.F.R. § 302.8(c)(1), (d). Furthermore, USS is ineligible for the continuous release exemption for these episodic releases because its releases are not continuous, are not stable in quantity and rate, do not occur without interruption or abatement, and are not routine, anticipated, or intermittent. 42 U.S.C. § 9603(f); 40 C.F.R. § 302.8.

As demonstrated by these facts, USS has violated and continues to violate CERCLA section 103(a)’s requirement that a person in charge of a facility immediately notify the NRC “as

⁴² See Irvin Operating Permit, *supra*, at 75; Edgar Thomson Operating Permit, *supra*, at 35; Clairton Installation Permit, *supra*, at 18.

⁴³ See ACHD Order, *supra*, at 4.

⁴⁴ See Clairton Operating Permit, *supra*, at 258 Tbl. VII-1; Irvin Operating Permit, *supra*, at 94; Edgar Thomson Operating Permit, *supra*, at 107 Tbl. VII-1.

⁴⁵ See Clairton Operating Permit, *supra*, at 196.

⁴⁶ See NRC, 2019 Reports Spreadsheet, *available at* <http://www.nrc.uscg.mil/> (accessed May 1, 2019).

⁴⁷ *Id.* (Nos. 1236736, 1240193).

soon as he has knowledge of any release of a hazardous substance” above a reportable quantity. 42 U.S.C. § 9603(a). USS had knowledge of these releases as of December 24, 2018, but has yet to report these releases to the NRC. Therefore, USS has violated section 103(a) of CERCLA at least 306 times—and likely several more times than that, given the number of facilities and other hazardous substances involved—in its failure to report the releases of the three hazardous substances noted above for each of the 102 days before it brought its desulfurization equipment back online.

As a further matter, to the extent that USS’s bringing the desulfurization equipment back online has not ended all hazardous releases above reportable quantities, U.S. Steel’s reporting violations continue to accrue with every such unreported release from April 4, 2019, to the present. This is all the more likely in light of recent data from ACHD air monitors and other monitors showing spikes of sulfur dioxide and benzene on several days since April 4, 2019, including April 6, 7, 13, 14, 17, 18, and 19, 2019.⁴⁸ In fact, EPA ranked the Liberty/Clairton area as having the worst air quality index in the nation on the morning of April 23, 2019.⁴⁹

III. PARTIES GIVING NOTICE

The names, addresses, and telephone numbers of the parties giving notice are:

Environmental Integrity Project 1000 Vermont Ave. NW Suite 1100 Washington, DC 20005 (202) 296-8800	Breathe Project Energy Innovation Center Suite 140 1435 Bedford Avenue Pittsburgh, PA 15219 (412) 514-5008	Clean Air Council 135 S. 19th Street Suite 300 Philadelphia, PA 19103 (215) 567-4004
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Adam Kron and Lisa Widawsky Hallowell are the counsel representing these parties. Their addresses and telephone numbers can be found in the signature blocks below.

IV. CONCLUSION

By failing to notify the NRC immediately upon having knowledge of unpermitted releases of reportable quantities of hazardous substances, including hydrogen sulfide, benzene, and coke oven emissions from the Clairton Plant, the Irvin Plant, and the Edgar Thomson Plant, USS violated and continues to violate the reporting requirements of CERCLA section 103(a). Accordingly, Parties intend to file suit to abate the violations described above, ensure future compliance with federal and state law, obtain civil penalties, recover attorneys’ fees and costs of litigation, and obtain other appropriate relief.

⁴⁸ See Carnegie Mellon CREATE Lab, Environmental Sensor Data Repository, <https://esdr.cmucreatelab.org/browse> (accessed May 1, 2019).

⁴⁹ See screenshot of AirNow.gov (on file with Parties); see also EPA, AirNow Archives, <https://airnow.gov/index.cfm?action=airnow.mapsarchivecalendar> (accessed May 1, 2019).

If you have any questions regarding the allegations in this notice or believe any of the foregoing information may be in error, please contact either Adam Kron or Lisa Widawsky Hallowell at the numbers listed below. We would also welcome an opportunity to discuss a resolution of this matter prior to expiration of the notice period if you are prepared to remedy the violations discussed above.

Thank you for your prompt attention to this matter.

Sincerely,



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*Attorneys for Environmental Integrity Project,
Breathe Project, and Clean Air Council*

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