# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BEFORE THE ADMINISTRATOR

)	PETITION FOR OBJECTION
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)	Permit No. 0052-OP22
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# PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF TITLE V RENEWAL OPERATING PERMIT NO. 0052-OP22 FOR THE U.S. STEEL MON VALLEY WORKS CLAIRTON PLANT

Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. §7661(b)(2), and 40 C.F.R. §70.8(b), Environmental Integrity Project (EIP), Clean Air Council (CAC), and Citizens for Pennsylvania's Future (PennFuture) ("Petitioners") hereby petition the Administrator of the U.S. Environmental Protection Agency ("Administrator" or "EPA") to object to Title V Operating Permit No. 0052-OP22 ("Renewal Permit") issued by the Allegheny County Health Department ("ACHD" or "Department") on November 21, 2022 to the Mon Valley Works Clairton Plant ("facility" or "Clairton Plant"), owned and operated by the United States Steel Corporation ("US Steel"), located in Allegheny County, Pennsylvania. The Clairton Plant is located in an area that has been designated by Pennsylvania as an Environmental Justice area. As required, Petitioners are filing this Petition with the Administrator via the Central Data Exchange and providing copies via email and certified U.S. mail to ACHD and US Steel.

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<sup>&</sup>lt;sup>1</sup> Dep't of Envtl. Prot., PA Environmental Justice Areas, EJ Areas Viewer, <u>www.dep.pa.gov/EJViewer</u> (last visited on Feb. 27, 2023).

As discussed further below, EPA must object to the Renewal Permit because it does not include testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with multiple applicable requirements for coke oven battery combustion stacks, flares, boilers, and quench towers. The pollutants of concern include PM, NOx, VOCs, CO, SO2, and several hazardous air pollutants (HAPs), including benzene.

Petitioners emphasize that it is critical that EPA ensures full compliance with Title V of the Clean Air Act at this facility because the Clairton Plant is located in a designated Environmental Justice Area and Mon Valley communities living near this facility and workers are exposed to unacceptably high levels of benzene and other air pollution.<sup>2</sup> In addition, U.S. Steel has a long history of non-compliance with the Clean Air Act, is currently identified as a "High Priority Violator" by EPA,<sup>3</sup> and the adverse health risks associated with pollution from U.S. Steel plants in the Mon Valley is well documented.<sup>4</sup> For example, the Allegheny County Health Department's (ACHD) Liberty Borough air quality monitor recorded exceedances of the National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM2.5) on six days in October and November.<sup>5</sup> Hydrogen sulfide levels exceeded state standards more than twenty days in the months of October and November.<sup>6</sup>

In addition to exceedances of PM2.5 and hydrogen sulfide standards at the Liberty Borough monitor, sampling conducted at residential locations near the Liberty Borough monitor

<sup>&</sup>lt;sup>2</sup> Attached Here as Exhibit 1: Letter to EPA, Request for Immediate U.S. Environmental Protection Agency (EPA) Action to Abate Benzene Emissions and Other Toxic Air Pollution in Monongahela River Valley Communities in Allegheny County, Pennsylvania, December 14, 2022 (Letter 1); Second Letter to EPA, Request for Immediate U.S. Environmental Protection Agency (EPA) Action to Abate Benzene Emissions and Other Toxic Air Pollution in Monongahela River Valley Communities in Allegheny County, Pennsylvania, February 1, 2023 (Letter 2).

<sup>&</sup>lt;sup>3</sup> US Steel Clairton Plant, EPA Enforcement Compliance History Online (ECHO), available at <a href="https://echo.epa.gov/detailed-facility-report?fid=110042043384">https://echo.epa.gov/detailed-facility-report?fid=110042043384</a>.

<sup>&</sup>lt;sup>4</sup> Exhibit 1, Letter 1 at 2-3.

<sup>&</sup>lt;sup>5</sup> Id. at 4.

<sup>&</sup>lt;sup>6</sup> Id.

and U.S. Steel plants using EPA Method 325A/B since December of 2021 show that benzene concentrations in the Mon Valley community pose a risk to public health.<sup>7</sup> In the month of October, two-week average benzene concentrations were as high as 16.7 µg/m3 at a monitoring station located at a residential property in Glassport, Pennsylvania.<sup>8</sup> At a second home nearby, the two-week average concentration for the same period was 10.4 µg/m3.<sup>9</sup> At these concentrations, residents and workers may be exposed to concentrations that can cause adverse health effects in as little as 24 hours.<sup>10</sup> In addition, the average concentrations of benzene over the past year at these same two locations and a third location exceed public health thresholds for chronic exposure.<sup>11</sup>

Petitioners, local groups, and community members petitioned EPA in December to take immediate action to abate benzene emissions and other air pollution emitted from this facility, including ensuring that the facility's Title V permit assures compliance with the law.<sup>12</sup>

## I. PETITIONERS

The Environmental Integrity Project (EIP) is a national non-profit organization based in Washington, D.C. dedicated to ensuring the effective enforcement of environmental laws, with a specific focus on the Clean Air Act and large stationary sources of air pollution such as the Clairton Plant. EIP has three goals: (1) to provide objective analysis of how the failure to enforce and implement environmental laws increases pollution and harms public health; (2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce

<sup>&</sup>lt;sup>7</sup> Exhibit 1, Letters 1 and 2.

<sup>&</sup>lt;sup>8</sup> Id., Letter 1 at 5.

<sup>&</sup>lt;sup>9</sup> Id.

<sup>&</sup>lt;sup>10</sup> Id. Letter 1 at 6.

<sup>&</sup>lt;sup>11</sup> Id. Letter 2 at 2.

<sup>&</sup>lt;sup>12</sup> Exhibit 1.

or comply with environmental laws; and (3) to help local communities obtain the protection of environmental laws.

Clean Air Council (CAC) is a non-profit environmental health organization headquartered at 135 South 19<sup>th</sup> Street, Suite 300, Philadelphia, Pennsylvania, 19103. CAC maintains an office in Pittsburgh. CAC has been working to protect everyone's right to a clean environment for over 50 years. CAC has members throughout Pennsylvania who support its mission, including members in Allegheny County.

PennFuture is a Pennsylvania-statewide environmental organization dedicated to leading the transition to a clean energy economy in Pennsylvania and beyond. PennFuture strives to protect our air, water and land, and to empower citizens to build sustainable communities for future generations. A main focus of PennFuture's work is to improve and protect air quality across Pennsylvania through public outreach and education, advocacy, and litigation.

#### II. PROCEDURAL BACKGROUND

This petition addresses the ACHD's renewal of Title V Permit No. 0052-OP22 for the U.S. Steel Mon Valley Works Clairton Plant.

The previous Title V operating permit for the Clairton Plant was issued on March 27, 2012 and expired on March 26, 2017. ACHD released the Draft Permit for public comment on January 13, 2022, setting a 45-day comment deadline of February 28, 2022. ACHD extended the comment period to March 15, 2022. A public hearing was held on February 22, 2022. On March 15, 2022, petitioners timely filed significant Public Comments on the Draft Permit. *See* Exhibit 2, Public Comments Regarding Draft Renewal Title V Permit No. 0052-OP22 (Comments).

ACHD provided Petitioners with the Final Renewal Permit, Technical Support Document (attached here as Exhibit 3)<sup>13</sup>, and the "Summary of Public Comments and Department Responses on the Proposed Issuance of the U.S. Steel Clairton Works Title V Operating Permit No. 0552" (attached here as Exhibit 4, ACHD Comment and Response Document (Response to Comments)) on November 22, 2022.

EPA's 45-day review period began on November 19, 2022 and ended on January 3, 2023. EPA did not object to the Renewal Permit during that period, which initiated the start of the 60-day public petition period that has a deadline of March 6, 2023. Accordingly, this Petition is timely filed.

# III. LEGAL REQUIREMENTS

Title V permits, which must list and assure compliance with all federally enforceable requirements that apply to each major source of air pollution, are the primary method for enforcing and assuring compliance with the Clean Air Act's pollution control requirements for major sources. *Operating Permit Program*, 57 Fed. Reg. 32250, 32258 (July 21, 1992). One of the primary purposes of Title V is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements. Increased source accountability and better enforcement should result." Id. at 32251. "The [Title V] permit is crucial to implementation of the Act: it contains, in a single, comprehensive set of documents, all [Clean Air Act] requirements relevant to the particular source." *Virginia v. Browner*, 80 F.3d 869, 873 (4th Cir. 1996).

<sup>&</sup>lt;sup>13</sup> In Petitioners' Comments Petitioners referred to the Technical Support Document as the Review Memo. *See* Exhibit 3 Petitioners' Comments. The document appears to serve the purpose of the Statement of Basis required by 40 C.F.R. 70.7(a)(5). *See* Ex. 3, Technical Support Document.

"But Title V did more than require the compilation in a single document of existing applicable limits . . . . It also mandated that each permit . . . shall set forth monitoring requirements to assure compliance with the permit terms and conditions." *Sierra Club v. EPA*, 536 F.3d 673, 674-75 (D.C. Cir. 2008). It is the Title V permitting authority's responsibility to ensure that a proposed permit "set[s] forth" conditions sufficient "to assure compliance with all applicable requirements" of the Clean Air Act. *In the Matter of Sandy Creek Services, LLC, Sandy Creek Energy Station, McLennan County, TX,* Order on Petition No. III-2018-1 (June 30, 2021) ("Sandy Creek Order") at 12 (quoting 42 U.S.C. § 7661c(c)). Among other things, a Title V permit must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1). A "monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards." *See Sierra Club v. EPA*, 536 F.3d 673, 677 (D.C. Cir. 2008).

All emission limits in a Title V permit must be enforceable as both a legal and practical matter. In order for a limit to be enforceable under the Clean Air Act, it must be supported by monitoring, recordkeeping, and reporting requirements "sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action. *In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC*, Order on Petition No. II-2001-05 7 (Apr. 8, 2002). The permitting authority's rationale for any proposed permit conditions must be clear and documented in the permit record, 40 C.F.R. § 70.7(a)(5), and "permitting authorities have a responsibility to respond to significant comments" received on a proposed permit. *In the Matter of CITGO* 

Refining and Chemicals Co., L.P., West Plant, Corpus Christi, TX, Order on Petition No. VI-2007-01 (May 28, 2009) ("CITGO Order") at 7.

EPA must object to any Title V permit that fails to include or assure compliance with all applicable requirements of the Clean Air Act. 40 C.F.R. § 70.8(c). "Applicable requirements" include any requirements of a federally enforceable SIP and any preconstruction requirements that are incorporated into the Title V permit. *In the Matter of Pac. Coast Bldg. Prods., Inc.,* Permit No. A00011, Clark County, NV (Dec. 10, 1999) ("Pac. Coast Order") at 7 ("applicable requirements include the requirement to obtain preconstruction permits that comply with preconstruction review requirements under the Act, EPA regulations, and State Implementation Plans."). If EPA does not object to a Title V permit, "any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d). The Administrator "shall issue an objection" if the petitioner demonstrates "that the permit is not in compliance with the requirements of [the Clean Air Act], including the requirements of the applicable implementation plan." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1). The Administrator "shall grant or deny such petition within 60 days after the petition is filed." 42 U.S.C. § 7661d(b)(2).

#### IV. GROUNDS FOR OBJECTION

For all the reasons discussed below, EPA must object to the Title V Renewal Permit for the Clairton Plant.

- A. The Renewal Permit Does Not Include Sufficient Testing, Monitoring, or Reporting Requirements that Assure Compliance with PM and PM10 Emission Limits for Several Boilers
  - 1. Specific Grounds for Objection, Including Citation to Permit Term

The Renewal Permit is deficient because it fails to establish testing, monitoring, or reporting requirements that assure compliance with hourly and rolling 12-month particulate matter ("PM") and PM10 emission limits for several boilers. Conditions V.GG.2.h, HH.2.i, II.2.g, and JJ.2.h of the Renewal Permit establish hourly and rolling 12-month emission limits for Boilers 1, 2, R1, R2, T1, and T2. Renewal Permit at V.GG.2.h; V.HH.2.i; V.II.2.g; and V.JJ.2.h. According to ACHD, these requirements are based on ACHD Regulations Article XXI \$2104.02.a.4, which is part of ACHD's EPA-approved SIP. Technical Support Document at 28-30; 63 FR 32126 (June 12, 1998).

The Renewal Permit requires only that PM and PM10 testing be conducted at least once every two years and does not include any other testing or monitoring requirements for PM and PM10 emissions from these sources. Renewal Permit at V.GG.2.d; V.HH.2.e; V.II.2.c; V.JJ.2.b. Neither the Renewal Permit, Technical Support Document, or Response to Comments provide a reasoned explanation as to how biennial stack tests assure continuous compliance with hourly and 12-month rolling emission limits.

# 2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements." 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

## 3. Inadequacy of the Permit Term

Biennial stack tests for PM and PM10 do not assure compliance with PM and PM10 emission limits that must be met on an hourly and rolling 12-month basis. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 CFR §70.6(a)(3)(i)(B); Sierra Club, 536 F.3d at 676-77.EPA has expressly found that even annual stack testing alone is insufficient to assure compliance with an hourly limit. In re Northeast Maryland Waste Disposal Authority, Order on Petition No. III-2019-2, at 9, (Dec. 11, 2020) ("NMWDA Order"), available at https://www.epa.gov/sites/default/files/2020-12/documents/montgomery\_response2019.pdf. In that order, EPA found that petitioners demonstrated that the annual stack testing required to demonstrate compliance with an hourly limit for hydrochloric acid (HCl) at Covanta's incinerator in Montgomery County, Maryland, was insufficient and that the additional monitoring measures cited by the permitting agency did not cure the deficiency. Id. In fact, in the NMWDA Order, the EPA strongly suggested that even monitoring on a 3-hour basis is likely inadequate to assure continuous compliance with an hourly standard. Id. at 10-11; note 10 ("use of a 3-hour block average, even if using a certified HCl CEMS, is likely inappropriate for demonstrating compliance with a 1-hour standard."). Similarly, stack testing performed every two years is clearly not sufficient to demonstrate compliance with hourly and rolling 12-month emission limits.

The Department has identified no other testing, monitoring, or reporting requirements for the hourly and rolling 12-month PM or PM10 emission limits for the boilers, and the Department does not provide any rationale for how biennial stack tests assure compliance with short-term emission limits in the Renewal Permit or Technical Support Document as required by 40 CFR §70.7(a)(5). *See* Technical Support Document at 33-34.

#### 4. Issue Raised in Public Comment

Petitioners expressly raised these issues in Comment 12.a of their Comments, which stated the same points above. Ex. 2 at 76-77. EPA also commented that the testing and monitoring requirements for these emission limits are inadequate and recommended that the Department revise the permit to include annual stack testing and "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with permit limits." *See* Response to Comment, Comment No. 138 at 55; EPA Comments on Title V Renewal U.S. Steel Corporation, Mon Valley Works, Clairton Plant (0052-OP22) March 14, 2022 (attached here as Exhibit 5).

# 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comment does not explain how the Renewal Permit assures compliance with hourly and rolling 12-month PM and PM10 emission limits for the boilers. In response to Petitioner's Comments, the Department states that the Renewal Permit requires biennial stack testing, the "boilers have shown compliance with PM in recent time", stack tests from more than four years ago show that boiler emissions are significantly lower than the potential to emit, requiring a continuous emission monitor system (CEMS) "require[s] an enforcement order", and the Department may require additional emissions testing in the future "if it is deemed necessary". Response to Comments, Comment #123 at 44-45.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comment. First, while the Department increased PM and PM10 stack testing to once every 2-years, the Department does not explain how biennial stack testing will assure compliance

with hourly and rolling 12-month emission limits. 40 C.F.R. § 70.7(a)(5). The fact that the Department believes the boilers have met PM and PM10 emission limits in recent times or that stack tests from more than four years ago suggests that boiler emissions are lower than the potential to emit are irrelevant. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time and, as discussed above, even annual stack testing alone is insufficient to assure compliance with an hourly limit. 40 C.F.R. § 70.6(a)(3)(i)(B); NWDA Order at 9. Second, the Department's statement that it may require additional testing in the future is also not sufficient. Under Title V, testing, monitoring, and reporting requirements must be included in the Title V permit itself. See In the Matter of Valero Refining-Texas, L.P. Valero Houston Refinery, Order on Petition No. VI-2021-8, at 23 (Jun. 30, 2022) (Valero Order) (finding that the Title V permit itself must include or clearly incorporate by reference monitoring requirements that assure compliance with emissions limits set forth in incorporated Permits-by-rule). Finally, the Department suggests that requiring continuous emissions monitoring may only be accomplished through an enforcement order. See Response to Comments, Comment #123 at 44. This is simply inaccurate. See, e.g., Sierra Club v. EPA, 536 F.3d 673, 677-78 (D.C. Cir. 2008). In fact, the Department has an affirmative obligation to supplement the Renewal Permit with testing and monitoring requirements that assure continuous compliance with emission limits. Id. In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, reporting, and recordkeeping requirements for hourly and 12-month rolling PM and PM10 emission limits for several boilers.

B. The Renewal Permit Does Not Include Testing, Monitoring, or Reporting Requirements that Ensure Compliance with the Emission Limits for CO, VOCs, Benzene, HCl, and Naphthalene from the Coke Oven Battery C Combustion Stack

1. Specific Grounds for Objections, Including Citation to Permit Term

The Renewal Permit is deficient because it does not include testing, monitoring, and reporting requirements that assure continuous compliance with hourly and 12-month rolling emissions limits for CO, benzene, hydrogen chloride (HCl), and naphthalene from the coke oven battery C combustion stack, which were established by Installation Permit IP-0052-I011b.

Renewal Permit, Condition V.I.1.dd.; Technical Support Document at 19.

The Renewal Permit requires biennial stack tests for CO and VOCs. Renewal Permit, Condition V.I.2.i. The Renewal Permit includes no other testing or monitoring requirements for CO and VOCs, and no monitoring or testing requirements at all for emissions of benzene, HCl, and naphthalene. Renewal Permit, Condition V.I. Neither the Renewal Permit, Technical Support Document, or the Response to Comments provide a reasoned explanation as to how biennial stack tests assure continuous compliance with hourly and rolling 12-month emission limits for CO and VOCs or how no testing or monitoring at all assures continuous compliance with benzene, HCl, and napthalene.

## 2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements" as well as any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I of the CAA. 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. §

70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

## 3. Inadequacy of the Permit Term

Biennial stack tests—CO and VOCs—or no testing or monitoring requirements at all—benzene, HCl, napthalene—do not assure compliance with emission limits that must be met on an hourly and rolling 12-month basis. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 CFR \$70.6(a)(3)(i)(B); Sierra Club, 536 F.3d at 676-77. As noted previously, EPA has concluded that even annual stack testing alone is insufficient to assure compliance with an hourly limit. See discussion supra Section IV.A.3. In this case, biennial stack tests—much less no requirements at all—are clearly not sufficient to assure continuous compliance with short-term emission limits that must be met on an hourly and 12-month rolling basis. Id. Further, the Department does not provide any clear and documented rationale in the Renewal Permit or Technical Support Document for how the biennial stack tests or lack of testing and monitoring requirements assures compliance as required by 40 CFR §70.7(a)(5). See Technical Support Document at 33-34.

# 4. Issue Raised in Public Comment

Petitioners expressly raised these issues in Comments 12.b, 12.c, and 12.f of their Comments, which stated the same points as above. Ex. 2 at 77-80, 83. EPA also commented that the testing and monitoring requirements for these emission limits are inadequate and recommended that the Department revise the permit to include annual stack testing and "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with permit limits." Response to Comment, Comment No. 138 at 55; Ex. 5.

# 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comments does not explain how the testing, monitoring, and recordkeeping requirements assure continuous compliance with the CO, VOC, benzene, HCl, and napthalene hourly and rolling 12-month emission limits. With respect to CO, the Department states—without any support—that biennial stack testing is sufficient for the hourly and 12-month rolling emission limits, the emissions inventory indicates that CO emissions are lower than the potential to emit, that requiring additional monitoring to assure continuous compliance with the emission limits would require an enforcement order, and that the Department reserves the right to require additional testing or monitoring sufficient to assure compliance. Response to Comments, Comment No. 124 at 45-46.

The Department included a biennial stack test requirement for CO in the Renewal Permit in response to Petitioners' Comments. However, this response does not sufficiently address the deficiencies identified by the Petitioners. First, the Department makes no attempt to explain how biennial stack testing will assure compliance with hourly and rolling 12-month emission limits. 40 C.F.R. § 70.7(a)(5). The fact that the Department believes that coke oven battery C combustion stack CO emissions are lower than the potential to emit is irrelevant. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time. 40 C.F.R. § 70.6(a)(3)(i)(B). Second, the Department's statement that it may require additional testing in the future is also not sufficient. Under Title V, testing, monitoring, and reporting requirements must be included in the Title V permit itself. Valero Order at 23. Finally, the Department suggests that requiring continuous emissions monitoring may only be accomplished through an enforcement order. *See* Response to Comments, Comment No. 124 at 46. This is simply inaccurate. *See*, *e.g.*, *Sierra Club v. EPA*, 536 F.3d 673, 677-78 (D.C. Cir.

2008). In fact, the Department has an affirmative obligation to supplement the Renewal Permit with testing and monitoring requirements that assure continuous compliance with emission limits. *Id*.

Similarly, the Department included a biennial stack testing requirement for the VOC emission limit in the Renewal Permit in response to Petitioners' Comments. Renewal Permit, Condition V.I.2.i. However, this does not cure the deficiency, and the Department's response regarding VOC emissions is similar and states only that biennial stack tests are "reasonable" based on "potential emissions and historic emissions inventory submissions . . . and the Department reserves the right to require additional emissions testing or monitoring sufficient to assure compliance with the terms and conditions of the permit." Response to Comment, Comment No. 125, at 47. For the reasons cited above with respect to CO emission limits, the Department has not met its obligations under Title V.

Finally, in response to Petitioners' comments regarding the hourly and 12-month rolling emission limits of benzene, HCl, and naphthalene, the Department stated that they removed benzene, hexane, hydrochloric acid, ammonia, and hydrogen sulfide emissions for Coke Oven Battery C and Coke Oven Battery 20 combustion stacks. Response to Comments, Comment No. 128 at 49. However, the benzene, HCl, and napthalene limits remain in the Renewal Permit for the Coke Oven Battery C combustion stack. Renewal Permit, Condition V.I.1. Further, the Department did not respond at all to Petitioners' comments that there are no monitoring, testing, recordkeeping, or reporting requirements for these emissions limits. For these reasons, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, reporting, and recordkeeping requirements for hourly and 12-month rolling CO, VOC, benzene, HCl, and napthalene emission limits for the Coke Oven Battery C combustion stack.

C. The Renewal Permit Does Not Include Testing, Monitoring, or Reporting Requirements that Ensure Compliance with the Emission Limits for CO from the Coke Oven Battery Combustion Stacks and Boilers

# 1. Specific Grounds for Objection, Including Citation to Permit Term

The Renewal Permit is deficient because it does not include sufficient testing, monitoring, or reporting requirements to assure continuous compliance with the hourly and 12-month rolling emissions limits for CO from the coke oven battery combustion stacks and boilers. Renewal Permit, Conditions V.A.1.u, w, and y, C.1.v, x, and z, E.1.bb and cc, G.1.v, GG.1.h, HH.1.i, II.1.g, and JJ.1.h. According to ACHD, these requirements are based on a RACT analysis conducted in accordance with Article XXI §2103.12.a.2.B, which is part of ACHD's EPA-approved SIP. *See* Response to Comments, Comment No. 2 at 3; 69 FR 52831 (Mar. 31, 1998).

The Renewal Permit requires only that CO testing be conducted at least once every two years from the coke oven combustion stacks and boilers 1, 2, R1, and R2 while requiring CO stack testing to be conducted from boilers T1 and T2 once every four years. Renewal Permit at Condition V.A.2.e; E.2.d; GG.2.c; HH.2.d; II.2.a; and JJ.2.b. 14 The Renewal Permit identifies no other testing or monitoring requirements. *See id.* Neither the Renewal Permit, Technical Support Document, or Response to Comments provide a reasoned explanation as to how biennial and once every four-years stack tests assure continuous compliance with the hourly and 12-month rolling emission limits for CO from these sources.

#### 2. Applicable Requirement or Part 70 Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R.

<sup>&</sup>lt;sup>14</sup> There also appears to be an error with the lettering in Renewal Permit Condition V.JJ.2 as there are two paragraph a's.

§ 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements" as well as any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I of the CAA. 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

## 3. Inadequacy of the Permit Term

Biennial and four-year stack tests for CO do not assure compliance with CO emission limits that must be met on an hourly and rolling 12-month basis. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 CFR §70.6(a)(3)(i)(B); Sierra Club, 536 F.3d at 676-77. As noted previously above, EPA has concluded that even annual stack testing alone is insufficient to assure compliance with an hourly limit. See discussion supra Section IV.A.3. In this case, biennial and four-year stack tests are clearly not sufficient to assure continuous compliance with short-term emission limits that must be met on an hourly and 12-month rolling basis. Id.

The Department has not identified any other testing or monitoring requirement for these emission limits in the Renewal Permit or provided a clear and documented rationale for how biennial or four-year stack tests assure compliance with the short-term emission limits in the Renewal Permit or Technical Support Document as required by 40 C.F.R. § 70.7(a)(5).

#### 4. Issue Raised in Public Comment

Petitioners expressly raised these issues in comment 12.b of their Comments, which stated the same points above. Ex. 2 at 77-79. EPA also commented that the testing and monitoring requirements for these emission limits are inadequate and recommended that the Department revise the permit to include annual stack testing and "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with permit limits." Response to Comment, Comment No. 138 at 55; Ex. 5.

# 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comment does not explain how the Renewal Permit assures compliance with hourly and rolling 12-month CO emission limits for the coke oven battery combustion stacks and boilers. In response to Petitioners' Comment, the Department restated the same irrelevant points that it made when responding to Petitioners' comments on inadequate monitoring for other emission limits, including a general statement that the Department considers the CO testing frequency specified by the permit to be sufficient, that "[t]he 2021 emissions inventory shows the reported batteries CO emissions is significantly lower than the potential to emit", that requiring additional monitoring may only be done through an enforcement order, and that the Department may require additional testing or monitoring in the future if it determines it is necessary. Response to Comments, Comment No. 124 at 46.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comment. First, the Department makes no attempt to explain how biennial stack testing will assure compliance with hourly and rolling 12-month emission limits. 40 C.F.R. § 70.7(a)(5). The fact that the Department believes emissions from this source are lower than the potential to emit is irrelevant. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time. 40 C.F.R. § 70.6(a)(3)(i)(B).

Second, the Department's statement that it may require additional testing in the future is also not sufficient. Under Title V, testing, monitoring, and reporting requirements must be included in the Title V permit itself. Valero Order at 23. Finally, the Department suggests that requiring continuous emissions monitoring may only be accomplished through an enforcement order. *See* Response to Comments, Comment No. 124 at 46. This is simply inaccurate. *See*, *e.g.*, *Sierra Club v. EPA*, 536 F.3d 673, 677-78 (D.C. Cir. 2008). In fact, the Department has an affirmative obligation to supplement the Renewal Permit with testing and monitoring requirements that assure continuous compliance with emission limits. *Id.* In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, and recordkeeping requirements for hourly and 12-month rolling CO emission limits for the coke oven battery combustion stacks and boilers.

- D. The Renewal Permit Does Not Include Sufficient Testing, Monitoring, or Reporting Requirements to Assure Compliance with the Emission Limits for VOCs from the Coke Oven Battery Combustion Stacks and Boilers
  - 1. Specific Grounds for Objection, Including Citation to Permit Term

The Renewal Permit is deficient because it does not include sufficient testing, monitoring, or reporting requirements to assure continuous compliance with the hourly and 12-month rolling emissions limits for VOCs from the coke oven battery combustion stacks and the boilers. Renewal Permit, Conditions V.A.1.u, w, and y, V.C.1.v, x, and z, V.E.1.bb and cc, V.G.1.v, V.GG.1.h, V.HH.1.i, V.II.1.g, and V.JJ.1.h. According to ACHD, these requirements are based on a RACT analysis that they conducted in accordance with Article XXI \$2103.12.a.2.B, which is part of ACHD's EPA-approved SIP. *See* Response to Comments, Comment No. 2 at 3; 69 FR 52831 (Mar. 31, 1998).

The Renewal Permit requires only that stack testing be performed for VOCs from each of the coke oven battery combustion stacks at least once every two years. Renewal Permit, Conditions V.A.2.c; C.2.d; E.2.d; and G.2.d. The Renewal Permit includes no other monitoring requirements of VOC emissions from the coke oven battery combustion stacks or any testing or monitoring at all for VOCs from the boilers. Id. at Conditions V.A, V.C, V.E, and V.G. Neither the Renewal Permit, Technical Support Document, or Response to Comments provide a reasoned explanation as to how any of these testing and monitoring requirements assure compliance with the hourly and 12-month rolling emission limits of VOCs from these sources.

## 2. Applicable Requirement or Part 70 Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements" as well as any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I of the CAA. 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

#### 3. Inadequacy of the Permit Term

Biennial stack tests for VOCs do not assure continuous compliance with VOC emission limits that must be met on an hourly and rolling 12-month basis, and the absence of any testing, monitoring, or reporting requirements for VOCs from the boilers clearly does not assure

compliance with emission limits. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 CFR §70.6(a)(3)(i)(B); Sierra Club, 536 F.3d at 676-77. As noted previously, EPA has concluded that even annual stack testing alone is insufficient to assure compliance with an hourly limit. See discussion supra Section IV.A.3. In this case, biennial stack tests—much less no requirements at all—are clearly not sufficient to assure continuous compliance with short-term emission limits that must be met on an hourly and 12-month rolling basis. Id.

The Department has identified no other testing or monitoring requirements in addition to the stack tests for the coke oven battery combustion stacks and has failed to provide a clear and documented rationale for how biennial stack testing or no testing or monitoring whatsoever assures continuous compliance with short-term emission limits in the Renewal Permit or Technical Support Document as required by 40 C.F.R. § 70.7(a)(5). Renewal Permit at Conditions V.A, V.C, V.E, and V.G.; *See* Technical Support Document at 33-34.

#### 4. Issue Raised in Public Comment

Petitioners expressly raised this issue in comment 12.c of their Comments, which stated the same points above. Ex. 2 at 79-80. EPA also commented that the testing and monitoring requirements for these emission limits are inadequate and recommended that the Department revise the permit to include annual stack testing and "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with permit limits." Response to Comment, Comment No. 138 at 55; Ex. 5.

#### 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comment does not explain how the Renewal Permit assures compliance with hourly and rolling 12-month VOC emission limits for the coke

oven battery combustion stacks and boilers. In response to Petitioners' comments, the Department added biennial stack testing requirements for VOCs from the combustion stacks of coke oven batteries 1-3, 13-15, 19-20, and B. Renewal Permit, Conditions V.A.2.c; C.2.d; E.2.d; and G.2.d. However, this is not sufficient under Title V, and the Department states many of the same irrelevant points made when responding to Petitioners' comments on inadequate monitoring for other pollutants, including that VOC emissions for the coke oven battery combustion stacks were based on 2015 stack test results and AP 42 emission factors, that "stack testing frequency is reasonable based on the potential emissions and historic emissions inventory", that the Department reserves the right to require additional testing and monitoring, requiring additional monitoring may only be done through an enforcement order, and that the Department reserves the right to require additional testing and monitoring in the future. Response to Comments, Comment No. 125 at 47. Concerningly, the Department actually removed requirements to conduct stack testing for VOCs emissions for two of the boilers. Id. The Department suggests no testing or monitoring for VOC emissions from the boilers is necessary and that the Department may require additional testing or monitoring requirements in the future if necessary. Id.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comment. First, the Department makes no attempt to explain how biennial stack testing will assure continuous compliance with hourly and rolling 12-month emission limits. 40 C.F.R. § 70.7(a)(5). The fact that the Department believes VOC emissions from the coke oven batteries and boilers are lower than the potential to emit or are not "significant" is irrelevant. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time. 40 C.F.R. § 70.6(a)(3)(i)(B). Second, the Department's

statement that it may require additional testing in the future is also not sufficient. Under Title V, testing, monitoring, and reporting requirements must be included in the Title V permit itself.

Valero Order at 23. Third, the Department suggests that requiring continuous emissions monitoring may only be accomplished through an enforcement order. *See* Response to Comments, Comment No. 125 at 47. As noted previously, this is simply inaccurate. *See*, *e.g.*, *Sierra Club v. EPA*, 536 F.3d 673, 677-78 (D.C. Cir. 2008). In fact, the Department has an affirmative obligation to supplement the Renewal Permit with testing and monitoring requirements that assure continuous compliance with emission limits. *Id*.

Finally, the Department's removal of stack testing requirements for VOC emissions from two of the boilers and failure to include any testing or monitoring requirements for the boilers in the Renewal Permit is inconsistent with the Clean Air Act for the reasons cited above. In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, and recordkeeping requirements for hourly and 12-month rolling VOC emission limits for the battery combustion stacks and boilers.

- E. The Renewal Permit Does Not Include Sufficient Testing, Monitoring, or Reporting Requirements to Ensure Compliance with the NOx Emissions Limits for Most of the Coke Oven Battery Combustion Stacks and Boilers
  - 1. Specific Grounds for Objection, Including Permit Term

The Renewal Permit is deficient because it does not include sufficient testing, monitoring, or reporting requirements to assure continuous compliance with hourly and rolling 12-month emissions limits for NOx from all coke oven battery combustion stacks and boilers except for the Coke Oven Battery C combustion stack and Boilers 001 and 002. Renewal Permit, Conditions V.A.1.u, w, and y; V.C.1.v, x, and z; V.E.1.bb and cc; V.G.1.v; V.GG.1.h; V.HH.1.i; V.II.1.g; and V.JJ.1.h. According to ACHD, these limits are based on a RACT analysis

conducted in accordance with Article XXI §2103.12.a.2.B, which is part of ACHD's EPA-approved SIP. *See* Response to Comments, Comment No. 2 at 3; 69 FR 52831 (Mar. 31, 1998). The Department also cites to RACT IP 0052-I020b as the source of the NOx limits for the boilers. Technical Support Document at 28-30.

The Renewal Permit requires only that the permittee conduct stack tests for NOx from the coke oven battery combustion stacks and boilers, excluding Coke Oven Battery C combustion stack and Boilers 001 and 002, at least once every two years. Renewal Permit, Conditions V.A.2.d; V.C.2.d; E.2.d; G.2.d; V.II.2.a and JJ.2.a. The Renewal Permit does not include any other monitoring requirements for NOx from these coke oven battery combustion stacks and boilers. Id., Conditions V.A., V.C, V.E, V.G, V.II, and V.JJ. Neither the Renewal Permit, Technical Support Document, or Response to Comments provide a reasoned explanation as to how biennial stack tests assure continuous compliance with the hourly and 12-month rolling emission limits of NOx from these sources.

## 2. Applicable Requirements or Part 70 Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements" as well as any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I of the CAA. 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. §

70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

# 3. Inadequacy of Permit Term

Biennial stack tests for NOx do not assure compliance with NOx emission limits that must be met on an hourly and rolling 12-month basis. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 CFR §70.6(a)(3)(i)(B); *Sierra Club*, 536 F.3d at 676-77. As noted above, EPA has concluded that annual stack testing alone is insufficient to assure compliance with an hourly limit. *See* discussion *supra* Section IV.A.3. In this case, biennial stack tests—much less no requirements at all—are clearly not sufficient to assure continuous compliance with short-term emission limits that must be met on an hourly and 12-month rolling basis. *Id*.

The Department has identified no other testing or monitoring requirements for NOx from these coke oven battery combustion stacks and boilers. Renewal Permit, Conditions V.A, V.C, V.E, V.G. V.GG, V.HH, V.II, and V.JJ. Notably, the Department has required the use of NOx CEMS for Coke Oven Battery C combustion stack and Boilers 001 and 002. Renewal Permit, Conditions V.GG.3.a; V.HH.3.a.

The Renewal Permit and Technical Review Memo do not include a clear and documented rationale as to how biennial stack tests for all other coke oven battery combustion stacks and boilers assure continuous compliance with short-term emission limits as required by 40 C.F.R. § 70.7(a)(5). Renewal Permit, Conditions V.A.2.d; V.C.2.d; E.2.d; G.2.d; V.II.2.a and JJ.2.a.; Technical Support Document, at 33-34.

#### 4. Issues Raised in Public Comments

Petitioners expressly raised these issues in comment 12.d of their Comments, which stated the same points above. Ex. 2 at 80-81. EPA also commented that the testing and monitoring requirements for these emission limits are inadequate and recommended that the Department revise the permit to include annual stack testing and "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with permit limits." Response to Comment, Comment No. 138 at 55; Ex. 5.

# 5. Analysis of ACHD's Response

With the exception of Boilers 001 and 002, the Department's response to Petitioners'

Comment does not explain how the Renewal Permit assures compliance with hourly and rolling

12-month NOx emission limits for the coke oven battery combustion stacks and boilers. The

Department's response to Petitioners' Comments includes general statements that biennial stack

tests for these sources is sufficient, the emission limits for the coke oven battery combustion

stacks are based on stack test results and maximum coke oven gas and natural gas usage, and the

Department reserves the right to require additional testing and monitoring. Response to

Comments, Comment No. 126 at 48.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comment. First, the Department makes no attempt to explain how biennial stack testing will assure compliance with the hourly and rolling 12-month emission limits that the coke oven combustion stacks and boilers must meet. 40 C.F.R. § 70.7(a)(5). The fact that the limits were based on prior stack test results and conservative assumptions is irrelevant as to whether the Renewal Permit contains sufficient testing and monitoring. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time. 40 C.F.R. § 70.6(a)(3)(i)(B). Second, the Department's statement that it may require additional

testing or monitoring in the future is also insufficient. Under Title V, testing, monitoring, and reporting requirements must be included in the Title V permit itself. Valero Order at 23. In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, and recordkeeping requirements for hourly and 12-month rolling NOx emission limits for the coke oven battery combustion stacks and boilers except for Coke Oven Battery Combustion Stack C and Boilers 001 and 002.

- F. The Renewal Permit Does Not Include Sufficient Testing, Monitoring, or Reporting to Ensure Compliance with the SO2 Emission Limits for the Coke Oven Battery Combustion Stacks and Boilers During Periods of Malfunction, Breakdown, and Repair
  - 1. Specific Grounds for Objection, Including Permit Term

The Renewal Permit is deficient because it does not include sufficient testing, monitoring, or reporting requirements to ensure compliance with multiple SO2 emission limits for the coke oven battery combustion stacks and boilers during periods of malfunction, breakdown, and repair. Specifically, each of the boilers is subject to a 30-day rolling average, supplementary 24-hr limit, and a rolling 12-month SO2 limit. Renewal Permit, Condition IV.33.g. Similarly, all coke oven batteries are subject to 30-day rolling average, supplementary 24-hr, and annual SO2 limits. Id. Conditions V.A.1.v, x, and z; V.C.1.w, y, and aa; V.E.1.dd; V.G.1.w; and V.I.1.ee. Each of these limits is derived from SO2 SIP IP 005-I017. Id., Condition IV.33.g.

For each of these emission limits, the Renewal Permit states that US Steel must "continuously" monitor and record the H2S grain loading and fuel flow rate in order to calculate sulfur dioxide emissions except for periods of malfunction, breakdown, and repair. Id. at Condition IV.33.b-c. "Continuous" means at least once every 15 minutes. Id. The Renewal Permit requires that during periods of monitor malfunction, breakdown, and repair, US Steel

must propose a procedure for measuring the H2S content of the gas for the Department's approval. Id. at Condition IV.33.e. However, this procedure is not incorporated into the Renewal Permit and there are no other SO2 monitoring or testing requirements identified for startup, shutdown, and malfunction periods. Id., Condition IV.33. Neither the Renewal Permit, Technical Support Document, or Response to Comments provide a reasoned explanation as to how the Renewal Permit assures compliance with SO2 limits during periods of startup, shutdown, and malfunction.

# 2. Applicable Requirements or Part 70 Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements" as well as any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I of the CAA. 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

# 3. Inadequacy of Permit Term

The absence of testing and monitoring requirements during periods of startup, shutdown, and malfunction does not assure continuous compliance with short-term and other SO2 emission limits for the coke oven battery combustion stacks and boilers. Under Title V, the permit itself must include all applicable requirements, including those requirements necessary to assure

continuous compliance with emission limits. Valero Order at 23. EPA has recently determined that plans that are necessary to implement requirements under the Clean Air Act are "applicable requirements" that must be included in a Title V permit and made available for public review. Valero Order at 25-26 (finding that the operational requirements in plans required pursuant to NSPS subpart Ja and NESHAP subpart CC are applicable requirements and must be included in the Title V Permit). Similarly, the procedures that U.S. Steel is required to develop to assure continuous compliance with SO2 emission limits during periods of malfunction, breakdown, and repair are "applicable requirements" and must be included in the Title V Permit. *Id*.

#### 4. Issues Raised in Public Comments

Petitioners expressly raised these issues in comment 12.i of their Comments, which stated the same points as above. Ex. 2 at 85-86.

# 5. Analysis of ACHD's Responses

The Department makes no effort to explain how the Renewal Permit assures continuous compliance with multiple SO2 emission limits for the coke oven battery combustion stacks and the boilers during periods of malfunction, breakdown, and repair. In just two sentences, the Department states only that these SO2 limits are derived from SIP Installation Permit 0052-I017 and makes a general statement that the testing and monitoring requirements are sufficient to assure compliance with the permit conditions. Response to Comments, Comment No. 131 at 51.

This response is not consistent with the Clean Air Act or responsive to Petitioners' Comments. As noted previously, Title V operating permits must include testing, monitoring, reporting, and recordkeeping requirements to assure compliance with all applicable requirements and the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.6(a) and (c)(1). The Renewal Permit is deficient because it does

not assure compliance with multiple SO2 emission limits for coke oven battery combustion stacks and boilers during periods of malfunctions, breakdowns, and repairs.

- G. The Renewal Permit Does Not Include Sufficient Monitoring or Testing Requirements that Assure Compliance with the Emissions Limits for PM, SO2, NOx, or VOCs for the Quench Towers
  - 1. Specific Grounds for Objection, Including Citation to Permit Term

The Renewal Permit is deficient because it does not include sufficient testing, monitoring, or reporting requirements to assure continuous compliance with hourly and rolling 12-month emissions limits for PM, PM10, PM2.5, PM-condensable 15, SO2, NOx, or VOCs for the quench towers. Renewal Permit, Conditions V.K.1.d and e; L.1.i; N.1.d and e; and O.1.e. According to ACHD, the PM, PM10, PM2.5, PM-condensable, NOx, and VOC limits are based on a RACT determination made in accordance with Article XXI §2103.12.a.2.B, which is part of ACHD's EPA-approved SIP. *See* Response Document, Comment No. 2 at 3; 69 FR 52831 (Mar. 31, 1998). The SO2 limits are based on SO2 SIP IP 005-I017. Renewal Permit, Conditions V.K.1.d and e; L.1.i; N.1.d and e; and O.1.e.

The Renewal Permit requires only that PM (PM10 and PM2.5), SO2, and VOCs stack testing be performed on the quench tower outlets at least once every two years. Renewal Permit, Conditions V.K.2.e; L.2.e; M.2.e; and N.2.e; and O.2.e. The Renewal Permit does not identify any other testing or monitoring requirements for the PM, PM10, PM2.5, NOx, VOCs, and SO2 emission limits. Id. Neither the Renewal Permit, Technical Review Memo, or Response to Comments provide a reasoned explanation as to how biennial stack testing—and no testing or monitoring at all for NOx or PM-condensable—assures continuous compliance with hourly and rolling 12-month emission limits.

<sup>&</sup>lt;sup>15</sup> Quench towers 5A, 7A, and C Battery quench tower are not subject to PM-condensable limits.

## 2. Applicable Requirements or Part 70 Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements" as well as any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I of the CAA. 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

## 3. Inadequacy of the Permit Term

Biennial stack tests for PM, PM2.5, PM10, VOCs, and SO2—and no testing or monitoring at all for NOx or PM-condensable—do not assure continuous compliance with emission limits that must be met on an hourly and rolling 12-month basis. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 CFR §70.6(a)(3)(i)(B); Sierra Club, 536 F.3d at 676-77. As noted previously, EPA has concluded that even annual stack testing alone is insufficient to assure compliance with an hourly limit. See discussion supra Section IV.A.3. In this case, biennial stack tests—much less no requirements at all for NOx and PM-condensable—are clearly not sufficient to assure continuous compliance with short-term emission limits that must be met on an hourly and 12-month rolling basis. Id. There are no other testing or monitoring requirements identified in the Renewal Permit for these emission limits, and the Department has failed to provide a clear

and documented rationale in the Renewal Permit or Technical Support Document that describes how biennial stack tests assure continuous compliance with short-term emission limits for the quench towers as required by 40 C.F.R. § 70.7(a)(5).

#### 4. Issues Raised in Public Comments

Petitioners expressly raised these issues in comment 12.1 of their Comments, which stated the same points as above. Ex. 2 at 89-92. Petitioners inadvertently left out a citation to the specific limits established for Quench Tower C in the Comments. However, Petitioners' Comments applied to all quench towers, and the deficiencies related to testing and monitoring for the Quench Tower C emission limits are the same issues for all other quench towers. Id.

# 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comment does not explain how the Renewal Permit assures compliance with hourly and 12-month rolling emission limits for PM, PM10, PM2.5, PM-condensable, SO2, NOx, and VOCs for the quench towers. In response to Petitioners' Comments, the Department did add biennial testing for PM, PM10, PM2.5, SO2, and VOCs for each quench tower in the Renewal Permit, and state that the limits were established by stack test results, and that the limits are lower than major source thresholds. Response to Comments, Comment No. 134 at 54.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comments. The response does not explain how biennial testing for PM, SO2, and VOCs—and no testing or monitoring at all for NOx and PM-condensable—assures continuous compliance with hourly and rolling 12-month emission limits for these pollutants. 40 C.F.R. § 70.7(a)(5). The fact that emissions from each of these sources are lower than the major source threshold is irrelevant for purposes of determining whether the Renewal Permit includes

sufficient testing, monitoring, and recordkeeping requirements. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time. 40 C.F.R. § 70.6(a)(3)(i)(B). In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, and recordkeeping requirements for hourly and rolling 12-month PM, PM10, PM2.5, PM-condensable, NOx, VOC, and SO2 emission limits for the quench towers.

- I. The Renewal Permit Does Not Include Sufficient Testing, Monitoring, or Reporting Requirements that Assure Compliance with Applicable Requirements for the Coke Oven Battery Bypass/Bleeder Stack Flare Systems
  - 1. Specific Grounds for Objection, Including Citation to Permit Term

The Renewal Permit is deficient because it fails to establish testing, monitoring, or reporting requirements that assure compliance with requirements to install, operate, and maintain a bypass/bleeder stack flare systems for each coke oven battery that achieves at least 98% destruction efficiency of coke oven emissions, <sup>16</sup> controls 120% of the normal gas flow generated by each battery, and is designed for a net heating value of 240 Btu per standard cubic feet (Btu/scf). Renewal Permit, Conditions V.A.1.a-d; V.C.1.a-d; V.E.1.a-d; V.G.1.a-d; V.I.1.o-r; 40 C.F.R. § 63.307. The only testing and monitoring requirements applicable to the bypass/bleeder stack flare systems are Method 22 testing every two hours

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<sup>&</sup>lt;sup>16</sup> The Renewal Permit, and the federal rules incorporated by reference, state that as an alternative to the installation, operation, and maintenance of a flare system that meets the specific flow and heat requirements, an owner or operator may petition the Administrator for approval of an alternative system that achieves 98% destruction efficiency of coke oven emissions. *See, e.g.*, Condition V.A.1(c); 40 C.F.R. § 63.307(d). Further, when EPA promulgated 40 C.F.R. § 63.307, EPA stated that these "flare systems must be designed to meet the EPA flare specifications in 40 C.F.R. § 60.18 (New Source Performance Standards)", with certain modifications to take into account the special characteristics of the gas stream" like the specific net heating value. National Emission Standards for Hazardous Air Pollutants for Source Categories and for Coke Oven Batteries, 58 FR 57,898, 57,902 (Oct. 27, 1993). EPA has repeatedly stated that flares operating in accordance with the specifications found in 40 C.F.R. § 60.18 destroy VOCs with a destruction efficiency of 98% or greater. *See, e.g.*, Standards of Performance for New Stationary Sources: General Provisions; National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions, 63 FR 24,436, 24,437 (May 4, 1998). Thus, the Clairton Plant's bypass/bleeder stack flare systems must achieve at least a 98% destruction efficiency of coke oven emissions. *Id.* 

to assure compliance with the prohibition on most visible emissions and the installation of a thermocouple or other equivalent device to ensure a continuously operable pilot frame is present at all times. Renewal Permit, Conditions V.A.1.e, V.C.1.e, V.E.1.e, V.G.1.e, and V.I.1.p. Neither the Renewal Permit, Technical Support Document, or Response to Comments assure continuous compliance with the applicable requirements for the bypass/bleeder stack flare systems.

# 2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements." 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

## 3. Inadequacy of the Permit Term

The Renewal Permit does not contain any testing or monitoring requirements that assure continuous compliance with the 98% destruction efficiency, flow, and net heating value requirements for the bypass/bleeder stack flares, and the Department has provided no rationale as to how the Renewal Permit assures continuous compliance. The Department has confirmed that these flares are open flares, and we assume that the flares are steam- or air-assisted based on the net heating value requirement identified in the

Renewal Permit. Response to Comments, Comment No. 127 at 49; *See* 40 C.F.R. § 63.307(b)(1)(specifying a net heating value of 240 Btu/scf for steam- or air-assisted flares).

Petitioners' Comments provided information to show that the presence of a pilot light and Method 22 observations are not enough to assure that the flares will continuously achieve compliance with applicable limits and asked the Department to establish additional monitoring requirements addressing operational and environmental conditions known to impair the performance of industrial flares. Petitioners' Comments, Comment 12.e at 82-83. EPA has directed a state agency in at least one recent order on a Title V petition to impose more stringent monitoring and operating requirements on flares to assure that they are achieving compliance with a 98% destruction efficiency for VOCs and benzene. See In the Matter of BP Amoco Chemical Company Texas City Chemical Plant Galveston County, Texas, Order on Petition No. VI-2017-6 (Jul. 20, 2021). The permit in question in that order required that flares achieve a 98% destruction efficiency rate for VOCs and benzene but lacked sufficient monitoring methods to assure compliance with this operational limit and the emissions caps on VOCs and benzene. *Id.* at 19. The petitioners presented evidence that additional monitoring requirements were necessary to address problems that are known to reduce destruction efficiency, like over-steaming, excess aeration, high winds, and flame liftoff. *Id.* at 20. EPA concluded:

[I]t will be necessary to monitor the flow and composition of assist steam and any supplemental gasses (e.g., natural gas) combusted by the flare, in order to calculate the NHVcz, before presuming that BP Amoco's flares achieve a 98 percent VOC destruction efficiency. To this end, TCEQ should consider adding permit terms mirroring the monitoring and calculation methodologies in the EPA's refinery regulations—specifically, 40 C.F.R. § 63.670(i) and (m).

*Id.* at 25. EPA relied on extensive EPA studies and the finalized petroleum refinery NESHAP to conclude that a 98% destruction efficiency rate is rarely achievable and require supplemental monitoring. *Id.* at 20-24.

Similarly, the bypass/bleeder stack flares at the Clairton Plant are either steam- or air-assisted and are used "as VOC control and a safety device." Response to Comments, Comment No. 127 at 49. Here, the requirement to install a thermocouple or other equivalent device and conduct Method 22 observations every two hours similarly does not assure continuous compliance with the 98% destruction efficiency, flow, and net heating value requirements, and the Department has identified no other testing or monitoring requirements applicable to the bypass/bleeder stack flare systems. Renewal Permit, Conditions V.A, V.C, V.E, V.G, and V.I; Technical Support Document at 33; Response to Comments, Comment No. 127 at 48-49. In order to assure continuous compliance with these requirements, the Department must require the facility to either continuously measure emissions during flare events or to continuously monitor the flare parameters (i.e. flow and net heating value) required to assure the standard is met. 40 C.F.R. § 70.6(c)(1). Even if EPA disagrees that the flares must achieve 98% destruction efficiency of coke oven emissions, the Renewal Permit must still contain sufficient testing and monitoring to assure continuous compliance with the requirement to control 120% of the normal gas flow generated by each battery and the net heating value of 240 Btu/scf, which it does not do.

#### 4. Issue Raised in Public Comment

Petitioners expressly raised these issues in Comment 12.e of their Comments, which generally states the same points above. Ex. 2 at 81-83.

# 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comment does not explain how the Renewal Permit assures compliance with the 98% destruction efficiency of coke oven emissions, flow, and net heating requirements for the bypass/bleeder stack flare systems. In response to Petitioner's Comments, the Department states that the bypass/bleeder stack flares operate on an emergency basis, "primarily function[] as VOC control and a safety device", "operate with a VOC destruction efficiency of 99 percent", and are distinguishable from flares at petroleum refineries. Response to Comments, Comment No. 127 at 48-49.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comment. None of the statements by the Department have any bearing as to how the Renewal Permit assures continuous compliance with the 98% destruction efficiency, flow, and net heating requirements for the flares. *See id.* at 49. For example, the Department concedes these flares are used to control VOCs and claims—without identifying any supporting evidence—that these flares achieve 99% destruction efficiency but then fails to identify any provision of the Renewal Permit that assures the flares actually achieve this destruction rate efficiency. *Id.* The fact that these flares operate on an emergency basis alone is also not relevant as to whether the Renewal Permit includes adequate testing and monitoring requirements. In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, and recordkeeping requirements to assure continuous compliance with applicable requirements for the bypass/bleeder stack flares.

J. The Renewal Permit Does Not Include Sufficient Testing, Monitoring, or Reporting Requirements that Assure Compliance with Applicable Requirements for the Ammonia Flare

## 1. Specific Grounds for Objection, Including Citation to the Permit Term

The Renewal Permit is deficient because it fails to establish testing, monitoring, and reporting requirements for the Ammonia Flare that assure compliance with requirements to achieve at least 98% destruction efficiency for VOCs; ensure a minimum residence time of .50 seconds at all times when emissions from the wastewater surge tanks and/or anhydrous ammonia loading operations are exhausted to the flare; and meet hourly and 12-month rolling emissions limits for SO2, NOx, CO, VOCs, and ammonia. Renewal Permit, Conditions V.KK.1.a, c, and d. These limits are derived from Installation Permit 0052-I002b. Id.

The Renewal Permit only requires emissions testing from this source to be performed once every 5 years to determine the VOC destruction efficiency of the flare and the mass emission rate of NOx, SO2, and ammonia, as well as a requirement to continuously monitor and record the temperature of the flare with a tolerance +/- 10 degrees Fahrenheit when the equipment is in operation. Id. Conditions V.KK.2.a and KK.3.b. Neither the Renewal Permit, Technical Support Document, or Response to Comments provide a reasoned explanation as to how emission tests once every five years assure continuous compliance with the operational requirements that must be met at all times and short-term emission limits applicable to the Ammonia Flare.

## 2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable"

requirements." 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

# 3. Inadequacy of the Permit Term

Testing once every five years does not assure continuous compliance with a minimum destruction efficiency of 98%, the minimum residence time of 0.50 seconds, or the VOC, NOx, SO2, CO, and ammonia emission limits that must be met on an hourly and rolling 12-month basis. Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 40 C.F.R. § 70.6(a)(3)(i)(B); Sierra Club, 536 F.3d at 676-77. As noted previously, EPA has concluded that even annual stack testing alone is insufficient to assure compliance with an hourly limit. See discussion *supra* Section IV.A.3. In this case, testing once every five years is clearly not sufficient to assure continuous compliance with operational limits that must be met at all times or with short-term emission limits that must be met on an hourly and 12-month rolling basis. *Id*.

Although the Renewal Permit includes a requirement to continuously monitor the temperature of the Ammonia Flare while it is in operation, temperature is only one parameter that impacts the destruction efficiency of flares. The Renewal Permit does not contain any other testing or monitoring requirements that assure continuous compliance with the 98% destruction efficiency, residence time, and emissions limit requirements for the Ammonia Flare, and the Department has provided no rationale as to how the Renewal Permit assures continuous compliance with these applicable requirements.

Petitioners' Comments provided information to show that the 5-year testing was insufficient to assure that the flare will achieve continuous compliance with operational limits and short-term emission limits and asked the Department to establish additional monitoring requirements addressing operational and environmental conditions known to impair the performance of industrial flares. Ex. 2, Comment 12.h at 84-85. As noted above, EPA has directed a state agency in at least one recent order on a Title V petition to impose more stringent monitoring and operating requirements on flares to assure that they are achieving compliance with a 98% destruction efficiency for VOCs and benzene. *See* discussion *supra* Section IV.I.3.

Similarly, the continuous monitoring of the flare temperature alone or the requirement to test emissions from the flare once every 5-years does not assure continuous compliance with the 98% destruction efficiency, the minimum residence time requirement, or the hourly and rolling 12-month emissions limits for VOCs, NOx, SO2, CO, and ammonia. Renewal Permit, Condition V.KK.2.a. The Department has also not identified any other monitoring requirements applicable to the Ammonia Flare. Id. at V.KK; Technical Support Document; Response to Comments, Comment No. 130 at 50-51. In order to assure continuous compliance with these requirements, the Department must require the facility to continuously measure emissions during flare events or continuously monitor flare parameters required to assure the flare achieves 98% destruction of VOCs, the minimum residence time, and complies with short-term emission limits. 40 C.F.R. § 70.6(c)(1).

#### 4. Issue Raised in Public Comment

Petitioners expressly raised these issues in Comment 12.h of their Comments, which generally states the same points above. Ex. 2 at 84-85.

## 5. Analysis of ACHD's Response

The Department's response to Petitioners' Comment does not explain how the Renewal Permit assures continuous compliance with the 98% destruction efficiency of wastewater tanks and/or anhydrous ammonia loading station emissions, combustion zone residence time, and hourly and rolling 12-month emissions limits. In response to Petitioner's Comments, the Department states that the flare is restricted to 2,920 hours of operation per year "unlike the petroleum refinery flares that operate continuously" and that as a result NESHAP 40 C.F.R. §63.670 does not apply. Response to Comments, Comment No. 130 at 51. The Department also summarily states that the existing testing and monitoring requirements are sufficient and that they reserve the right to require additional testing or monitoring sufficient to assure compliance with the Renewal Permit's terms. Id.

The Department's response is not consistent with the Clean Air Act or responsive to Petitioners' Comment. None of the statements by the Department have any bearing as to how the Renewal Permit assures continuous compliance with the minimum 98% destruction efficiency and residence time requirements or the emission limits for the flare. Id. First, the fact that these flares operate sporadically is not relevant as to whether the Renewal Permit includes adequate testing and monitoring requirements that apply to the flare when the flare is operating. Title V requires that the frequency of testing and monitoring must be reasonably related to the emission limit's averaging time. 40 C.F.R. § 70.6(a)(3)(i)(B). Second, the Department makes no attempt to explain how testing once every 5-years will assure compliance with operational requirements that must be met at all

times when the flare is operating and short-term emission limits. 40 C.F.R. § 70.7(a)(5). Third, the Department's statement that it may require additional testing or monitoring in the future is also insufficient. Under Title V, testing, monitoring, and reporting requirements must be included in the Title V permit itself. Valero Order at 23. In conclusion, the Renewal Permit is deficient because it does not include sufficient testing, monitoring, and recordkeeping requirements to assure continuous compliance with applicable requirements for the Ammonia Flare.

- K. Despite the Department's Statement that a NOx CEMS is Required for the Coke Oven Battery C Combustion Stack, the Renewal Permit Does Not Clearly Require NOx CEMs for this Source
- 1. Specific Grounds for Objection, Including Citation to the Permit Term

Despite the Department's statement that NOx CEMS is required for the Coke Oven Battery C combustion stack, the Renewal Permit does not include a clear requirement that a NOx CEMS is required. As a result, the Renewal Permit does not assure compliance with the hourly and rolling 12-month NOx emission limits for the Coke Oven Battery C combustion stack. Renewal Permit, Conditions V.G.1.v; V.I.1.dd. The NOx emission limit for the Coke Oven Battery C combustion stack was established by Installation Permit IP-0052-I011b. Renewal Permit, Condition V.I.1.dd. and Technical Review Memo at 19.

The Renewal Permit includes no testing requirements for emissions of NOx from the Coke Oven Battery C combustion stack. Renewal Permit, Condition V.I. Renewal Permit Conditions V.I.2.t and u require that the permittee conduct a number of tests to ensure that a NOx CEMS is functioning, but no provisions of Condition V.I appear to actually require the

operation of a CEMS<sup>17</sup> despite the Department's statements that a NOx CEMS is required for the coke oven battery C combustion stack. Response to Comments, Comment No. 138 at 55; Technical Support Document at 34.

## 2. Applicable Requirement or Part 70 Not Met

Title V operating permits must include all applicable requirements, as well as the origin of and authority of each requirement. 40 C.F.R. §70.6(a)(1). Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P.* (Wheelabrator Order), Permit No. 24-510-01886 at 10 (April 14, 2010). Requirements of a federally enforceable SIP that are incorporated into a Title V permit are "applicable requirements." 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* (Granite City I Order), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011). Furthermore, monitoring requirements must be included or clearly incorporated in the Title V operating permit in order to assure compliance with applicable requirements. Valero Order at 23.

## 3. Inadequacy of the Permit Term

The Renewal Permit does not contain any testing or monitoring requirements that assure continuous compliance with the NOx emissions that apply to the coke oven battery C combustion stack because the Department has failed to include a clear requirement for the installation and operation of NOx CEMS for this source. Title V and its regulations mandate that

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<sup>&</sup>lt;sup>17</sup> The conditions related to Coke Oven Battery B combustion stack contain similar language related to the existence of a NOx CEMS, but the Department has not expressly stated that a NOx CEMS is required for this source. Renewal Permit, Condition V.G.2.e. *See* discussion *supra* Section IV.E.3 related to inadequate testing and monitoring for NOx emissions from the Coke Oven Battery B combustion stack.

Valero Order at 23-31; Granite City I Order; *In the Matter of ETC Texas Pipeline, LTD WAHA Gas Plant*, Permit No. O2546 at 17-19 (Jan. 28, 2022)("The Title V permit should contain references that are detailed enough that the manner in which the referenced material applies to the facility is clear and is not reasonably subject to misinterpretation."). The current terms related to the NOx CEMS for Coke Oven Battery C combustion stack are vague and do not meet this standard.

For example, the Renewal Permit requirements covering boilers 001 and 002 clearly require the installation and operation of NOx CEMS, stating "[t]he NOx emissions shall be determined by a thirty (30) day rolling average and a twelve (12) month rolling average Continuous Emission Monitoring (CEM) data for the lbs/MMBtu and tons/yr emission limitation respectively," and Boilers 001 and 002 "shall have properly maintained and operated Continuous Monitoring Systems or approved alternatives for continuously monitoring the NOx concentration in the exhaust gas..." Renewal Permit, Conditions V.GG.1.c and d; V.HH.1.c and d. To ensure that these monitoring requirements apply to the Coke Oven Battery C combustion stacks, the Department should have included similar unambiguous language in the conditions applicable to the Coke Oven Battery C combustion stacks. Without the requirement to install and operate NOx CEMS for this source or alternative testing and monitoring requirements that assure compliance with the hourly or 12-month rolling NOx emission limits, the Renewal Permit is deficient.

#### 4. Issue Raised in Public Comment

Petitioners expressly raised these issues in Comment 12.d of their Comments, which generally state the same points as above. Ex. 2 at 80-81.

## 5. Analysis of ACHD's Response

The Department's Response to Petitioners' comments was nonresponsive. The Department did not address Petitioners' comments regarding the lack of clarity as to whether NOx CEMS is required for both coke oven batteries B and C combustion stacks. Response to Comments, Comment No. 126 at 48. The Department also did not sufficiently address Petitioners' comments related to the lack of NOx emissions testing for coke oven battery combustion stacks. *See* discussion *supra* Section IV.E.5. The Department only confirmed that NOx CEMS is "required" for the Coke Oven Battery C combustion stack in response to a comment that was made by EPA. Response to Comments, Comment No. 138 at 55; Ex. 5. As a result, the Renewal Permit's testing and monitoring requirements do not assure continuous compliance with the hourly and 12-month rolling NOx limits on Coke Oven Battery C battery stacks because it does not clearly require NOx CEMS or contain other necessary testing and monitoring requirements.

## V. CONCLUSION

For the foregoing reasons, and as explained in Petitioners' timely-filed public comments, the Renewal Permit is deficient. The Department's Response to Comments also failed to address Petitioners' significant comments. Accordingly, the Clean Air Act and EPA's 40 C.F.R. Part 70 rules require that the Administrator object to the Renewal Permit.

Respectfully submitted this 6<sup>th</sup> day of March 2023 on behalf of the Environmental Integrity Project, Clean Air Council, and PennFuture,

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