



United States Steel Corporation  
Law Department  
600 Grant Street  
Pittsburgh, PA 15219-2800  
Tel: 412.433.2919  
E-mail: [dwhacker@uss.com](mailto:dwhacker@uss.com)

**David W. Hacker**  
Senior Counsel-Environmental

**VIA EMAIL**

June 1, 2020

Dr. Debra L. Bogen  
Director  
Allegheny County Health Department  
542 Fourth Avenue  
Pittsburgh, PA 15219  
Sent to: [todd.bogdanovich@alleghenycounty.us](mailto:todd.bogdanovich@alleghenycounty.us)

Max Slater  
ACHD Hearing Officer  
542 Fourth Avenue  
Pittsburgh, PA 15219  
[max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us)

**RE: United States Steel Corporation – Edgar Thomson Plant  
Appeal of Reasonable Available Control Technology  
Installation Permit No. 0051-I008**

Dear Dr. Bogen and Hearing Officer Slater:

Pursuant to Article XI of the Rules and Regulations of the Allegheny County Health Department, United States Steel Corporation submits for filing the enclosed Notice of Appeal regarding the above-referenced permit. If you have any questions or wish to discuss this matter further, please contact me at [dwhacker@uss.com](mailto:dwhacker@uss.com) or (412) 433-2919; or Mike Winek at [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com) or (412) 394-6538.

Sincerely,

A handwritten signature in blue ink, appearing to read 'DWHacker', with a long horizontal flourish extending to the right.

David W. Hacker

Attachments

cc: Jason Willis, Esq. (via e-mail: [Jason.Willis@AlleghenyCounty.us](mailto:Jason.Willis@AlleghenyCounty.us))  
Mike Winek (via e-mail: [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com))

## Notice of Appeal

This form is used to file an appeal of an order, notice, decision, determination, or ruling by the Allegheny County Health Department. Please complete this form (use additional pages as necessary). If more than one person or entity is filing this appeal, please attach a separate form for each additional appellant. A copy of the order, notice, decision, determination, or ruling must be attached to the Notice of Appeal.

Name United States Steel Corporation - Edgar Thomson Plant  
Mailing Address 13th Street and Braddock Avenue  
City Braddock State PA Zip 15104 Email KBarshick@uss.com  
Phone (412) 675-2600 Fax (optional) \_\_\_\_\_

If you are represented by an attorney, please provide contact information for your attorney:

Name Michael Winek, Babst Calland  
Mailing Address Two Gateway Center, Sixth Floor  
City Pittsburgh State PA Zip 15222 Email mwinek@babstcalland.com  
Phone (412) 394-6538 Fax (optional) \_\_\_\_\_

Describe your objections to the Department's actions and a statement describing the relief you want the Hearing Officer to grant. (The objections may be factual or legal and must be specific. If you fail to state an objection here, you may be barred from raising it later in your appeal. Use additional pages if necessary.)

Please see attached.  
\_\_\_\_\_  
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\_\_\_\_\_

By filing this Notice of Appeal with the Allegheny County Health Department, I hereby certify that the information submitted is true and correct to the best of my information and belief.

Signature  Date 5/29/2020

Appeals should be submitted in person or by mail to: Allegheny County Health Department Attention: Hearing Officer 542 4th Avenue Pittsburgh, PA 15219, or emailed to the Hearing Officer at [max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us).

**BEFORE THE HEARING OFFICER FOR THE  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
542 4TH AVENUE  
PITTSBURGH, PENNSYLVANIA 15219**

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UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Appellant,	)	
	)	
v.	)	Appeal of Reasonable Available
	)	Control Technology Installation
ALLEGHENY COUNTY HEALTH	)	Permit No. 0051-I008
DEPARTMENT, Air Quality Program,	)	
	)	
Appellee.	)	

**NOTICE OF APPEAL**

NOW COMES, Appellant, UNITED STATES STEEL CORPORATION (hereinafter “U.S. Steel”), pursuant to Sections 1103 and 1104 of Article XI of the Allegheny County Health Department’s Rules and Regulations, before the Director of the Allegheny County Health Department (“ACHD” or Department”), filing this appeal from the Department’s issuance of “Reasonably Available Control Technology” Installation Permit # 0051-I008 to U. S. Steel Corporation’s Edgar Thomson Plant, Braddock, Pennsylvania, with an issuance date of April 21, 2020, and received by U. S. Steel via email on the same date. A true and correct copy of the permit is provided as Exhibit A to this notice of appeal. This submission constitutes timely filing of a Notice of Appeal<sup>1</sup> of a Department action, and properly specifies the manner in which U.S. Steel is aggrieved by the Department’s action.

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<sup>1</sup> This notice of appeal is timely filed because, consistent with the Pennsylvania Supreme Court’s (COVID-19) Order Nos. 531 and 532, Judicial Administrative Docket, dated April 28, 2020, the ACHD Hearing Officer issued an emergency order, dated May 8, 2020, which provides that any administrative appeal before the ACHD Hearing Officer which was required to be filed between March 19, 2020 and June 1, 2020 shall be deemed to have been timely filed if it is filed by June 2, 2020.

## **A. Manner in which U. S. Steel is Aggrieved and Grounds for Appeal**

1. U. S. Steel owns and operates the Edgar Thomson Plant, an integrated iron and steel making facility, located at 13<sup>th</sup> Street and Braddock Avenue, Braddock, Pennsylvania 15104 (hereinafter “Facility”).

2. The Department issued “Reasonably Available Control Technology (“RACT”) Installation Permit No. 0051-I008” (hereinafter “RACT Installation Permit”) on April 21, 2020, and it was received by U. S. Steel on or about April 21, 2020.

3. U. S. Steel objects to the Department’s issuance of the RACT Installation Permit. By issuing the RACT Installation Permit, the Department has abused its discretion and acted unreasonably, arbitrarily, capriciously, contrary to fact and law and in a manner not supported by evidence. U. S. Steel objects to the Department’s issuance of the RACT Installation Permit because it contains numerous enforceable conditions that are arbitrary, capricious, unreasonable, an abuse of the Department’s discretion, and contrary to law including the federal Clean Air Act, 42 U.S.C. §7401 *et seq.* (“CAA”), federal Administrative Procedures Act, 5 U.S.C. §551 *et seq.* and state and local analogs (collectively “APA”), Pennsylvania Air Pollution Control Act, 35 P.S. Section 4001 *et seq.* (“APCA”), and Article XXI. The Department’s imposition of these requirements is therefore unreasonable, arbitrary and capricious, contrary to law including the CAA, APA, APCA and Article XXI, and an abuse of the Department’s discretion. U. S. Steel’s objections specifically include:

- a. The Department issued the permit without having received a complete application as required by Article XXI, § 2102.04(b), which requires: “[t]he Department shall not issue *any* [emphasis added] Installation Permit unless it has complied with all

applicable requirements under this Article for public notice and received a complete application...” [emphasis added]. In particular, the Department did not request nor did the Facility submit a permit application related to or for issuance of the RACT Installation Permit.

- b. The Department issued the RACT Installation Permit with *substantively different* terms and conditions than what was presented in the draft permit *and which could not be reasonably anticipated*, without affording U. S. Steel the ability to comment on the substantive changes prior to including them in the final RACT Installation Permit. Such action is contrary to law, including the APA and Article XXI, and an abuse of the Department’s discretion.
- c. The Department issued the RACT Installation Permit with new substantive conditions (including vague and ambiguous tune-up requirements, especially as *apparently applied* to the affected emissions units<sup>2</sup>) which are significantly different than what was provided in the draft permit (and for which could not be reasonably anticipated) *with an effective date being the same as the issued date*. U. S. Steel had no notice of the changes, contrary to the requirements of the APA and Article XXI.
- d. Contrary to the Department’s rules and regulations, the Department issued the RACT Installation Permit, an installation permit, to the Facility, while the Facility did not (nor did it request to) “*install, modify, replace, reconstruct, or reactivate*” any source or air pollution control equipment at the Facility.

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<sup>2</sup> The tune up requirement is vague and ambiguous, as explained *supra*.

- e. The Department unilaterally and unlawfully issued the RACT Installation Permit imposing conditions and limits contrary to those conditions and limits imposed by Plan Approval Order and Agreement Upon Consent No. 235 (hereinafter referred to as “RACT Order 235.”) A true and correct copy of RACT Order 235 is provided as Exhibit B to this notice of appeal. Specifically, the Department *unilaterally and unlawfully* reduced the nitrogen oxide limits agreed to in RACT Order 235, which the parties previously agreed to and which continue to be a part of the Pennsylvania State Implementation Plan (“SIP”.) While U. S. Steel acknowledges that ACHD can, and at times, is required to, revise its portion of the Pennsylvania SIP, it cannot unilaterally modify a Federally enforceable agreement which includes RACT Order 235. In particular, RACT Order 235 provides that, “intending to be legally bound, the parties hereby consent to all of the terms and conditions of the foregoing Plan Approval Order and Agreement as of the date of the above written [December 30, 1996.]<sup>3</sup>
- f. Because the Department has determined that no new controls are technologically and economically feasible and no fuel and operating scenarios have changed since entering RACT Order 235, changing the limits imposed in RACT Order 235 is unlawful.

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<sup>3</sup> According to the Department, U. S. Steel provided the Department with all required information for the RACT determination. See attached letter from Jason Willis (ACHD) to David Hacker (U. S. Steel), dated November 1, 2016 (attached herein as Exhibit C). As noted therein, in 2014, U. S. Steel proposed a case by case RACT determination and that determination indicated that no changes to the existing RACT requirements are required for RACT II. In response, the Department advised U. S. Steel that U. S. Steel satisfied its RACT evaluation obligation. While in the letter the Department does not offer a final approval of the plan, the Department was afforded sufficient time to seek revision to RACT Order 235. Instead, the Department acted unlawfully by unilaterally issuing the RACT Installation Permit with conditions that are unlawful and inconsistent with RACT Order 235.

- g. The limits provided in Conditions V.A.1.(b)(1) and V.A.1.(b)(2) and in Table V-A-1, on pages 20 and 21 of the RACT Installation Permit, respectively, were determined in a manner which is contrary to the CAA, APCA, and the PADEP RACT II regulations (25 Pa. Code 129.96-129.100). Specifically, the Department imposed nitrogen oxide (“NOx”) limits for Boilers 1, 2, and 3 that are not achievable under all previously permitted fuel and operating scenarios. Furthermore, the limits are more restrictive than the presumptive RACT limit (0.10 lbs. NOx/mmbtu) as provided in the PADEP RACT II regulations ***which apply statewide*** unless a source determines that it cannot meet the presumptive RACT limit and requests an alternative limit. The limits imposed for Boilers 1, 2, and 3 are unlawful and unreasonably restrict U. S. Steel’s operations, and place U. S. Steel at an unfair competitive disadvantage.
- h. The limits in Conditions V.A.1.(b)(1) and V.A.1.(b)(2), and in Table V-A-1, on pages 20 and 21 of the RACT Installation Permit, respectively, have not been demonstrated to be achievable for all currently permitted and fuel burning operating conditions and scenarios. In fact, while U. S. Steel agrees that additional controls are not technologically and economically feasible, based upon available operating and emissions data, U. S. Steel disagrees that the limits imposed are achievable under all currently permitted and fuel burning operating conditions and scenarios. In particular, for example, the limits are not achievable during times, including but not limited to extended outages, when blast furnace gas is not available and during times when significant power generation at the Facility is necessary which assists in avoiding flaring of coke oven gas. Attempts to comply with the limits could

result in operational upsets (not being able to operate the boilers as needed to maintain sufficient demand for plant operations) while increasing emissions by flaring coke oven gas at the Irvin facility. Such coke oven gas would otherwise be combusted at the Facility to produce steam but for the NOx limit imposed in the RACT Installation Permit (i.e., emissions in the area could actually increase as the coke oven gas would be flared.)

- i. The limits in Conditions V.A.1.(b)(1) and V.A.1.(b)(2) and in Table V-A-1, on pages 20 and 21 of the RACT Installation Permit, respectively, have been derived in a manner inconsistent with the PADEP RACT II regulations.
- j. In Table V-A-1, on page 21 of the RACT Installation Permit, the averaging period for the hourly limit imposed is inconsistent with the PADEP RACT II regulations, which uses 30-day rolling average limits for units equipped with Continuous Emissions Monitoring Systems (“CEMS”), which each of the boilers are equipped and use is required pursuant to existing permit requirements. Even if the hourly limit is determined to be lawful, which it is not, the limit must be based upon a 30-day rolling average limit, as required by the PADEP RACT II regulations, not an individual hour.<sup>4</sup>
- k. The limits provided in Conditions V.B.1.(c) and V.B.1.(d) and in Table V-B-1, on page 24 of the RACT Installation Permit were determined in a manner which is contrary to the CAA, APCA, and the PADEP RACT II Regulations. In fact, while U. S. Steel agrees that additional controls are not economically and technologically

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<sup>4</sup> U. S. Steel notes that the Department seems to acknowledge that the limit is to be applied as a rolling 30-day average, as explained in the comment and response document for the RACT Installation Permit. However, the permit does not specifically identify the limit as a rolling 30-day average, leading to an inconsistency and ambiguity when reading the permit in total with the supporting comment and response document.

feasible, specifically, the Department imposed unachievable and unlawful nitrogen oxide (“NOx”) limits for Blast Furnace Stove No. 1 and Blast Furnace Stove No. 3. Furthermore, the limits are more restrictive than the presumptive RACT limit (0.10 lbs. NOx/mmbtu) as provided in the PADEP RACT II regulations ***which apply statewide.***

- l. The limits provided in Conditions V.B.1.(c) and V.B.1.(d) and in Table V-B-1, on page 24 of the RACT Installation Permit have not been demonstrated to be achievable for all currently permitted and fuel burning operating conditions and scenarios. In fact, while U. S. Steel agrees that additional controls are not technologically feasible for the blast furnace stoves (as the Department has determined), based upon available operating and emissions data, U. S. Steel disagrees that the limits imposed are achievable under all currently permitted and fuel burning operating conditions and scenarios. In particular, for example, the limits are not achievable during times, including but not limited to extended outages, when blast furnace gas is not available and during times when significant power generation at the Facility is necessary which assists in avoiding flaring of coke oven gas. Attempts to comply with the limits could result in operational upsets (not being able to operate the stoves as necessary) while increasing emissions by flaring coke oven gas at the Irvin facility.
- m. In 2014, U. S. Steel submitted a RACT evaluation which was accepted by the Department in 2016 as U. S. Steel’s request for a RACT case-by-case limitation. In the evaluation, U. S. Steel determined that the existing RACT Order 235 limits for Boilers 1, 2, and 3 should remain in place and the case by case limit would be

0.55 lbs NO<sub>x</sub>/mmbtu (for each boiler) as provided in RACT Order 235. Instead of applying the RACT Order limits, or requesting that U. S. Steel agree to modify RACT Order 235, the Department unilaterally, unlawfully, and incorrectly determined, among other conditions, that the RACT limits would be lowered to 0.07 lb/mmbtu (short term) and 0.05 lb/mmbtu (long term) – substantially lower than the limits imposed by RACT Order 235, and substantially lower than statewide presumptive RACT limit of 0.10 lb/mmbtu that would apply if a case-by-case determination was not requested (and if RACT Order 235 did not exist.) *The purpose of the case-by-case determination is to allow sources that cannot meet the presumptive RACT NO<sub>x</sub> limit of 0.10 lb/mmbtu to propose an alternate limit.* U. S. Steel made such a request for a case-by-case limit of 0.55 lbs/mmbtu whereby the existing federally enforceable RACT 235 Order limits would remain in effect and not require modification. This is logical because U. S. Steel determined that no controls were technologically or economically feasible which would indicate the existing limits are appropriate. However, instead of denying the request for a case-by-case request and applying the presumptive limit of 0.10 lbs/mmBtu, the Department unlawfully applied a more stringent limit that was lower than the statewide applicable presumptive RACT limit and lower than the limit in RACT Order 235.

- n. The method to demonstrate compliance with the Blast Furnace Stove NO<sub>x</sub> limits is not provided in the RACT Installation Permit. Consistent with the PADEP RACT II regulations, the method to demonstrate compliance should be a stack test

conducted in a manner consistent with the Source Test Manual, one time in each 5-year calendar. (25 PA Code 129.100).

- o. RACT Installation Permit conditions V.C.1.b and V.C.2 on page 26 vaguely and ambiguously require U. S. Steel to conduct “annual adjustment and tune-up on the blast furnaces 1 & 3 to include at a minimum...” and keep records of such tune-ups. The conditions are ambiguous and not necessarily feasible, as the prescriptive requirements are not feasible or relevant to a blast furnace. The prescriptive requirements appear to be derived from boiler and process heater requirements which cannot be adopted for blast furnaces. U. S. Steel is not aware of any such RACT obligation for any other blast furnace. Because the conditions are vague, ambiguous, and incomprehensible (because such requirements are not feasible or otherwise appropriate to apply to a blast furnace), it should not be included in any RACT permit or order.
- p. Notwithstanding the objections with the issuance of the RACT Installation Permit, all conditions in Section V.D, Process P005, Rotary Dryer, page 27 of the RACT Installation Permit are improperly applied to U. S. Steel because U. S. Steel does not own or operate the rotary dryer and is not responsible for compliance with this emissions unit. The very same rotary dryer is owned and operated by another source which has its own air quality permit(s) for the same emissions unit issued by ACHD (e.g., Permit No. 265, Installation Permit No. 265-I001, which includes existing terms and conditions for this emission unit (BRI’s emission unit P005, rotary dryer)). U. S. Steel would be unable to certify compliance with an emissions

unit which it does not own or operate, and which is covered by separate ACHD-issued permits.

- q. Notwithstanding the objections provided in paragraphs a and b, above, even if the Department had the authority to issue the RACT Installation Permit (which it does not), the Department made substantive changes to the draft permit and provided no opportunity for the Facility to comment;
- r. Contrary to the statewide applicable PADEP RACT II regulations, the Department's unlawful action precluded U. S. Steel from seeking an emissions averaging method of compliance as authorized by 25 PA Code 129.98.
- s. In issuing the RACT Installation Permit, the Department relied upon limited and incomplete data to support the limits and its determination of RACT;
- t. By using incomplete data to make its RACT determination, the Department is unlawfully prohibiting fuel operating scenarios, that are otherwise permitted and have been permitted prior to the issuance of the RACT Installation Permit;
- u. The RACT Installation Permit includes limits that are not achievable, are not based upon similar facilities, are not based on a review of the RACT/BACT Clearinghouse;
- v. The Department has failed to adequately explain the basis for its RACT determinations;
- w. In issuing the RACT Installation Permit, the Department exceeded its authority under applicable law, including Article XXI, the CAA, the APCA, and the PADEP RACT II regulations;

**B. U. S. Steel's Direct Interest in the Action**

4. U. S. Steel is a named entity to which the RACT Installation Permit was issued, and whose activities are unlawfully and unreasonably restricted by the RACT Installation Permit. As a result, U. S. Steel is negatively impacted by the RACT Installation Permit and has a direct interest in the RACT Installation Permit and this appeal.

### **C. Conclusion**

5. Through this Notice of Appeal, U. S. Steel has identified its objections to the RACT Installation Permit but reserves the right to amend or supplement the factual and legal basis of its Appeal as authorized by the Department's Rules and Regulations.

6. For the foregoing reasons, U. S. Steel respectfully requests that the Director vacate the RACT Installation Permit, or alternatively, vacate the RACT Installation Permit *and* order the Department to implement its RACT obligations in a manner consistent with applicable laws including the CAA, the APCA, Article XXI, and PADEP RACT II regulations.

Respectfully submitted,



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David W. Hacker, Esq. (PAID#91236)  
United States Steel Corporation  
600 Grant Street, Suite 1500  
Pittsburgh, Pennsylvania 15219  
Telephone: (412) 433-2919  
Email: [dwhacker@uss.com](mailto:dwhacker@uss.com)

Michael H. Winek (PAID#69464)  
Babst, Calland, Clements and Zomnir, P.C.  
Two Gateway Center  
Pittsburgh, PA 15222  
Telephone (412) 394-5400  
Email: [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com)

*Counsel for Appellant*

Dated: June 1, 2020

**EXHIBIT A**

**RACT INSTALLATION PERMIT NO. 0051-I008  
ISSUED TO UNITED STATES STEEL CORPORATION  
EDGAR THOMSON PLANT  
BRADDOCK, PENNSYLVANIA**



**AIR QUALITY PROGRAM**  
**301 39th Street, Bldg. #7**  
**Pittsburgh, PA 15201-1811**

**Reasonable Available Control Technology**  
**INSTALLATION PERMIT**

**Issued To:** U.S. Steel Mon Valley Works  
Edgar Thomson Plant  
13<sup>th</sup> Street and Braddock Avenue  
Braddock, PA 15104

**ACHD Permit#:** 0051-I008

Date of Issuance: April 21, 2020

Expiration Date: (See Section III.12)

**Issued By:** \_\_\_\_\_  
JoAnn Truchan, P.E.  
Section Chief, Engineering

**Prepared By:** \_\_\_\_\_  
Hafeez Ajenifuja  
Air Quality Engineer

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### *AMENDMENTS:*

<i>DATE</i>	<i>SECTION(S)</i>
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**I. CONTACT INFORMATION**

**Facility Location:** U.S. Steel Mon Valley Works  
Edgar Thomson Plant  
13<sup>th</sup> Street and Braddock Avenue  
Braddock, PA 15104

**Permittee/Owner:** U.S. Steel Mon Valley Works  
Edgar Thomson Plant  
13<sup>th</sup> Street and Braddock Avenue  
Braddock, PA 15104

**Permittee/Operator:** *same as above*  
(if not Owner)

**Responsible Official:** Kurt Barshick  
**Title:** General Manager  
**Company:** U.S. Steel Corporate, Mon Valley Works  
**Address:** P.O. Box 878  
Dravosburg, PA 15043  
**Telephone Number:** 412-675-2600  
**Fax Number:** 412-675-5407

**Facility Contact:** Coleen Davis  
**Title:** Environmental Coordinator  
**Telephone Number:** 412-273-4730  
**Fax Number:** 412-273-7099  
**E-mail Address:** CDavis@uss.com

**AGENCY ADDRESSES:**

**ACHD Contact:** Chief Engineer  
Allegheny County Health Department  
Air Quality Program  
301 39th Street, Building #7  
Pittsburgh, PA 15201-1811

**EPA Contact:** Enforcement Programs Section (3AP12)  
USEPA Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

## II. FACILITY DESCRIPTION

### FACILITY DESCRIPTION

The U. S. Steel Mon Valley Works Edgar Thomson Plant (ET) is an iron and steel making facility that produces mainly steel slabs. Raw materials such as coke, iron-bearing materials, and fluxes are charged to blast furnaces in the iron making process. Molten metal (iron) is tapped from the blast furnace at the casthouse into transfer ladles. The hot metal is then transferred to a hot metal mixer or direct pour station in preparation for desulfurization. For desulfurization, a reagent is added to the hot metal, causing sulfur and other impurities to form and rise to the surface. Desulfurized hot metal is then introduced into the basic oxygen process (BOP), where the hot metal is transformed into molten steel. Scrap, alloys, fluxes, and oxygen are also introduced at the BOP. The liquid steel is tapped from the BOP vessels and transferred to the ladle metallurgy facility (LMF) or Vacuum Degasser, where the properties of the steel can be more precisely refined according to customer specifications. To achieve this additional refining at the LMF or Vacuum Degasser, specific alloying materials are added to the process. The refined liquid steel is then charged to the dual strand continuous caster mold. The steel slabs are formed in the continuous caster and are cut to length, ground, slit as necessary, and shipped offsite. There are three Riley Boilers at ET, which are used to generate steam, heat, and electricity for the plant. The three primary fuels for the boilers are Blast Furnace Gas (BFG), Coke Oven Gas, (COG), and Natural Gas (NG).

The facility has two (2) processes that are operated by an outside contractor:

1. BOP Slag Processing; and
2. Waste Product Recycling and Briquetting.

The BOP slag handling system is being operated by Tube City IMS, LLC, while the Waste Product Recycling and Briquette is operated by Braddock Recovery Inc, a division of Harsco Corporation.

Both Tube City IMS, Inc. and Braddock Recovery Inc. are located on U.S. Steel Edgar Thomson property and are considered Title V facilities by ACHD. These facilities are part of the same major source, acting as support facilities to Edgar Thomson Plant, and have their own Title V operating permits.

In addition, Messer is another support facility that is located outside U. S. Steel Edgar Thomson compound but supplies oxygen to U. S. Steel Edgar Thomson Plant. Messer is also supplying gases to other companies and is therefore not considered a co-located Title V facility at this time.

The facility, which is located in Braddock, Pennsylvania, is a major source of particulate matter less than 10 microns in diameter (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC), and Hazardous Air Pollutants (HAPs), as defined in Section 2101.20 of Article XXI.

### INSTALLATION DESCRIPTION

This installation permit is for inclusion of physical and operational conditions for subject facility pursuant to Reasonable Available Control Technology (RACT II) in section 2105.06 of Article XXI. There are no new units being added to the facility as part of this permitting action.

The emission units regulated by this permit are summarized in Table II-1:

**TABLE II-1: Emission Unit Identification**

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
B001	Riley Boiler 1	None	525 MMBtu/hr	Blast Furnace Gas, Coke Oven Gas & Natural Gas	S012
B002	Riley Boiler 2	None	525 MMBtu/hr	Blast Furnace Gas, Coke Oven Gas & Natural Gas	S013
B003	Riley Boiler 3	None	525 MMBtu/hr	Blast Furnace Gas, Coke Oven Gas & Natural Gas	S014
P001b	Blast Furnace No. 1 Stoves	None	495 MMBtu/hr	Blast Furnace Gas, Coke Oven Gas & Natural Gas	S001
P002b	Blast Furnace No. 3 Stoves	None	495 MMBtu/hr	Blast Furnace Gas, Coke Oven Gas & Natural Gas	S001
P001a	Blast Furnace No. 1 plus Casthouse	Casthouse Baghouse	1,752,000 TPY (Production)	Coke, Iron-Bearing Materials, Fluxes	S002
P002a	Blast Furnace No. 3 plus Casthouse	Casthouse Baghouse	1,752,000 TPY (Production)	Coke, Iron-Bearing Materials, Fluxes	S002
P001c	BFG Flare	N/A	26,280 MMcfh	BFG	S003
P003	Basic Oxygen Process (BOP) Shop	Mixer Baghouse, Primary Scrubber, Secondary Baghouse	3, 467,500 TPY (Production)	Hot Metal (Iron), Fluxes, Scrap, Alloy Additives	S005-S008
P004	Ladle Metallurgy Facility (LMF)	LMF Baghouse	3, 467,500 TPY (Production)	Steel (Liquid), Fluxes, Scrap, Alloy Additives	S009
P005	Dual Strand Caster	Dust Collectors	3, 467,500 TPY (Production)	Steel (Liquid), Fluxes	N/A

### ***DECLARATION OF POLICY***

*Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.*

**The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.**

### **III. GENERAL CONDITIONS**

#### **1. Prohibition of Air Pollution (§2101.11)**

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

- a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
- b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
- c. May reasonably be anticipated to endanger the public health, safety, or welfare.

#### **2. Nuisances (§2101.13)**

Any violation of any requirement of this Permit shall constitute a nuisance.

#### **3. Definitions (§2101.20)**

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.
- b. Unless specified otherwise in this permit or in the applicable regulation, the term “year” shall mean any twelve (12) consecutive months.

**4. Certification (§2102.01)**

Any report or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**5. Operation and Maintenance (§2105.03)**

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

**6. Conditions (§2102.03.c)**

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

**7. Transfers (§2102.03.e)**

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

**8. Effect (§2102.03.g)**

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

**9. General Requirements (§2102.04.a)**

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

- a. The Department has first issued an Installation Permit for such source or equipment; or
- b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

**10. Conditions (§2102.04.e)**

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this

Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

**11. Revocation (§2102.04.f)**

- a. The Department may, at any time, revoke this Installation Permit if it finds that:
- 1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
  - 2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
  - 3) Air contaminants will not be controlled to the degree indicated by this permit;
  - 4) Any term or condition of this permit has not been complied with;
  - 5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or
- b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

**12. Term (§2102.04.g)**

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire 18 months after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of this Permit.

**13. Annual Installation Permit Administrative Fee (§2102.10.c & e)**

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of \$750.

**14. Severability Requirement (§2103.12.l)**

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

**15. Reporting Requirements (§2103.12.k)**

- a. The permittee shall submit reports of any required monitoring at least every six (6) months. All

instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

- b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.
- c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
  - 1) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
  - 2) One semiannual report is due by February 1 of each year for the time period beginning July 1 and ending December 31.
  - 3) The first semiannual report shall be due July 31, 2020 for the time period beginning on the issuance date of this permit through June 30, 2020.
- e. Reports may be emailed to the Department at [aqreports@alleghenycounty.us](mailto:aqreports@alleghenycounty.us) in lieu of mailing a hard copy.

#### **16. Minor Installation Permit Modifications (§2102.10.d)**

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of \$300 and where:

- a. No reassessment of any control technology determination is required; and
- b. No reassessment of any ambient air quality impact is required.

#### **17. Violations (§2104.06)**

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article §2109.02.

#### **18. Other Requirements Not Affected (§2105.02)**

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

#### **19. Other Rights and Remedies Preserved (§2109.02.b)**

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit

**20. Penalties, Fines, and Interest (§2109.07.a)**

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

**21. Appeals (§2109.10)**

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

## IV. SITE LEVEL TERMS AND CONDITIONS

### 1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

### 2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- b. Equal or exceed an opacity of 60% at any time.

### 3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

### 4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

### 5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

### 6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

### 7. Shutdown of Control Equipment (§2108.01.b)

- a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment

- is shut down.
- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.
- c. The prior report required by Site Level Condition IV.7.a above shall include:
- 1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
  - 2) The reasons for the shutdown;
  - 3) The expected length of time that the equipment will be out of service;
  - 4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
  - 5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
  - 6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
  - 7) Such other information as may be required by the Department.

## 8. Breakdowns (§2108.01.c)

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.
- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
- 1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
  - 2) The nature and probable cause of the breakdown.
  - 3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
  - 4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
  - 5) The estimated quantity of each material being or likely to be emitted.
  - 6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
  - 7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.

- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.
- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

**9. Cold Start (§2108.01.d)**

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

**10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)**

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

**11. Emissions Inventory Statements (§2108.01.e & g)**

- a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.
- b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit

giving rise to the remedies provided by Article XXI §2109.02.

**12. Orders (§2108.01.f)**

In addition to meeting the requirements Site Level Conditions IV.7 through IV.11, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

**13. Violations (§2108.01.g)**

The failure to submit any report or update thereof required by Site Level Conditions IV.7 through IV.12 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**14. Emissions Testing (§2108.02)**

- a. **Orders:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.
- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.

- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**15. Abrasive Blasting (§2105.51)**

- a. Except where such blasting is a part of a process requiring an operating permit, no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.
- b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

**16. Asbestos Abatement (§2105.62, §2105.63)**

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

**17. Volatile Organic Compound Storage Tanks (§2105.12.a)**

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

**18. Permit Source Premises (§2105.40)**

- a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:
- 1) Are visible at or beyond the property line of such source;
  - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
  - 3) Have an opacity of 60% or more at any time.

- b. **Deposition on Other Premises:** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.18.a above.

**19. Parking Lots and Roadways (§2105.42)**

- a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:
- 1) Are visible at or beyond the property line;
  - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
  - 3) Have an opacity of 60% or more at any time.
- b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.
- c. Site Level Condition IV.19.a above shall apply during any repairs or maintenance done to such parking lot or roadway.
- d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.19.

**20. Permit Source Transport (§2105.43)**

- a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.20.

**21. Construction and Land Clearing (§2105.45)**

- a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:

- 1) Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
- 2) Equal or exceed 60% at any time.

- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

## **22. Mining (§2105.46)**

No person shall conduct, or allow to be conducted, any mining activities in such manner that emissions from such activities:

- a. Are visible at or beyond the property line;
- b. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- c. Have an opacity of 60% or more at any time.

## **23. Demolition (§2105.47)**

- a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period.
- b. Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.23 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.23.

## **24. Fugitive Emissions (§2105.49)**

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

- a. The use of asphalt, oil, water, or suitable chemicals for dust control;
- b. The paving and maintenance of roadways, parking lots and the like;
- c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
- d. The adoption of work or other practices to minimize emissions;
- e. Enclosure of the source; and
- f. The proper hooding, venting, and collection of fugitive emissions.

## **25. Episode Plans (§2106.02)**

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent

with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

**26. New Source Performance Standards (§2105.05)**

- a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.
- b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

## V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

### A. Riley Boiler Nos. 1, 2 & 3

<b>Process Description:</b>	Water Tube Boiler, Multi-Fuel Firing
<b>Facility ID:</b>	B001- B003
<b>Capacity:</b>	525 MMBtu/hr, each boiler
<b>Max. Design Rate:</b>	525 MMBtu/hr, each boiler
<b>Fuel/Raw Material:</b>	BFG, COG, NG; Fuel Oil
<b>Control Device(s):</b>	None
<b>Stack Ids:</b>	S012 (#1 Boiler); S013 (#2 Boiler); S014 (#3 Boiler) are each equipped with a NO <sub>x</sub> Continuous Emission Monitoring (CEM) System

#### 1. Restrictions:

- a. The permittee shall continue to meet the conditions of the current Title V Operating Permit #0051 not otherwise affected by the revisions in this permit. (§2102.04.b.5; §2105.06.d)
- b. Nitrogen oxide (NO<sub>x</sub>) emissions from each Riley Boiler No. 1, 2 or 3 shall not exceed the following, with the exception of actions to mitigate emergency situations: (25 Pa Code §129.99; 2102.04.b.5; §2105.06.d)
  - 1) Short term limit of 0.07 lbs/MMBtu on a 30-day rolling average Continuous Emission Monitoring (CEM) data recorded pursuant to condition V.A.3.a below
  - 2) Long term limit of 0.05 lbs/MMBtu on a 12-month rolling average Continuous Emission Monitoring (CEM) data recorded pursuant to condition V.A.3.a below
- c. The permittee shall not exceed, at any time, with the exception of actions to mitigate emergency conditions, an annual natural gas capacity factor of 78.4% for each Riley Boiler. (RACT Order No. 235; 25 Pa Code §129.99; §2102.04.b.5).
- d. At no time shall the permittee allow Riley Boilers No. 1, 2 or 3 to operate unless the subject equipment is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (RACT Order No. 235, Condition 1.1; §2102.04.b.5; 25 Pa Code §129.99).

- e. NO<sub>x</sub> emissions from each Riley Boilers No. 1, 2 or 3 shall not exceed the limitations in Table V-A-1 below: (25 Pa Code §129.99; §2102.04.b.5; §2105.06.d)

**TABLE V-A-1: NO<sub>x</sub> Emission Limitations**

Process	Emission Limit** lbs/MMBtu	Hourly Emission Limit (lb/hr)	Annual Emission Limit (tons/year)*
Boiler 1	0.07(**)	36.75	115
	0.05(***)		
Boiler 2	0.07(**)	36.75	115
	0.05(***)		
Boiler 3	0.07(**)	36.75	115
	0.05(***)		

\*A year is defined as any consecutive 12-month period.

\*\*Based on a 30-day rolling average limit of 0.07 lbs/MMBtu.

\*\*\*Based on a 12-month rolling average limit of 0.05 lbs/MMBtu.

**2. Testing Requirements:**

- a. The permittee shall perform particulate matter, sulfur oxides and nitrogen oxides emissions testing on Riley Boilers No. 1, 2 and 3 once every two years from the date of the prior valid test in order to demonstrate compliance with Conditions V.A.1.b and V.A.1.e above. Such testing shall be conducted under maximum normal (i.e., mixed fuel) operating conditions in accordance with applicable U.S. EPA approved test methods, Article XXI §2108.02, or another Department approved test method. During this testing, the permittee shall compute the F-factor for BFG combustion. (§2103.12.h.1; §2108.02.b, §2108.02.e; 25 Pa Code §129.99; 25 Pa Code §129.100)
- b. Emissions of NO<sub>x</sub> may be determined by the CEMs required in Condition V.A.3.a below in lieu of a stack test to determine compliance with the emissions limitation of Condition V.A.1.b and V.A.1.e above. (§2103.12.i; §2103.12.h.1; §2108.02; §2108.03; 25 Pa Code §129.99; 25 Pa Code §129.100)
- c. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.14 above and Article XXI §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. The permittee shall install, calibrate, maintain, and operate a CEM for Riley Boilers No. 1, 2 and 3, and record the output of each system, for measuring nitrogen oxide emissions discharged to the atmosphere. The CEM data recorder shall convert the data to the required reporting units in compliance with 25 PA Code §§139.101-139.111 relating to requirements for continuous in-stack monitoring for stationary sources. (§2108.03.b.2, RACT Order No. 235, Condition 1.4; §2102.04.b.5; 25 Pa Code §129.100)

**4. Record Keeping Requirements**

- a. The permittee shall maintain all appropriate records to demonstrate compliance with the requirements of §2105.06. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06 are met. The permittee shall record and maintain such data and information required to determine compliance for the facility in a time frame consistent with the averaging period of the requirements of both §2105.06 and RACT Order No. 235. Such information shall include, but not be limited to, the following minimum information which shall be submitted to the Department as a written report at three month intervals: (§2102.04.b.5; §2108.03.d, §2105.06; 25 Pa Code §129.100)
  - 1) All recording and reporting required by Section 2108.03 of Article XXI and entitled “Continuous Emission Monitoring.”
  - 2) An identification of each instance during the reporting period during which emissions exceeded the applicable emission limitation rates in Condition V.A.1.b above and an identification of the reasons, if known, for such exceedance. The averaging period used for making such identification shall correspond to the averaging period specified in condition V.A.1.e above.
  - 3) An identification of each period during which the continuous emission monitoring system was inoperative, except for zero and span drift checks, the reasons therefore, and the nature of repairs or adjustments performed or to be performed.
  - 4) An identification of calibrations, zero and span drift checks, and other quality assurance procedures.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.j; §2103.12.h.1)
- c. All records shall be retained by the facility for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2; 25 Pa Code §129.100)

**5. Reporting Requirements**

- a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)
  - 1) Total monthly Fuel Combustion Unit fuel use, per fuel type;
  - 2) The monthly average H<sub>2</sub>S content of the COG fired; and
  - 3) Non-compliance information required to be recorded by condition V.A.4.b above.
- b. Reporting instances of non-compliance in accordance with condition V.A.5.a.3) above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. (§2103.12.k.1)

**6. Work Practice Requirements:**

The permittee shall calibrate, maintain, and operate the Fuel Combustion Units according manufacturer’s recommendations and good engineering practices. (§2105.03; 25 Pa Code §129.99)

**7. Additional Requirements**

None except as specified elsewhere.

**B. Process P001b: Blast Furnace No. 1 Stoves; Process P002b: Blast Furnace No. 3 Stoves**

**Process Description:** Blast Furnace No. 1 Stoves and Blast Furnace No. 3 Stoves (3 Stoves for each blast furnace)  
**Facility ID:** P001b and P002b  
**Max. Heat Input:** 495 MMBtu/hour (total for each set of blast furnace stoves)  
**Fuel(s):** BFG, COG, NG  
**Control Device(s):** None  
**Stack I.D.:** S001 and S004

**1. Restrictions:**

- a. The permittee shall continue to meet the conditions of the current Title V Operating Permit #0051 not otherwise affected by the revisions in this permit. (§2102.04.b.5; §2105.06.d)
- b. At no time shall the permittee allow the No. 1 and No. 3 Blast Furnace Stoves to operate unless the subject equipment is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance, and as required by condition V.B.4.a, with the exception of actions to mitigate emergency conditions. (RACT Order No. 235, Condition 1.1; 25 Pa Code §129.99; §2102.04.b.5).
- c. Nitrogen Oxide (NO<sub>x</sub>) emissions from each Stoves No. 1 or 3, shall not at any time exceed 0.03 lb/MMBtu and 65.04 tons per year, with the exception of actions to mitigate emergency situations. (25 Pa code §129.99; 2102.04.b.5; §2105.06.d)
- d. NO<sub>x</sub> emissions from each Stoves No. 1 or 3 shall not exceed the limitations in Table V-B-1 below: [25 Pa code §129.99; §2102.04.b.5; §2105.06.d]

**TABLE V-B-1: NO<sub>x</sub> Emission Limitations**

Process	Emission Limit lbs/MMBtu	Hourly Emission Limit (lb/hr)	Annual Emission Limit (tons/year)*
Blast Furnace Stove 1	0.03	14.85	65.04
Blast Furnace Stove 3	0.03	14.85	65.04

\*A year is defined as any consecutive 12-month period.

**2. Testing Requirements:**

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with condition IV.14 and Article XXI §2108.02. [§2103.12.h.1]

**3. Monitoring Requirements:**

None, except as provided elsewhere.

**4. Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for the No. 1 and No. 3 Blast Furnace Stoves: (§2103.12.h; §2103.12.j; 25 Pa Code §129.100)
  - 1) Fuel type and consumption (daily, monthly, and 12-month);
  - 2) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment necessary for proper operation of the stoves.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2; 25 Pa Code §129.100)

**5. Reporting Requirements:**

- a. The permittee shall report non-compliance information required to be recorded by the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)
- b. Reporting instances of non-compliance in accordance with condition V.B.5.a does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. (§2103.12.k)

**6. Work Practice Standard:**

None except provided elsewhere.

**7. Additional Requirements:**

None except provided elsewhere.

**C. Process Equipment Sources****1. Work Practice Standard**

- a. At no time shall the permittee operate the following equipment at the facility unless they are properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (RACT Order No. 235, Condition 1.1; 25 Pa Code §129.99; §2102.04.b.5).
- 1) Blast Furnace No. 1 and Casthouse
  - 2) Blast Furnace No. 3 and Casthouse
  - 3) BFG Flare
  - 4) Basic Oxygen Process (BOP) Shop
  - 5) Ladle Metallurgy Facility (LMF)
  - 6) Dual Strand Caster
- b. The permittee shall conduct annual adjustment and tune-up on the blast furnaces 1 & 3 to include at a minimum: [(25 Pa Code §129.99; §2102.04.b.5).§2105.06.d.2];
- 1) Inspection, adjustment, cleaning, or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimize emissions of CO; and
  - 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacture

**2. Record Keeping Requirements:**

- a. The following records must be maintained for the adjustment and tune up required in condition V.C.1.b for Blast Furnaces 1 and 3: [(25 Pa Code §129.99; §2102.04.b.5).
- 1) The date of the adjustment procedure;
  - 2) The name of the service company and technicians;
  - 3) The operating rate or load after adjustment;
  - 4) The CO and NO<sub>x</sub> emission rates before and after adjustment;
  - 5) The excess oxygen rate after adjustment; and
  - 6) Other information required by the applicable operating permit.

**D. Process P005: Rotary Dryer**

<b>Process Description:</b>	<b>Rotary Kiln Dryer</b>
<b>Facility ID:</b>	<b>S004</b>
<b>Max. Design Rate/Units:</b>	<b>24.59 MMBTU/hr</b>
<b>Fuel:</b>	<b>Coke Oven Gas</b>
<b>Raw Materials:</b>	<b>Briquettes for Blast Furnace and BOP Shop</b>
<b>Control Device(s):</b>	<b>One (1) Cyclone and One (1) Baghouse</b>

This Rotary Dryer (P005) is owned and operated by Braddock Recovery but it is located on USS- ET Plant, and it supports the United States Steel- Edgar Thomson Plant “Waste Product Recycling and Briquetting Process.

**1. Work Practice Standard:**

- a. At no time shall the permittee operate the rotary kiln dryer unless they are properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (25 Pa Code §129.97(d); §2102.04.b.5).
- b. The permittee shall perform a bi-annual tune up on the rotary kiln dryer in accordance with procedures in 40 CFR 63.11223 (relating to how do I demonstrate continuous compliance with the work practice and management standards). The biennial tune-up must include, at a minimum, the following: [25 Pa Code 129.97(b)(1)]
  - i. Inspection and cleaning or replacement of fuel-burning equipment, including the burners and components, as necessary, for proper operation as specified by the manufacturer.
  - ii. Inspection of the flame pattern and adjustment of the burner, as necessary, to optimize the flame pattern to minimize total emissions of NO<sub>x</sub> and, to the extent possible, emissions of CO.
  - iii. Inspection and adjustment, as necessary, of the air-to-fuel ratio control system to ensure proper calibration and operation as specified by the manufacturer.

**2. Record Keeping Requirements:**

The owner or operator shall comply with the applicable recordkeeping requirements of §129.100(d), (e) or (f) (relating to compliance demonstration and recordkeeping requirements). [25 Pa code 129.97(b)(3)]

## VI. ALTERNATIVE OPERATING SCENARIOS

None except as specified elsewhere.

**VII. EMISSIONS LIMITATIONS SUMMARY**

The following table summarizes the annual maximum potential RACT II NO<sub>x</sub> emissions for Boilers 1 through 3 and Blast Furnace Stoves 1 and 3.

**TABLE VII-1: Emission Limitations Summary**

Pollutant	Annual Combined Emission Limit (tons/year)*
Nitrogen Oxides (NO <sub>x</sub> )	474.96

\*A year is defined as any consecutive 12-month period.

**EXHIBIT B**

**PLAN APPROVAL ORDER AND AGREEMENT UPON CONSENT NO. 235  
DECEMBER 30, 1996**

ALLEGHENY COUNTY HEALTH DEPARTMENT

IN RE:

USX Corporation ) PLAN APPROVAL ORDER  
US Steel Group ) AND AGREEMENT NO. 235  
Edgar Thomson Works ) UPON CONSENT  
Allegheny County  
Braddock, PA 15034

AND NOW, this 30th day of December, 1996,

WHEREAS, the Allegheny County Health Department, (hereafter referred to as "Department"), has determined that the USX Corporation, US Steel Group, (hereafter referred to as "USX"), 600 Grant Avenue, Pittsburgh, Allegheny County, PA 15222, is the owner and operator of a steel production facility at 13th. Street Braddock, Allegheny County, PA 15034 (hereafter referred to as "the facility"), is a major stationary source of oxides of nitrogen a potential major source of volatile organic compounds (hereafter referred to as "NO<sub>x</sub> & VOCs") emissions as defined in Section 2101.20 of Article XXI, Rules and Regulations of the Allegheny County Health Department, Air Pollution Control (hereafter referred to as "Article XXI"); and

WHEREAS, the Department has determined that Section 2105.06.a. of Article XXI, entitled "Major Sources of NO<sub>x</sub> & VOCs" is applicable to USX's operations at this facility; and

WHEREAS, USX promptly submitted to the Department all documents required by Section 2105.06.b of Article XXI. (hereafter

referred to as "the proposal"); and

WHEREAS, the Department, after a review of the submitted proposal, has determined the proposal to be complete; and

WHEREAS, the Department has further determined, after review of the submitted proposal, that it constitutes Reasonably Available Control Technology (hereafter referred to as "RACT") for control of NO<sub>x</sub> and VOC emissions from the facility; and

WHEREAS, the Department and USX desire to memorialize the details of the submitted proposal by entry of an Plan Approval Order and Agreement Upon Consent; and

WHEREAS, pursuant to Section 2109.03 of Article XXI, whenever the Director of the Allegheny County Health Department or his designated representative finds, on the basis of any information available to him, that any source is being operated in violation of any provision of Article XXI, he may order the person or persons responsible for the source to comply with Article XXI; and

NOW, THEREFORE, this day first written above, the Department, pursuant to Section 2109.03 of Article XXI, and upon agreement of the parties as hereinafter set forth, hereby issues this Plan Approval Order and Agreement upon Consent:

I. ORDER

1.1. At no time shall USX operate the following equipment at the facility unless they are properly operated and maintained according to good engineering and air pollution control practices, with the exception of actions to mitigate emergency conditions:

- A. Boilers 1 through 3
- B. Blast Furnace Stoves and casthouses # 1 & #3
- C. Dual Strand Continuous Caster
- D. Basic Oxygen Furnace vessels # 1 and # 2
- E. Blast Furnace Gas Flare
- F. Hot Metal Transfer and Desulfurization unit
- G. Blast Furnace Ramming mix operations

1.2. At no time shall Boilers 1, 2 & 3 exceed the following limits for NO<sub>x</sub> emissions, with the exception of actions to mitigate emergency situations:

<u>Boiler #</u>	<u>lb/MMBTUs</u>	<u>TON(s)/Yr</u>
1	0.55	800
2	0.55	800
3	0.55	800

1.3. The facility shall not exceed, at any time, with the

exception of actions to mitigate emergency conditions, the following annual natural gas capacity factors for boilers no. 1, 2, and 3 at the facility:

<u>Boiler #</u>	<u>Capacity Factor</u>
1	78.4%
2	78.4%
3	78.4%

- 1.4. Boilers no. 1, 2 and 3 at the facility shall have properly maintained and operated Continuous Monitoring Systems or approved alternatives (hereafter referred to as "CEM"), meeting all requirements of Section 2108.03 of Article XXI at all times with the exception of emergency or planned outages, repairs or maintenance.
- 1.5. The NO<sub>x</sub> emission limitations for boilers no. 1, 2 and 3 specified in paragraph 1.2 above, shall be determined by a thirty day rolling average and by an twelve month rolling average of CEM data for the Lbs/MMBTU and Tons/Yr emission limitation respectively.
- 1.6. USX shall retain all records required by both §2105.06 of Article XXI and this order for at least two years and shall be made available to the Department upon request.

- 1.7. USX shall maintain all appropriate records to demonstrate compliance with the requirements of §2105.06 of Article XXI. Such records shall provide sufficient data clearly demonstrate that all requirements of this section are being met.

## II. AGREEMENT

The foregoing Order shall be enforced in accordance with and is subject to the following agreement of the parties, to wit:

- 2.1. The contents of this Order shall be submitted to the U.S. Environmental Protection Agency as a revision to the Commonwealth of Pennsylvania's State Implementation Plan (hereafter referred to as "SIP").
- 2.2. Failure to comply with any portion of this Order or Agreement is a violation of Article XXI that may subject USX to civil proceedings, including injunctive relief, by the Department.
- 2.3. This Order does not, in any way, preclude, limit or otherwise affect any other remedies available to the Department for violations of this Order or of Article

XXI, including, but not limited to, actions to require the installation of additional pollution control equipment and the implementation of additional corrective operating practices.

2.4. USX hereby consents to the foregoing Order and hereby knowingly waives all rights to appeal said Order, and the undersigned represents that he is authorized to consent to the Order and to enter into this Agreement on behalf of USX.

2.5. USX acknowledges and understands that the purpose of this Agreement is to establish RACT for the control of emissions of NO<sub>x</sub> and VOCs from this facility. USX further acknowledges and understands the possibility that the U.S. EPA may decide to not accept the Agreement portion of the Plan Approval Order and Agreement by Consent as a revision to the Commonwealth of Pennsylvania's SIP.

IN WITNESS WHEREOF, and intending to be legally bound,  
the parties hereby consent to all of the terms and conditions of  
the foregoing Plan Approval Order and Agreement as of the date of  
the above written.

USX CORPORATION  
US STEEL GROUP

By: David Wohl

(signature)

Print or type Name: D. H. Lohr

Title: General Manager  
Mon Valley Works

Date: 12/17/96

ALLEGHENY COUNTY HEALTH DEPARTMENT

By: Bruce W. Dixon 12/30/96

Bruce W. Dixon, M.D., Director  
Allegheny County Health Department

and By: Thomas J. Puzniak

Thomas J. Puzniak, Manager Engineering  
Air Quality Program

**EXHIBIT C**

**NO ACTION ASSURANCE LETTER FROM ACHD TO U. S. STEEL  
DATED NOVEMBER 1, 2016**

COUNTY OF



ALLEGHENY

RICH FITZGERALD  
COUNTY EXECUTIVE

November 1, 2016

via electronic and first-class mail: [DWHacker@uss.com](mailto:DWHacker@uss.com)

David W. Hacker  
Counsel  
United States Steel Corporation  
600 Grant Street, Suite 1500  
Pittsburgh, PA 15219

RE: United States Steel Corporation No Action Assurance Regarding Additional Reasonably Available Control Technology (RACT) Submittals

Dear Mr. Hacker:

As we discussed, the Allegheny County Health Department (“ACHD” or “Department”) has previously received U. S. Steel’s 2014 RACT evaluations for U. S. Steel’s Clairton, Edgar Thomson and Irvin plants that U. S. Steel provided in response to the Department’s December 2013 request.

Since the Department’s receipt of the 2014 RACT submittals, the Pennsylvania Department of Environmental Protection promulgated updated RACT requirements for major sources of NOx and VOCs (“Additional RACT Requirements for Major Sources of NOx and VOC”). (See April 23, 2016, *Pennsylvania Bulletin*, 46 PaB 2036.) While the Department has not yet determined that the Commonwealth’s updated requirements are applicable to sources within Allegheny County, if it were to determine that said requirements were applicable, U.S. Steel’s 2014 RACT submittals are acceptable as submissions in furtherance of ultimate departmental approval and satisfying U. S. Steel’s obligations to provide an alternate RACT compliance approach pursuant to 25 PA Code §129.99.

Because the Department has not completed its review of the submissions, the Department is not offering its final approval of the plan. Rather, the Department is merely issuing this no action assurance regarding the report submittal and RACT limits pursuant to the 2016 rule until the Department completes its review. The Department emphasizes that it is the submission that it



KAREN HACKER, MD, MPH, DIRECTOR  
**ALLEGHENY COUNTY HEALTH DEPARTMENT**  
**AIR QUALITY PROGRAM**

301 39<sup>TH</sup> STREET • CLACK HEALTH CENTER • BUILDING 7  
PITTSBURGH, PA 15201-1811  
PHONE (412) 578-8103 • FAX (412) 578-8144  
24-HR (412) 687-ACHD (2243) • [WWW.ACHD.NET](http://WWW.ACHD.NET)

now deems acceptable and not the plan which still requires approval. The Department also reserves the right to request additional information from U. S. Steel to evaluate RACT for the Clairton, Edgar Thomson, and Irvin plants.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jason K. Willis". The signature is written in a cursive style with a large initial "J".

Jason K. Willis  
Assistant Solicitor,  
Allegheny County Health Department

**BEFORE THE HEARING OFFICER FOR THE  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
542 4TH AVENUE  
PITTSBURGH, PENNSYLVANIA 15219**

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UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Appellant,	)	
	)	
v.	)	Appeal of Reasonably Available Control
ALLEGHENY COUNTY HEALTH	)	Technology Installation Permit # 0051-I008
DEPARTMENT, Air Quality Program,	)	
	)	
Appellee.	)	

**CERTIFICATE OF SERVICE**

I hereby certify that on the 1<sup>st</sup> day of June 2020, a true and correct copy of the foregoing Notice of Appeal was served via electronically<sup>5</sup> to the following individuals:

Max Slater, Esq.  
Administrative Hearing Officer  
Allegheny County Health Department  
542 Fourth Avenue  
Pittsburgh, PA 15219  
[max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us)

Jason K. Willis, Esq.  
Assistant Solicitor  
Allegheny County Health Department  
301 39<sup>th</sup> Street, Bldg. No. 7  
Pittsburgh, PA 15201  
[jason.willis@alleghenycounty.us](mailto:jason.willis@alleghenycounty.us)

Respectfully submitted,



---

David W. Hacker, Esq.  
Counsel for United States Steel Corporation

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<sup>5</sup> Pursuant to the Hearing Officer's Emergency COVID-19 Order, dated May 8, 2020, filing of this notice of appeal, and service is being completed electronically.



United States Steel Corporation  
Law Department  
600 Grant Street  
Pittsburgh, PA 15219-2800  
Tel: 412.433.2919  
E-mail: [dwhacker@uss.com](mailto:dwhacker@uss.com)

**David W. Hacker**  
Senior Counsel-Environmental

**VIA EMAIL**

June 1, 2020

Dr. Debra L. Bogen  
Director  
Allegheny County Health Department  
542 Fourth Avenue  
Pittsburgh, PA 15219  
Sent to: [todd.bogdanovich@alleghenycounty.us](mailto:todd.bogdanovich@alleghenycounty.us)

Max Slater  
ACHD Hearing Officer  
542 Fourth Avenue  
Pittsburgh, PA 15219  
[max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us)

**RE: United States Steel Corporation – Clairton Plant  
Appeal of Reasonable Available Control Technology  
Installation Permit No. 0052-I020**

Dear Dr. Bogen and Hearing Officer Slater:

Pursuant to Article XI of the Rules and Regulations of the Allegheny County Health Department, United States Steel Corporation submits for filing the enclosed Notice of Appeal regarding the above-referenced permit. If you have any questions or wish to discuss this matter further, please contact me at [dwhacker@uss.com](mailto:dwhacker@uss.com) or (412) 433-2919; or Mike Winek at [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com) or (412) 394-6538.

Sincerely,

A handwritten signature in blue ink, appearing to read 'DWHacker', with a long horizontal flourish extending to the right.

David W. Hacker

Attachments

cc: Jason Willis, Esq. (via e-mail: [Jason.Willis@AlleghenyCounty.us](mailto:Jason.Willis@AlleghenyCounty.us))  
Mike Winek (via e-mail: [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com))

## Notice of Appeal

This form is used to file an appeal of an order, notice, decision, determination, or ruling by the Allegheny County Health Department. Please complete this form (use additional pages as necessary). If more than one person or entity is filing this appeal, please attach a separate form for each additional appellant. A copy of the order, notice, decision, determination, or ruling must be attached to the Notice of Appeal.

Name United States Steel Corporation - Clairton Plant  
Mailing Address 400 State Street  
City Clairton State PA Zip 15025 Email KBarshick@uss.com  
Phone (412) 675-2600 Fax (optional) \_\_\_\_\_

If you are represented by an attorney, please provide contact information for your attorney:

Name Michael Winek, Babst Calland  
Mailing Address Two Gateway Center, Sixth Floor  
City Pittsburgh State PA Zip 15222 Email mwinek@babstcalland.com  
Phone (412) 394-6538 Fax (optional) \_\_\_\_\_

Describe your objections to the Department's actions and a statement describing the relief you want the Hearing Officer to grant. (The objections may be factual or legal and must be specific. If you fail to state an objection here, you may be barred from raising it later in your appeal. Use additional pages if necessary.)

Please see attached.  
\_\_\_\_\_  
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\_\_\_\_\_

By filing this Notice of Appeal with the Allegheny County Health Department, I hereby certify that the information submitted is true and correct to the best of my information and belief.

Signature  Date 5/29/2020

Appeals should be submitted in person or by mail to: Allegheny County Health Department Attention: Hearing Officer 542 4th Avenue Pittsburgh, PA 15219, or emailed to the Hearing Officer at [max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us).

**BEFORE THE HEARING OFFICER FOR THE  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
542 4TH AVENUE  
PITTSBURGH, PENNSYLVANIA 15219**

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UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Appellant,	)	
	)	
v.	)	Appeal of Reasonable Available
	)	Control Technology Installation
ALLEGHENY COUNTY HEALTH	)	Permit No. 0052-I020
DEPARTMENT, Air Quality Program,	)	
	)	
Appellee.	)	

**NOTICE OF APPEAL**

NOW COMES, Appellant, UNITED STATES STEEL CORPORATION (hereinafter “U.S. Steel”), pursuant to Sections 1103 and 1104 of Article XI of the Allegheny County Health Department’s Rules and Regulations, before the Director of the Allegheny County Health Department (“ACHD” or “Department”), filing this appeal from the Department’s issuance of “Reasonably Available Control Technology” Installation Permit # 0052-I020 to U. S. Steel Corporation’s Clairton Plant, Clairton, Pennsylvania, with an issuance date of April 24, 2020, and received by U. S. Steel via email on April 27, 2020. A true and correct copy of the permit is provided as Exhibit A to this notice of appeal. This submission constitutes timely filing of a Notice of Appeal<sup>1</sup> of a Department action, and properly specifies the manner in which U.S. Steel is aggrieved by the Department’s action.

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<sup>1</sup> This notice of appeal is timely filed because, consistent with the Pennsylvania Supreme Court’s (COVID-19) Order Nos. 531 and 532, Judicial Administrative Docket, dated April 28, 2020, the ACHD Hearing Officer issued an emergency order, dated May 8, 2020, which provides that any administrative appeal before the ACHD Hearing Officer which was required to be filed between March 19, 2020 and June 1, 2020 shall be deemed to have been timely filed if it is filed by June 2, 2020.

### **A. Manner in which U. S. Steel is Aggrieved and Grounds for Appeal**

1. U. S. Steel owns and operates the Clairton Plant, a by-products coke facility, located at 400 State Street, Clairton Pennsylvania 15025 (hereinafter “Facility”).

2. The Department issued “Reasonably Available Control Technology (“RACT”) Installation Permit No. 0052-I020” (hereinafter “RACT Installation Permit”) on April 24, 2020, and it was received by U. S. Steel on or about April 27, 2020.

3. U. S. Steel objects to the Department’s issuance of the RACT Installation Permit. By issuing the RACT Installation Permit, the Department has abused its discretion and acted unreasonably, arbitrarily, capriciously, contrary to fact and law and in a manner not supported by evidence. U. S. Steel objects to the Department’s issuance of the RACT Installation Permit because it contains numerous enforceable conditions that are arbitrary, capricious, unreasonable, an abuse of the Department’s discretion, and contrary to law including the federal Clean Air Act, 42 U.S.C. §7401 *et seq.* (“CAA”), federal Administrative Procedures Act, 5 U.S.C. §551 *et seq.* and state and local analogs (collectively “APA”), Pennsylvania Air Pollution Control Act, 35 P.S. Section 4001 *et seq.* (“APCA”), and Article XXI. The Department’s imposition of these requirements is therefore unreasonable, arbitrary and capricious, contrary to law including the CAA, APA, APCA and Article XXI, and an abuse of the Department’s discretion. U. S. Steel’s objections specifically include:

- a. The Department issued the permit without having received a complete application as required by Article XXI, § 2102.04(b), which requires: “[t]he Department shall not issue *any* [emphasis added] Installation Permit unless it has complied with all applicable requirements under this Article for public notice and received a complete

application... “[emphasis added]. In particular, the Department did not request nor did the Facility submit a permit application related to or for issuance of the RACT Installation Permit.

- b. The Department issued the RACT Installation Permit with *substantively different* terms and conditions than what was presented in the draft permit *and which could not be reasonably anticipated*, without affording U. S. Steel the ability to comment on the substantive changes prior to including them in the final RACT Installation Permit. Such action is contrary to law, including the APA and Article XXI, and an abuse of the Department’s discretion.
- c. The Department issued the RACT Installation Permit with new substantive conditions (including vague and ambiguous tune-up and flare minimization requirements, especially as *apparently applied* to the affected emissions units<sup>2</sup>) which are significantly different than what was provided in the draft permit (and for which could not be reasonably anticipated) *with an effective date being the same as the issued date*. U. S. Steel had no notice of the changes (and actually received the permit after its effective date), contrary to the requirements of the APA and Article XXI.
- d. Contrary to the Department’s rules and regulations, the Department issued the RACT Installation Permit, an installation permit, to the Facility, while the Facility did not (nor did it request) to “*install, modify, replace, reconstruct, or reactivate*” any source or air pollution control equipment at the Facility.

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<sup>2</sup> The tune up requirement is vague and ambiguous, as explained *supra*.

- e. The Department unilaterally and unlawfully issued the RACT Installation Permit imposing conditions and limits contrary to those conditions and limits imposed by Plan Approval Order and Agreement Upon Consent No. 234 (hereinafter referred to as “RACT Order 234.”) A true and correct copy of RACT Order 234 is provided as Exhibit B to this notice of appeal. Specifically, the Department *unilaterally and unlawfully* reduced the nitrogen oxide limits agreed to in RACT Order 234, which the parties previously agreed to and which continue to be a part of the Pennsylvania State Implementation Plan (“SIP”.) While U. S. Steel acknowledges that ACHD can and, at times, is required to revise its portion of the Pennsylvania SIP, it cannot unilaterally modify a Federally enforceable agreement which includes RACT Order 234. In particular, RACT Order 234 provides that, “intending to be legally bound, the parties hereby consent to all of the terms and conditions of the foregoing Plan Approval Order and Agreement as of the date of the above written [December 30, 1996.]<sup>3</sup>
- f. Because the Department has determined that no new controls are technologically and economically feasible and no fuel and operating scenarios regarding the affected units have changed since entering RACT Order 234, changing the limits imposed in RACT Order 234 is unlawful.

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<sup>3</sup> According to the Department, U. S. Steel provided the Department with all required information for the RACT determination. See attached letter from Jason Willis (ACHD) to David Hacker (U. S. Steel), dated November 1, 2016 (attached herein as Exhibit C). As noted therein, in 2014, U. S. Steel proposed a case by case RACT determination and that determination indicated that no changes to the existing RACT requirements are required for RACT II. In response, the Department advised U. S. Steel that U. S. Steel satisfied its RACT evaluation obligation. While in the letter the Department does not offer a final approval of the plan, the Department was afforded sufficient time to seek revision to RACT Order 234. Instead, the Department acted unlawfully by unilaterally issuing the RACT Installation Permit with conditions that are unlawful and inconsistent with RACT Order 234.

- g. The limits provided in Conditions V.A.1.(b), (c) and (e) and in Table V-A-1, on page 20 of the RACT Installation Permit, respectively, were determined in a manner which is contrary to the CAA, APCA, and the PADEP RACT II regulations (25 PA Code 129.96-129.100). Specifically, the Department imposed nitrogen oxide (“NO<sub>x</sub>”) limits for Boilers 1 and 2 that are not achievable under all previously permitted fuel and operating scenarios. The limits imposed for Boilers 1 and 2 are unlawful and unreasonably restrict U. S. Steel’s operations, and place U. S. Steel at an unfair competitive disadvantage.
- h. Conditions V.A.1.(b), (c) and (e) and in Table V-A-1, on page 20 of the RACT Installation Permit have not been demonstrated to be achievable for all currently permitted and fuel burning operating conditions and scenarios. In fact, while U. S. Steel agrees that additional controls are not technologically and economically feasible, based upon available operating and emissions data, U. S. Steel disagrees that the limits imposed are achievable under all currently (previously) permitted and fuel burning operating conditions and scenarios.
- i. Conditions V.A.1.(b), (c) and (e) and in Table V-A-1, on page 20 of the RACT Installation Permit have been derived in a manner inconsistent with the PADEP RACT II regulations.
- j. In Table V-A-1, on page 20 of the RACT Installation Permit, the averaging period for the hourly limit imposed is inconsistent with PADEP RACT II regulations, which uses 30-day rolling average limits for units equipped with Continuous Emissions Monitoring Systems (“CEMS”), which each of the boilers are equipped and use is required pursuant to existing permit requirements. Even if the hourly

limit is determined to be lawful, which it is not, the limit must be based upon a 30-day rolling average limit, as required by the PADEP RACT II regulations, not an individual hour.<sup>4</sup>

- k. The limits provided in Conditions V.B.1.(b) and V.B.1.(c) and in Table V-B-1, on page 23 of the RACT Installation Permit were determined in a manner which is contrary to the CAA, APCA, and PADEP RACT II regulations.
- l. The limits provided in Conditions V.B.1.(b) and V.B.1.(c) and in Table V-B-1, on page 23 of the RACT Installation Permit have not been demonstrated to be achievable for all currently permitted and fuel burning operating conditions and scenarios. In fact, while U. S. Steel agrees that additional controls are not feasible (as the Department has determined), based upon available operating and emissions data, U. S. Steel disagrees that the limits imposed are achievable under all currently permitted and fuel burning operating conditions and scenarios.
- m. Condition V.B.2(a), testing requirements, requires testing once every two years, not one time in each 5-year calendar, contrary to state-wide applicable PADEP RACT II regulations (25 PA Code 129.100.)
- n. Conditions V.B.1(b), V.B.1(c), Table V-B-1 and Condition V.B.2(a) of the RACT Installation Permit have been derived in a manner inconsistent with the PADEP RACT II regulations

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<sup>4</sup> U. S. Steel notes that the Department seems to acknowledge that the limit is to be applied as a rolling 30-day average, as explained in the comment and response document for the RACT Installation Permit. However, the permit does not specifically identify the limit as a rolling 30-day average, leading to an inconsistency and ambiguity when reading the permit in total with the supporting comment and response document.

- o. The limits provided in Conditions V.C.1.(b), V.C.1.(c), V.C.2(a) and in Table V-C-1 on page 25 of the RACT Installation Permit were determined in a manner which is contrary to the CAA, APCA, and PADEP RACT II regulations.
- p. The limits provided in Conditions V.C.1.(b) and V.C.1.(c) and in Table V-C-1, on page 25 of the RACT Installation Permit have not been demonstrated to be achievable for all currently permitted and fuel burning operating conditions and scenarios. In fact, while U. S. Steel agrees that additional controls are not feasible (as the Department has determined), based upon available operating and emissions data, U. S. Steel disagrees that the limits imposed are achievable under all currently permitted and fuel burning operating conditions and scenarios.
- q. Condition V.C.2(a), testing requirements, on page 25 of the RACT Installation Permit requires testing once every two years, not one time in each 5-year calendar, contrary to state-wide applicable PADEP RACT II regulations (25 PA Code 129.100)
- r. The limits provided in V.C.1.(b), V.C.1.(c), and V.C.2(a) and in Table V-C-1 on page 25 of the RACT Installation Permit have been derived in a manner inconsistent with the PADEP RACT II regulations
- s. In 2014, U. S. Steel submitted a RACT evaluation which was accepted by the Department in 2016 as U. S. Steel's request for a RACT case-by-case limitation. In the evaluation, U. S. Steel determined that the existing RACT Order 234 limits should remain in place. Instead of applying the RACT Order limits, or requesting that U. S. Steel agree to modify RACT Order 234, the Department unilaterally,

unlawfully, and incorrectly determined, among other conditions, that the RACT limit would be substantially lower than the limits imposed by RACT Order 234.

- t. Conditions V.D.1.b through V.D.1.f, and Conditions V.E.1.a. and V.E.1.b - work practices on pages 27-29 of the RACT Installation Permit- are already required by the Facility's existing Title V permit. The requirements are duplicate and should be removed from any RACT permit or order.
- u. Condition V.D.1.f.7 on page 28 of the RACT Installation Permit, vaguely and ambiguously requires U. S. Steel to conduct annual tune-ups for the desulfurization plant. The condition is ambiguous and not necessarily feasible, as the prescriptive requirements are not feasible or relevant to a desulfurization plant. The prescriptive requirements appear to be derived from boiler and process heater requirements which cannot be adopted for the desulfurization plant. U. S. Steel is not aware of any such RACT obligation for any other desulfurization plant. Because the condition is vague, ambiguous, and incomprehensible (because such requirements are not feasible or otherwise appropriate to apply to a desulfurization plant), it should not be included in any RACT permit or order.
- v. Conditions provided in Section V.F ("Emergency Flare") on page 30 of the RACT Installation Permit are vague and ambiguous. It is not clear as to what the "Emergency Flare: is and whether it is the same as the "Ammonia Flare" listed in Table II-1 on page 5-6 of the RACT Installation Permit.
- w. Even if the "Emergency Flare" conditions in Section V.F. refer to the ammonia flare, some of the prescriptive requirements for the Flare Minimization Plan are not appropriate, applicable, or otherwise feasible for application to the ammonia flare.

- x. Notwithstanding the objections provided in paragraphs a and b, above, even if the Department had the authority to issue the RACT Installation Permit (which it does not), the Department made substantive changes to the draft permit and provided no opportunity for the Facility to comment;
- y. Contrary to the statewide applicable PA DEP RACT II regulations, the Department's unlawful action precluded U. S. Steel from seeking an emissions averaging method of compliance as authorized by 25 PA Code 129.98.
- z. In issuing the RACT Installation Permit, the Department relied upon limited and incomplete data to support the limits and its determination of RACT;
  - aa. By using incomplete data to make its RACT determinations, the Department is unlawfully prohibiting fuel operating scenarios, that are otherwise permitted and have been permitted prior to the issuance of the RACT Installation Permit;
  - bb. The RACT Installation Permit includes limits that are not achievable, are not based upon similar facilities, and are not based on a review of the RACT/BACT Clearinghouse;
  - cc. The Department has failed to adequately explain the basis for its RACT determinations;
  - dd. In issuing the RACT Installation Permit, the Department exceeded its authority under applicable law, including Article XXI, the CAA, the APCA, and the PADEP RACT II regulations;

**B. U. S. Steel's Direct Interest in the Action**

4. U. S. Steel is a named entity to which the RACT Installation Permit was issued, and whose activities are unlawfully and unreasonably restricted by the RACT Installation Permit. As a result, U. S. Steel is negatively impacted by the RACT Installation Permit and has a direct interest in the RACT Installation Permit and this appeal.

### **C. Conclusion**

5. Through this Notice of Appeal, U. S. Steel has identified its objections to the RACT Installation Permit but reserves the right to amend or supplement the factual and legal basis of its Appeal as authorized by the Department's Rules and Regulations.

6. For the foregoing reasons, U. S. Steel respectfully requests that the Director vacate the RACT Installation Permit, or alternatively, vacate the RACT Installation Permit *and* order the Department to implement its RACT obligations in a manner consistent with applicable laws including the CAA, the APCA, Article XXI, and PADEP RACT II regulations.

Respectfully submitted,



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David W. Hacker, Esq. (PAID#91236)  
United States Steel Corporation  
600 Grant Street, Suite 1500  
Pittsburgh, Pennsylvania 15219  
Telephone: (412) 433-2919  
Email: [dwhacker@uss.com](mailto:dwhacker@uss.com)

Michael H. Winek (PAID#69464)  
Babst, Calland, Clements and Zomnir, P.C.  
Two Gateway Center  
Pittsburgh, PA 15222  
Telephone (412) 394-5400  
Email: [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com)

*Counsel for Appellant*

Dated: June 1, 2020

**EXHIBIT A**

**RACT INSTALLATION PERMIT NO. 0052-I020  
ISSUED TO UNITED STATES STEEL CORPORATION  
CLAIRTON PLANT  
CLAIRTON, PENNSYLVANIA**



**AIR QUALITY PROGRAM**  
**301 39th Street, Bldg. #7**  
**Pittsburgh, PA 15201-1811**

**Reasonable Available Control Technology**  
**INSTALLATION PERMIT**

**Issued To:** U. S. Steel Mon Valley Works  
Clairton Plant  
400 State Street  
Clairton, PA 15025-1855

**ACHD Permit#:** 0052-I020

**Date of Issuance:** April 24, 2020

**Expiration Date:** (See Section III.12)

**Issued By:** \_\_\_\_\_  
JoAnn Truchan, P.E.  
Section Chief, Engineering

**Prepared By:** \_\_\_\_\_  
Hafeez Ajenifuja  
Air Quality Engineer

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### AMENDMENTS:

<i>DATE</i>	<i>SECTION(S)</i>
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## I. CONTACT INFORMATION

**Facility Location:** U. S. Steel Mon Valley Works  
Clairton Plant  
400 State Street  
Clairton, PA 15025-1855

**Permittee/Owner:** U. S. Steel Mon Valley Works  
Clairton Plant  
400 State Street  
Clairton, PA 15025-1855

**Permittee/Operator:** Same as Owner  
**(if not Owner)**

**Responsible Official:** Kurt Barshick  
**Title:** General Manager  
**Company:** U. S. Steel Mon Valley Works  
**Address:** P.O. Box 878  
Dravosburg, PA 15034  
**Telephone Number:** (412) 675-2600  
**Fax Number:** (412) 675-5407

**Facility Contact:** Jonelle Scheetz  
**Title:** Environmental Control Engineer  
**Telephone Number:** (412) 233-1015  
**Fax Number:** (412) 233-1011  
**E-mail Address:** [jsscheetz@uss.com](mailto:jsscheetz@uss.com)

### AGENCY ADDRESSES:

**ACHD Contact:** Chief Engineer  
Allegheny County Health Department  
Air Quality Program  
301 39th Street, Building #7  
Pittsburgh, PA 15201-1811

**EPA Contact:** Enforcement Programs Section (3AP12)  
USEPA Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

## II. FACILITY DESCRIPTION

### FACILITY DESCRIPTION

U. S. Steel Mon Valley Works Clairton Plant is the largest by-products coke plant in North America. The Clairton Plant operates 10 coke batteries and produces approximately 13,000 tons of coke per day from the destructive distillation (carbonization) of more than 18,000 tons of coal. During the carbonization process, approximately 225 million cubic feet of coke oven gas are produced. The volatile products of coal contained in the coke oven gas are recovered in the by-products plant. In addition to the coke oven gas, daily production of these by-products include 145,000 gallons of crude coal tar, 55,000 gallons of light oil, 35 tons of elemental sulfur, and 50 tons of anhydrous ammonia. The coke produced is used in the blast furnace operations in the production of molten iron for steel making.

### INSTALLATION DESCRIPTION

This installation permit is for inclusion of physical and operational conditions for subject facility pursuant to Reasonable Available Control Technology (RACT II) in section 2105.06 of Article XXI. There are no new units being added to the facility as part of this permitting action.

**TABLE II-1: Emission Unit Identification**

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P001	Coke Battery No. 1	Pushing Emission Control (PEC) Baghouse (P050 - Serves Batteries 1, 2 & 3)	517,935 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S001
P002	Coke Battery No. 2	PEC Baghouse (P050 - Serves Batteries 1, 2 & 3)	517,935 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S002
P003	Coke Battery No. 3	PEC Baghouse (P050 - Serves Batteries 1, 2 & 3)	517,935 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S003
P007	Coke Battery No. 13	PEC Baghouse (P052 - Serves Batteries 13, 14 & 15)	545,675 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S007
P008	Coke Battery No. 14	PEC Baghouse (P052 - Serves Batteries 13, 14 & 15)	545,675 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S008

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P009	Coke Battery No. 15	PEC Baghouse (P052 - Serves Batteries 13, 14 & 15)	545,675 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S009
P010	Coke Battery No. 19	PEC Baghouse (P053 - Serves Batteries 19 & 20)	1,002,290 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S010
P011	Coke Battery No. 20	PEC Baghouse (P053 - Serves Batteries 19 & 20)	1,002,290 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S011
P012	Coke Battery B	PEC Baghouse (P054)	1,491,025 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S012
P044	Coke Battery C	PROven® system, Pushing Emission Control Baghouse	1,379,059 tons of coal charged per year	Coal, recycled coke plant materials, and bulk density control additives	S014
P019	Desulfurization Plant	Afterburner	6,394,800 tons of coke per year	Coke oven tail gas	S023
P044	Light Oil Barge Loading	Vapor Recovery to Boiler	55,000,000 gallons per year	Light Oil, Tar, and Tar Distillates	NA
B001	Boiler No. 1 (Babcock & Wilcox)	NA	760 MMBtu/hour	Coke Oven Gas and Natural Gas	NA
B002	Boiler No. 2 (Combustion Engineering)	NA	481 MMBtu/hour	Coke Oven Gas and Natural Gas	NA
B005	R1 Boiler (Riley Stoker)	NA	229 MMBtu/hour	Coke Oven Gas and Natural Gas	NA
B006	R2 Boiler (Riley Stoker)	NA	229 MMBtu/hour	Coke Oven Gas and Natural Gas	NA
B007	T1 Boiler (Erie City Zurn)	NA	156 MMBtu/hour	Coke Oven Gas and Natural Gas	NA
B008	T2 Boiler (Erie City Zurn)	NA	156 MMBtu/hour	Coke Oven Gas and Natural Gas	NA
B010	Ammonia Flare	NA	12.5 MMBtu/hour	Propane (assist gas)	NA

### ***DECLARATION OF POLICY***

*Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.*

**The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.**

## **III. GENERAL CONDITIONS**

### **1. Prohibition of Air Pollution (§2101.11)**

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

- a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
- b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
- c. May reasonably be anticipated to endanger the public health, safety, or welfare.

### **2. Nuisances (§2101.13)**

Any violation of any requirement of this Permit shall constitute a nuisance.

### **3. Definitions (§2101.20)**

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.
- b. Unless specified otherwise in this permit or in the applicable regulation, the term “year” shall mean any twelve (12) consecutive months.

**4. Certification (§2102.01)**

Any report or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**5. Operation and Maintenance (§2105.03)**

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

**6. Conditions (§2102.03.c)**

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

**7. Transfers (§2102.03.e)**

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

**8. Effect (§2102.03.g)**

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

**9. General Requirements (§2102.04.a)**

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

- a. The Department has first issued an Installation Permit for such source or equipment; or
- b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

**10. Conditions (§2102.04.e)**

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this

Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

**11. Revocation (§2102.04.f)**

- a. The Department may, at any time, revoke this Installation Permit if it finds that:
  1. Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
  2. The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
  3. Air contaminants will not be controlled to the degree indicated by this permit;
  4. Any term or condition of this permit has not been complied with;
  5. The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or
- b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

**12. Term (§2102.04.g)**

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire 18 months after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of this Permit.

**13. Annual Installation Permit Administrative Fee (§2102.10.c & e)**

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of \$750.

**14. Severability Requirement (§2103.12.l)**

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

**15. Reporting Requirements (§2103.12.k)**

- a. The permittee shall submit reports of any required monitoring at least every six (6) months. All

instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

- b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.
- c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
  - 1. One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
  - 2. One semiannual report is due by February 1 of each year for the time period beginning July 1 and ending December 31.
  - 3. The first semiannual report shall be due July 31, 2020 for the time period beginning on the issuance date of this permit through June 30, 2020.
- e. Reports may be emailed to the Department at [aqreports@allegghenycounty.us](mailto:aqreports@allegghenycounty.us) in lieu of mailing a hard copy.

**16. Minor Installation Permit Modifications (§2102.10.d)**

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of \$300 and where:

- a. No reassessment of any control technology determination is required; and
- b. No reassessment of any ambient air quality impact is required.

**17. Violations (§2104.06)**

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article §2109.02.

**18. Other Requirements Not Affected (§2105.02)**

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

**19. Other Rights and Remedies Preserved (§2109.02.b)**

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit

**20. Penalties, Fines, and Interest (§2109.07.a)**

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

**21. Appeals (§2109.10)**

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

## IV. SITE LEVEL TERMS AND CONDITIONS

### 1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

### 2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- b. Equal or exceed an opacity of 60% at any time.

### 3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

### 4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

### 5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

### 6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

### 7. Shutdown of Control Equipment (§2108.01.b)

- a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment

is shut down.

- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.
- c. The prior report required by Site Level Condition IV.7.a above shall include:
  - 1. Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
  - 2. The reasons for the shutdown;
  - 3. The expected length of time that the equipment will be out of service;
  - 4. Identification of the nature and quantity of emissions likely to occur during the shutdown;
  - 5. Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
  - 6. Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
  - 7. Such other information as may be required by the Department.

#### **8. Breakdowns (§2108.01.c)**

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.
- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
  - 1. Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
  - 2. The nature and probable cause of the breakdown.
  - 3. The expected length of time that the equipment will be inoperable or that the emissions will continue.
  - 4. Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
  - 5. The estimated quantity of each material being or likely to be emitted.
  - 6. Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
  - 7. Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.

- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.
- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

**9. Cold Start (§2108.01.d)**

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

**10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)**

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

**11. Emissions Inventory Statements (§2108.01.e & g)**

- a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.
- b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit

giving rise to the remedies provided by Article XXI §2109.02.

**12. Orders (§2108.01.f)**

In addition to meeting the requirements Site Level Conditions IV.7 through IV.11, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

**13. Violations (§2108.01.g)**

The failure to submit any report or update thereof required by Site Level Conditions IV.7 through IV.12 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**14. Emissions Testing (§2108.02)**

- a. **Orders:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.
- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.

- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**15. Abrasive Blasting (§2105.51)**

- a. Except where such blasting is a part of a process requiring an operating permit, no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.
- b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

**16. Asbestos Abatement (§2105.62, §2105.63)**

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

**17. Volatile Organic Compound Storage Tanks (§2105.12.a)**

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

**18. Permit Source Premises (§2105.40)**

- a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:
1. Are visible at or beyond the property line of such source;
  2. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
  3. Have an opacity of 60% or more at any time.

- b. **Deposition on Other Premises:** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.18.a above.

**19. Parking Lots and Roadways (§2105.42)**

- a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:
1. Are visible at or beyond the property line;
  2. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
  3. Have an opacity of 60% or more at any time.
- b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.
- c. Site Level Condition IV.19.a above shall apply during any repairs or maintenance done to such parking lot or roadway.
- d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.19.

**20. Permit Source Transport (§2105.43)**

- a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.20.

**21. Construction and Land Clearing (§2105.45)**

- a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:

1. Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
2. Equal or exceed 60% at any time.

- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

**22. Mining (§2105.46)**

No person shall conduct, or allow to be conducted, any mining activities in such manner that emissions from such activities:

- a. Are visible at or beyond the property line;
- b. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- c. Have an opacity of 60% or more at any time.

**23. Demolition (§2105.47)**

- a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period.
- b. Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.23 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.23.

**24. Fugitive Emissions (§2105.49)**

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

- a. The use of asphalt, oil, water, or suitable chemicals for dust control;
- b. The paving and maintenance of roadways, parking lots and the like;
- c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
- d. The adoption of work or other practices to minimize emissions;
- e. Enclosure of the source; and
- f. The proper hooding, venting, and collection of fugitive emissions.

**25. Episode Plans (§2106.02)**

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent

with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

**26. New Source Performance Standards (§2105.05)**

- a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.
- b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

**27. National Emission Standards for Hazardous Air Pollutants (§2104.08)**

- a. The permittee shall comply with each applicable emission limitation, work practice standard, and operation and maintenance requirement of 40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*.

**28. Facility-wide Emission Limitations**

On or before 90 days after the initial startup and commissioning of the new Cogeneration units, the permittee shall permanently shutdown the three (3) existing Boiler No. 1, Boiler No. 2 and Boiler R1. [§2102.04.b.6]

- 29.** 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. In addition, the permittee shall not flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed or combusted unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 35 grains per hundred dry standard cubic feet of coke oven gas produced by Clairton Plant, when all sulfur emissions from the Claus Sulfur Recovery Plant and the tail gas cleaning equipment thereon, expressed as equivalent H<sub>2</sub>S are added to the measured H<sub>2</sub>S. The concentration of sulfur compounds specified shall include the tail-gas sulfur, measured as hydrogen sulfide, emitted from sulfur removal equipment. [§2105.21.h].

**V. EMISSION UNIT LEVEL TERMS AND CONDITIONS**

**A. Boilers No. 1 & 2:**

**Process Description:** Steam Production  
**Facility ID:** B001 & B002  
**Capacity:** 760 MMBtu/hr; 481 MMBtu/hr  
**Raw Materials:** Desulfurized coke oven gas and natural gas  
**Control Device:** NA

**1. Restrictions:**

- a. The permittee shall continue to meet the conditions of the current Title V Operating Permit #0052 not otherwise affected by the revisions in this permit. (§2102.04.b.5; §2105.06.d)
- b. Nitrogen Oxide (NO<sub>x</sub>) emissions from each Boiler No. 1 shall not at any time exceed 0.48 lb/MMBtu, with the exception of actions to mitigate emergency situations. (25 Pa Code §129.99; 2102.04.b.5; §2105.06.d)
- c. Nitrogen Oxide (NO<sub>x</sub>) emissions from each Boiler No. 2, shall not at any time exceed 0.37 lb/MMBtu, with the exception of actions to mitigate emergency situations. (25 Pa Code §129.99; 2102.04.b.5; §2105.06.d)
- d. The NO<sub>x</sub> emissions in conditions V.A.1.b and V.A.1.c above 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. (25 Pa Code §129.99; RACT Order No. 234, Condition 1.5; 2102.04.b.5; §2105.06.d)
- e. NO<sub>x</sub> emissions from each Boilers No. 1 or 2 shall not exceed the limitations in Table V-A-1 below: (25 Pa Code §129.99; §2102.04.b.5; §2105.06.d)

**TABLE V-A-1: NO<sub>x</sub> Emission Limitations**

Process	Emission Limit** lbs/MMBtu	Hourly Emission Limit (lb/hr)	Annual Emission Limit (tons/year)*
Boiler 1	0.48	364.80	1,598
Boiler 2	0.37	177.97	780

\*A year is defined as any consecutive 12-month period.

\*\*Based on a 30-day rolling average.

**2. Testing Requirements:**

- a. Emissions of NO<sub>x</sub> may be determined by the CEMs required in Condition V.A.3 below in lieu of a stack test to determine compliance with the emissions limitation of Conditions V.A.1.b, V.A.1.c and V.A.1.e above. (§2103.12.i; §2103.12.h.1; §2108.02; §2108.03; 25 Pa Code §129.100)
- b. The Department reserves the right to require additional emissions testing sufficient to assure

compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.14 and §2108.02. (§2103.12.h.1)

### 3. Monitoring Requirements:

- a. The permittee shall install, operate, and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with 25 PA Code §§139.101 - 139.111 relating to requirements for continuous in-stack monitoring for stationary sources. (§2108.03.b.2 and RACT Plan 234)

### 4. Record Keeping Requirements:

- a. The permittee shall maintain all appropriate records to demonstrate compliance with the requirements of §2105.06. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06 are met. The permittee shall record and maintain such data and information required to determine compliance for the facility in a time frame consistent with the averaging period of the requirements of both §2105.06 and RACT Order No. 235. Such information shall include, but not be limited to, the following minimum information which shall be submitted to the Department as a written report at three month intervals: (§2102.04.b.5; §2108.03.d, §2105.06; 25 Pa Code §129.100; RACT Plan 234)
  1. All recording and reporting required by Section 2108.03 of Article XXI and entitled "Continuous Emission Monitoring."
  2. An identification of each instance during the reporting period during which emissions exceeded the applicable emission limitation rates in Condition V.A.1.b above and an identification of the reasons, if known, for such exceedance. The averaging period used for making such identification shall correspond to the averaging period specified in condition V.A.1.d above.
  3. An identification of each period during which the continuous emission monitoring system was inoperative, except for zero and span drift checks, the reasons therefore, and the nature of repairs or adjustments performed or to be performed.
  4. An identification of calibrations, zero and span drift checks, and other quality assurance procedures.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.j)
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2; RACT Plan 234, Condition 1.8)

### 5. Reporting Requirements:

- a. The permittee shall report the following information semi-annually to the Department in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report. The reports shall be postmarked by the 30th day following the end of the reporting period. (§2103.12.k; §2103.12.a.2.D)
  1. Total monthly Fuel Combustion Unit, fuel use, per fuel type;
  2. Cold start information; and
  3. Non-compliance information required to be recorded by Condition V.A.4.b above

- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. (§2103.12.k)

**6. Work Practice Standards:**

At no time shall the permittee allow Boilers No. 1 or 2 to operate unless the subject equipment is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (RACT Order No. 234, Condition 1.1; §2102.04.b.5; 25 Pa Code §129.99).

**B. Boilers R1 and R2: B005 & B006**

**Process Description:** Steam production  
**Facility ID:** B005 & B006  
**Max. Design Rate:** 229 MMBtu/hr, each (Heat Input)  
**Capacity:** 229 MMBtu/hr, each (Heat Input)  
**Raw Materials:** Desulfurized coke oven gas  
**Control Device:** NA

**1. Restrictions:**

- a. The permittee shall continue to meet the conditions of the current Title V Operating Permit #0052 not otherwise affected by the revisions in this permit. (§2102.04.b.5; §2105.06.d)
- b. Nitrogen Oxide (NO<sub>x</sub>) emissions from each Boiler No. 1 or 2, shall not at any time exceed 0.31 lb/MMBtu, with the exception of actions to mitigate emergency situations. (25 Pa Code §129.99; 2102.04.b.5; §2105.06.d)
- c. NO<sub>x</sub> emissions from each Boilers No. R1 or R2 shall not exceed the limitations in Table V-B-1 below: (25 Pa Code §129.99; §2102.04.b.5; §2105.06.d)

**TABLE V-B-1: NO<sub>x</sub> Emission Limitations**

Process	Emission Limit** lbs/MMBtu	Hourly Emission Limit (lb/hr)	Annual Emission Limit (tons/year)*
Boiler R1	0.31	70.99	310.94
Boiler R2	0.31	70.99	310.94

\*A year is defined as any consecutive 12-month period.

**2. Testing Requirements:**

- a. The permittee shall perform emissions testing on Boilers R1 and R2 at least once every two years for NO<sub>x</sub>. Such testing shall be in accordance with EPA Methods 7 through 7E or other such methods as approved by the Department. [RACT Plan 234 and §2108.02.c; §2107.05]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.14 above and Article XXI §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

None except as provided elsewhere in the permit

**4. Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for the boilers: (§2103.12.j; 25 Pa Code §129.100)

1. Records of the amount of coke oven gas combusted and the H<sub>2</sub>S content of the coke oven gas (daily, monthly and 12 months)
  2. Cold starts (date, time and duration of each occurrence);
  3. Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.j)
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2)

**5. Reporting Requirements:**

- a. The permittee shall report the following information semi-annually to the Department in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report. (§2103.12.k; §2103.12.a.2.D)
1. Monthly and 12-month data required to be recorded by Condition V.B.4.a above;
  2. Cold start information; and
  3. Non-compliance information required to be recorded by Condition V.B.4.b above
- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. (§2103.12.k)

**6. Work Practice Standards:**

At no time shall the permittee allow Boiler No. R1 or R2 to operate unless the subject equipment is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (RACT Order No. 234, Condition 1.1; §2102.04.b.5; 25 Pa Code §129.99).

**C. Boilers T1 and T2: Existing Boiler T1 & T2**

**Process Description:** Steam production  
**Facility ID:** B007 & B008  
**Max. Design Rate:** 156 MMBtu/hr, each (Heat Input)  
**Capacity:** 156 MMBtu/hr, each (Heat Input)  
**Raw Materials:** Desulfurized coke oven gas and natural gas  
**Control Device:** NA

**1. Restrictions:**

- a. The permittee shall continue to meet the conditions of the current Title V Operating Permit #0052 not otherwise affected by the revisions in this permit. (§2102.04.b.5; §2105.06.d)
- b. Nitrogen Oxide (NO<sub>x</sub>) emissions from each Boiler No. T1 or T2, shall not at any time exceed 0.31 lb/MMBtu, with the exception of actions to mitigate emergency situations. (25 Pa Code §129.99; 2102.04.b.5; §2105.06.d)
- c. NO<sub>x</sub> emissions from each Boilers No. T1 or T2 shall not exceed the limitations in Table V-C-1 below: (25 Pa Code §129.99; §2102.04.b.5; §2105.06.d)

**TABLE V-C-1: NO<sub>x</sub> Emission Limitations**

Process	Emission Limit** lbs/MMBtu	Hourly Emission Limit (lb/hr)	Annual Emission Limit (tons/year)*
Boiler T1	0.31	40.36	211.02
Boiler T2	0.31	40.36	211.02

\*A year is defined as any consecutive 12-month period.

**2. Testing Requirements:**

- a. The permittee shall perform emissions testing on Boilers T1 and T2 at least once every two years for NO<sub>x</sub>. Such testing shall be in accordance with EPA Methods 7 through 7E or other such methods as approved by the Department. (RACT Plan 234 and §2108.02.c; §2107.05)
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.14 above and Article XXI §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

None except as provided elsewhere in the permit

**4. Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for the boilers T1 and T2: (§2103.12.j; 25 Pa Code §129.100)

1. Records of the type and amount of fuel combusted and the H<sub>2</sub>S content of the coke oven gas (daily, monthly and 12 months)
  2. Cold starts (date, time and duration of each occurrence);
  3. Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.j)
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2)

**5. Reporting Requirements:**

- a. The permittee shall report the following information to the Department semi-annually in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report. The reports shall be postmarked by the 30th day following the end of the reporting period. (§2103.12.k; §2103.12.a.2.D)
1. Monthly and 12-month data required to be recorded by Condition V.C.4.a above;
  2. Cold start information; and
  3. Non-compliance information required to be recorded by Condition V.C.4.b above
- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. (§2103.12.k)

**6. Work Practice Standards:**

At no time shall the permittee allow Boiler No. T1 or T2 to operate unless the subject equipment is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (RACT Order No. 234, Condition 1.1; §2102.04.b.5; 25 Pa Code §129.99).

**D. Process Equipment Sources****1. Work Practice Standards:**

- a. At no time shall the permittee operate the following equipment at the facility unless they are properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (RACT Order No. 234, Condition 1.1; 25 Pa Code §129.99; §2102.04.b.5)
  1. Coke Oven Batteries No. 1, 2, 3, 13, 14, 15, 19, 20, B and C
  2. Pushing Emission Control System for the batteries specified in V.D.a.1
  3. By-Product Recovery Plant
  4. Desulfurization Plant (Scot Plant Incinerator)
  5. Wastewater Treatment Plant
- b. The coke oven batteries listed in condition V.D.1.a.1 above shall continue to comply with the NESHAP Subpart CCCC and Subpart L work practice standard. (§63.306; 63.7300; 25 Pa Code §129.99; §2102.04.b.5)
- c. The permittee shall not operate C Battery coke ovens unless the PROven® System is maintained and operated in such manner that the collector main is maintained at a negative pressure and each individual oven is maintained at the lowest positive pressure necessary to inhibit leaks of raw coke oven gas to the atmosphere from oven doors, charging port lids, and offtakes. [25 Pa Code §129.99; §2102.04.b.6]
- d. At no time shall the permittee operate the by-products plant unless the clean coke oven gas blanketing system is being properly maintained and operated at all times while the plant process units blanketed by the system are emitting VOCs, with the exception of emergency or planned outages, repairs or maintenance. [§2105.06; RACT Plan 234; 25 Pa Code §129.99]
- e. For the By-Product Plant, the permittee shall: [§2105.06; 25 Pa Code §129.99; §2104.08]
  1. The permittee shall comply with each applicable emission limitation, work practice standard, and operation and maintenance requirement of 40 CFR Part 61, Subpart V - *National Emission Standards for Equipment Leaks (Fugitive Emission Sources)*. [25 PA Code §129.99]
- f. For the desulfurization Plant, the permittee shall: [§2105.06; 25 Pa Code §129.99]
  1. Properly maintaining two Claus Plants at the coke oven gas desulfurization facility. Each Claus Plant shall be capable of independently processing all of the coke oven gas produced by the coke plant at full production.
  2. Operating and maintaining a Vacuum Carbonate Unit at all times that coke oven gas is being produced at the Clairton Works.
  3. Maintaining in good working order spare heat exchangers in the Vacuum Carbonate Units at the Clairton Works coke oven gas desulfurization facility.
  4. Maintaining in good working order spare heat exchangers in the Vacuum Carbonate Units at the Clairton Works coke oven gas desulfurization facility.
  5. Maintaining in good working order spare pumps in the Vacuum Carbonate Units at the coke oven gas desulfurization facility.
  6. Good combustion practices.

7. Annual Tune-ups, continued operation as permitted and incineration as permitted.

**E. Quench Towers:**

- Process Description:** Water quenching of incandescent coke  
**Raw Materials:** Incandescent coke, water  
**Control Device:** Baffles installed in the quench towers to capture entrained water droplets

**1. Work Practice Standards:**

- a. At no time shall the permittee operate the following quench towers at the facility unless they are properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (25 Pa Code §129.99; §2102.04.b.5)

Source ID	Description	Rating
P013	Quench Tower No. 1	1,553,805 tons/yr of coal
P015	Quench Tower No. 5	1,637,025 tons/yr of coal
P016	Quench Tower No. 7	2,004,580 tons/yr of coal
P017	Quench Tower B	1,491,025 tons/yr of coal
P046	Quench Tower C	1,379,059 tons/yr of coal
P051	5A Quench Tower	1,270,200 tons/yr of coal
P046	7A Quench Tower	1,555,630 tons/yr of coal

- b. The permittee shall be in compliance with the quench tower work practice standards, and operation and maintenance requirements of NEESHAP 40 CFR 63, Subpart CCCC at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2. [25 Pa Code §129.99; §2103.12.h.6; §63.7295(b) & (c)]

**F. Emergency Flare:**

**1. Work Practice Standards:**

- a. The permittee properly operates and maintained the emergency flare according to good engineering and air pollution control practices by performing regular maintenance with the exception of actions to mitigate emergency conditions. (25 Pa Code §129.99; §2102.04.b.5)
- b. The permittee shall maintain and operate the flare according to flare minimization plan that includes (25 Pa Code §129.99; §2102.04.b.5)
  1. A listing of all process units and ancillary equipment connected to the flare for each affected flare,
  2. An evaluation of the baseline flow to the flares, not including pilot gas flow or purge gas flow.
  3. A description of the equipment, processes and procedures installed or implemented within the last five years to reduce flaring; and a description of any equipment, processes or procedures the owner or operator plans to install or implement to eliminate or reduce flaring
  4. The facility must follow the flare minimization plan and operate all flares in such a manner that minimizes all flaring except during emergencies, shutdowns, startups, turnarounds or essential operational needs, and
  5. The plan should be updated periodically to account for changes in the operation of the flares, such as new connections to the flares or the installation of a flare gas recovery system, but the plan needs to be re-submitted to the Department only if the owner or operator adds an alternative baseline flow rate, revises an existing baseline, or installs a flare gas recovery system.

## **VI. ALTERNATIVE OPERATING SCENARIOS**

*There are no alternative operating scenarios for this operation.*

**VII. EMISSIONS LIMITATIONS SUMMARY**

The following table summarizes the annual maximum potential RACT II NO<sub>x</sub> emissions for Boilers B1, B2, R1, R2, T1 and T2.

**TABLE VII-1: Emission Limitations Summary**

Pollutant	Annual Combined Emission Limit (tons/year)*
Nitrogen Oxides (NO <sub>x</sub> )	3,421

**EXHIBIT B**

**PLAN APPROVAL ORDER AND AGREEMENT UPON CONSENT NO. 234  
DECEMBER 30, 1996**

# Allegheny County Health Department

## COUNTY COMMISSIONERS

Larry Dunn  
Chairman

Bob Cranmer

Mike Dawida

Bruce W. Dixon, M.D.  
Director



## BOARD OF HEALTH

Roy L. Titchworth, M.D.  
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Azizi Powell

Msgr. Charles Owen Rice  
Anthony D. Stagno, Sr.  
Janet E. Summers, D.O.

301 Thirty-ninth Street - Building #7  
Pittsburgh, Pennsylvania 15201-1891

January 2, 1997

Timothy J. Novack, P.E.  
Air Pollution Engineer

(412)-578-8118  
FAX: (412)-578-8144

U.S. Steel  
Clairton Works  
400 State Street  
Clairton, PA 15025-1855  
ATTN: Mr. William C. Graeser

RE: Enforcement Order and Agreement Upon Consent Number 234  
Reasonably Available Control Technology Approval

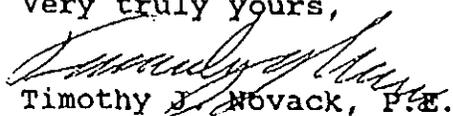
Dear Mr. Graeser:

Please find the above-referenced fully executed Order and Agreement.

As we have discussed, the executed documents will be submitted to the United States Environmental Protection Agency so that the Order portion of the documents can be incorporated into the County's portion of the Commonwealth's State Implementation Plan.

Thank you for your past cooperation in the negotiation and resolution of this matter. Should you have any further questions concerning this matter, please also contact me at the phone or fax numbers referenced above.

Very truly yours,

  
Timothy J. Novack, P.E.

ALLEGHENY COUNTY HEALTH DEPARTMENT

IN RE:

U.S. Steel Clairton Works	)	PLAN APPROVAL ORDER
400 State Street	)	AND AGREEMENT No. 234
Clairton, PA 15025	)	<u>UPON CONSENT</u>
	)	

AND NOW, this 30th day of December, 1996,

WHEREAS, the Allegheny County Health Department, (hereafter referred to as "Department"), has determined that the United States Steel hereafter referred to as "USS"), Clairton, PA, Allegheny County, as the operator and the owner of a coking facility at 400 State Street, Clairton PA, 15025 (hereafter referred to as "the facility"), is a major stationary source of oxides of nitrogen volatile organic compounds, (hereafter referred to as "NO<sub>x</sub>" and "VOCs") emissions as defined in Section 2101.20 of Article XXI, Rules and Regulations of the Allegheny County Health Department, Air Pollution Control (hereafter referred to as "Article XXI"); and

WHEREAS, the Department has determined that Section 2105.06.a. of Article XXI, entitled "Major NO<sub>x</sub> & VOCs" is applicable to USS's operations; and

WHEREAS, USS has been in full compliance at all relevant times with all relevant requirements of Section 2105.06 of Article XXI; and

WHEREAS, USS has timely submitted to the Department all of the documents required by Section 2105.06.b of Article XXI (hereafter, collectively referred to as "the Proposal"); and

WHEREAS, the Department has determined, after review, that the Proposal is complete; and

WHEREAS, the Department has further determined, after review, that the Proposal, constitutes Reasonably Available Control Technology (hereafter referred to as "RACT") for control of NO<sub>x</sub> and VOC emissions from the facility; and

WHEREAS, the Department and USS desire to make enforceable the details of the Proposal by entry of this RACT Plan Approval Order and Agreement Upon Consent; and

WHEREAS, pursuant to Section 2109.03 of Article XXI, the Director of the Allegheny County Health Department or his designated representative may issue such orders as are necessary to aid in the enforcement of the provisions of Article XXI, notwithstanding the absence of any violation of any provision of Article XXI and of any condition causing, contributing to, or creating danger of air pollution;

NOW, THEREFORE, this day first written above, the Department, pursuant to Section 2109.03 of Article XXI, and upon agreement of the parties as hereinafter set forth, hereby issues the following RACT Plan Approval Order and Agreement upon Consent.

I. ORDER

- 1.1. The following process equipment shall be properly maintained and operated according to good engineering and air pollution control practices at all times:
- A. Coke Batteries No. 1, 2, 3, 7, 8, 9, 13, 14, 15, 19, 20 and battery B
  - B. Pushing Emission Control System for the batteries specified in A. above.
  - C. Boilers No. 1, 2, 13, 14, R1, R2, T1 and T2
  - D. By-Products Plant Clean Coke Oven Gas Blanketing System and all process units blanketed by this system
  - E. Scot Plant Incinerator

F. Wastewater Treatment Plant

- 1.2. Boilers no. 1, 2, 13, 14, R1, R2, T1 and T2 shall not, at any time, exceed the following NO<sub>x</sub> emission limitations:

<u>Boiler:</u>	<u>Lbs/MMBTU:</u>	<u>Tons/Year:</u>
No. 1	0.54	1,740
No. 2	0.54	1,285
No. 13	0.54	282
No. 14	0.54	282
R1	0.54	525
R2	0.54	525
T1	0.54	358
T2	0.54	358

- 1.3. The facility shall determine initial compliance with the NO<sub>x</sub> Lbs/MMBTU emission limitations specified in paragraph 1.2 above for boilers no. 13, 14, R1, R2 T1 and T2 by NO<sub>x</sub> emission testing. Such testing shall be performed every two years and conducted according to U. S. EPA approved test methods and Section 2108.02 of article XXI.

- 1.4. Boilers no. 1 and 2 at the facility shall have

properly maintained and operated Continuous Monitoring Systems or approved alternatives (hereafter referred to as "CEM"), meeting all requirements of Section 2108.03 of Article XXI at all times with the exception of emergency or planned outages, repairs or maintenance.

1.5. The NO<sub>x</sub> emission limitations for boilers no. 1 and 2, specified in paragraph 1.2 above, shall be determined by a thirty day rolling average and by an twelve month rolling average of CEM data for the Lbs/MMBTU and Tons/Yr emission limitation respectively.

1.6 At no time shall the facility operate the By-products plant unless the clean coke oven gas blanketing system is being properly maintained and operated at all times while the plant process units blanketed by the system are emitting VOCs, with the exception of emergency or planned outages, repairs or maintenance. All VOC emissions processed by the blanketing system shall be incinerated by combustion in the facility's coke batteries or boilers or by downstream consumers.

- 1.7. The facility shall maintain all appropriate records to demonstrate compliance with the requirements of Section 2105.06 of Article XXI and Order No. 234. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of this section are being met.
- 1.8. The facility shall retain all records required by both §2105.06 of Article XXI and Order No. 234 for at least two years and they shall be made available to the Department upon request.

## II. AGREEMENT

The foregoing Order shall be enforced in accordance with and is subject to the following agreement of the parties, to wit:

- 2.1. The contents of this Order shall be submitted to the U.S. Environmental Protection Agency as a revision to the Commonwealth of Pennsylvania's State Implementation Plan (hereafter referred to

as "SIP").

- 2.2. Failure to comply with any portion of this Order or Agreement is a violation of Article XXI that may subject USS to civil proceedings, including injunctive relief, by the Department.
- 2.3. This Order does not, in any way, preclude, limit or otherwise affect any other remedies available to the Department for violations of this Order or of Article XXI, including, but not limited to, actions to require the installation of additional pollution control equipment and the implementation of additional corrective operating practices.
- 2.4. USS hereby consents to the foregoing Order and hereby knowingly waives all rights to appeal said Order, and the undersigned represents that he is authorized to consent to the Order and to enter into this Agreement on behalf of USS.
- 2.5. USS acknowledges and understands that the purpose of this Agreement is to establish RACT for the control of emissions of NO<sub>x</sub> and VOCs from this facility. USS further acknowledges and understands the possibility that the U.S. EPA may

decide to not accept the Agreement portion of  
the Plan Approval Order and Agreement by Consent  
as a revision to the Commonwealth of  
Pennsylvania's SIP.

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereby consent to all of the terms and conditions of the foregoing Order and Agreement as of the date of the above written.

USX CORPORATION, U. S. STEEL GROUP

By: *Thomas W. Gattke*

(signature)

Print or type Name: Thomas W. Gattke

Title: Gen'l Mgr - Capital Ops

Date: 12/16/96

ALLEGHENY COUNTY HEALTH DEPARTMENT

By: *Bruce W. Dixon* 12/30/96

Bruce W. Dixon, M.D., Director  
Allegheny County Health Department

and By: *Thomas J. Puzniak*

Thomas J. Puzniak, Engineering Manager  
Air Quality Program

**EXHIBIT C**

**NO ACTION ASSURANCE LETTER FROM ACHD TO U. S. STEEL  
DATED NOVEMBER 1, 2016**

COUNTY OF



ALLEGHENY

RICH FITZGERALD  
COUNTY EXECUTIVE

November 1, 2016

via electronic and first-class mail: [DWHacker@uss.com](mailto:DWHacker@uss.com)

David W. Hacker  
Counsel  
United States Steel Corporation  
600 Grant Street, Suite 1500  
Pittsburgh, PA 15219

RE: United States Steel Corporation No Action Assurance Regarding Additional Reasonably Available Control Technology (RACT) Submittals

Dear Mr. Hacker:

As we discussed, the Allegheny County Health Department (“ACHD” or “Department”) has previously received U. S. Steel’s 2014 RACT evaluations for U. S. Steel’s Clairton, Edgar Thomson and Irvin plants that U. S. Steel provided in response to the Department’s December 2013 request.

Since the Department’s receipt of the 2014 RACT submittals, the Pennsylvania Department of Environmental Protection promulgated updated RACT requirements for major sources of NOx and VOCs (“Additional RACT Requirements for Major Sources of NOx and VOC”). (See April 23, 2016, *Pennsylvania Bulletin*, 46 PaB 2036.) While the Department has not yet determined that the Commonwealth’s updated requirements are applicable to sources within Allegheny County, if it were to determine that said requirements were applicable, U.S. Steel’s 2014 RACT submittals are acceptable as submissions in furtherance of ultimate departmental approval and satisfying U. S. Steel’s obligations to provide an alternate RACT compliance approach pursuant to 25 PA Code §129.99.

Because the Department has not completed its review of the submissions, the Department is not offering its final approval of the plan. Rather, the Department is merely issuing this no action assurance regarding the report submittal and RACT limits pursuant to the 2016 rule until the Department completes its review. The Department emphasizes that it is the submission that it



KAREN HACKER, MD, MPH, DIRECTOR  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
AIR QUALITY PROGRAM

301 39<sup>TH</sup> STREET • CLACK HEALTH CENTER • BUILDING 7  
PITTSBURGH, PA 15201-1811  
PHONE (412) 578-8103 • FAX (412) 578-8144  
24-HR (412) 687-ACHD (2243) • WWW.ACHD.NET

now deems acceptable and not the plan which still requires approval. The Department also reserves the right to request additional information from U. S. Steel to evaluate RACT for the Clairton, Edgar Thomson, and Irvin plants.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jason K. Willis". The signature is written in a cursive style with a large initial "J".

Jason K. Willis  
Assistant Solicitor,  
Allegheny County Health Department

**BEFORE THE HEARING OFFICER FOR THE  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
542 4TH AVENUE  
PITTSBURGH, PENNSYLVANIA 15219**

---

UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Appellant,	)	
	)	
v.	)	Appeal of Reasonably Available Control
ALLEGHENY COUNTY HEALTH	)	Technology Installation Permit # 0052-I020
DEPARTMENT, Air Quality Program,	)	
	)	
Appellee.	)	

**CERTIFICATE OF SERVICE**

I hereby certify that on the 1<sup>st</sup> day of June 2020, a true and correct copy of the foregoing Notice of Appeal was served via electronically<sup>5</sup> to the following individuals:

Max Slater, Esq.  
Administrative Hearing Officer  
Allegheny County Health Department  
542 Fourth Avenue  
Pittsburgh, PA 15219  
[max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us)

Jason K. Willis, Esq.  
Assistant Solicitor  
Allegheny County Health Department  
301 39<sup>th</sup> Street, Bldg. No. 7  
Pittsburgh, PA 15201  
[jason.willis@alleghenycounty.us](mailto:jason.willis@alleghenycounty.us)

Respectfully submitted,



---

David W. Hacker, Esq.  
Counsel for United States Steel Corporation

---

<sup>5</sup> Pursuant to the Hearing Officer's Emergency COVID-19 Order, dated May 8, 2020, filing of this notice of appeal, and service is being completed electronically.



United States Steel Corporation  
Law Department  
600 Grant Street  
Pittsburgh, PA 15219-2800  
Tel: 412.433.2919  
E-mail: [dwhacker@uss.com](mailto:dwhacker@uss.com)

**David W. Hacker**  
Senior Counsel-Environmental

**VIA EMAIL**

June 1, 2020

Dr. Debra L. Bogen  
Director  
Allegheny County Health Department  
542 Fourth Avenue  
Pittsburgh, PA 15219  
Sent to: [todd.bogdanovich@alleghenycounty.us](mailto:todd.bogdanovich@alleghenycounty.us)

Max Slater  
ACHD Hearing Officer  
542 Fourth Avenue  
Pittsburgh, PA 15219  
[max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us)

**RE: United States Steel Corporation – Irvin Plant  
Appeal of Title V Operating and Federally Enforceable  
State Operating Permit No. 0050-OP16b**

Dear Dr. Bogen and Hearing Officer Slater:

Pursuant to Article XI of the Rules and Regulations of the Allegheny County Health Department, United States Steel Corporation submits for filing the enclosed Notice of Appeal regarding the above-referenced permit. If you have any questions or wish to discuss this matter further, please contact me at [dwhacker@uss.com](mailto:dwhacker@uss.com) or (412) 433-2919; or Mike Winek at [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com) or (412) 394-6538.

Sincerely,

A handwritten signature in blue ink that reads 'DWHacker'.

David W. Hacker

Attachments

cc: Jason Willis, Esq. (via e-mail: [Jason.Willis@AlleghenyCounty.us](mailto:Jason.Willis@AlleghenyCounty.us))  
Mike Winek (via e-mail: [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com))

## Notice of Appeal

This form is used to file an appeal of an order, notice, decision, determination, or ruling by the Allegheny County Health Department. Please complete this form (use additional pages as necessary). If more than one person or entity is filing this appeal, please attach a separate form for each additional appellant. A copy of the order, notice, decision, determination, or ruling must be attached to the Notice of Appeal.

Name United States Steel Corporation - Irvin Plant  
Mailing Address P.O. Box 878  
City Dravosburg State PA Zip 15034 Email KBarshick@uss.com  
Phone (412) 675-2600 Fax (optional) \_\_\_\_\_

If you are represented by an attorney, please provide contact information for your attorney:

Name Michael Winek, Babst Calland  
Mailing Address Two Gateway Center, Sixth Floor  
City Pittsburgh State PA Zip 15222 Email mwinek@babstcalland.com  
Phone (412) 394-6538 Fax (optional) \_\_\_\_\_

Describe your objections to the Department's actions and a statement describing the relief you want the Hearing Officer to grant. (The objections may be factual or legal and must be specific. If you fail to state an objection here, you may be barred from raising it later in your appeal. Use additional pages if necessary.)

Please see attached.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By filing this Notice of Appeal with the Allegheny County Health Department, I hereby certify that the information submitted is true and correct to the best of my information and belief.

Signature  Date 5/29/2020

Appeals should be submitted in person or by mail to: Allegheny County Health Department Attention: Hearing Officer 542 4th Avenue Pittsburgh, PA 15219, or emailed to the Hearing Officer at [max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us).

**BEFORE THE HEARING OFFICER FOR THE  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
542 4TH AVENUE  
PITTSBURGH, PENNSYLVANIA 15219**

---

UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Appellant,	)	
	)	
v.	)	Appeal of Title V Operating Permit
	)	& Federally Enforceable State Operating
	)	Permit # 0050-OP16b
ALLEGHENY COUNTY HEALTH	)	
DEPARTMENT, Air Quality Program,	)	
	)	
Appellee.	)	

**NOTICE OF APPEAL**

NOW COMES, Appellant, UNITED STATES STEEL CORPORATION (hereinafter “U.S. Steel”), pursuant to Sections 1103 and 1104 of Article XI of the Allegheny County Health Department’s Rules and Regulations, before the Director of the Allegheny County Health Department (“ACHD” or “Department”), filing this appeal from the Department’s issuance of Title V Operating Permit & Federally Enforceable State Operating Permit # 0050-OP16b to U. S. Steel Corporation’s Irvin Plant, West Mifflin, Pennsylvania, with an issuance date of April 16, 2020, and received by U. S. Steel via email on April 17, 2020. A true and correct copy of the permit is provided as Exhibit A to this notice of appeal. This submission constitutes timely filing of a Notice of Appeal<sup>1</sup> of a Department action, and properly specifies the manner in which U.S. Steel is aggrieved by the Department’s action.

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<sup>1</sup> This notice of appeal is timely filed because, consistent with the Pennsylvania Supreme Court’s (COVID-19) Order Nos. 531 and 532, Judicial Administrative Docket, dated April 28, 2020, the ACHD Hearing Officer issued an emergency order, dated May 8, 2020, which provides that any administrative appeal before the ACHD Hearing

### **A. Manner in which U. S. Steel is Aggrieved and Grounds for Appeal**

1. U. S. Steel owns and operates the Irvin Plant, a steel finishing facility, located at Camp Hollow Road, West Mifflin, Pennsylvania 15122 (hereinafter “Facility”).

2. The Department issued Title V Operating Permit & Federally Enforceable State Operating Permit # 0050-OP16b (hereinafter “RACT Permit”) on April 16, 2020, and it was received by U. S. Steel on or about April 17, 2020.

3. U. S. Steel objects to the Department’s issuance of the RACT Permit. By issuing the RACT Permit, the Department has abused its discretion and acted unreasonably, arbitrarily, capriciously, contrary to fact and law and in a manner not supported by evidence. U. S. Steel objects to the Department’s issuance of the RACT Permit because it contains numerous enforceable conditions that are arbitrary, capricious, unreasonable, an abuse of the Department’s discretion, and contrary to law including the federal Clean Air Act, 42 U.S.C. §7401 *et seq.* (“CAA”), federal Administrative Procedures Act, 5 U.S.C. §551 *et seq.* and state and local analogs (collectively “APA”), Pennsylvania Air Pollution Control Act, 35 P.S. Section 4001 *et seq.* (“APCA”), and Article XXI. The Department’s imposition of these requirements is therefore unreasonable, arbitrary and capricious, contrary to law including the CAA, APA, APCA and Article XXI, and an abuse of the Department’s discretion. U. S. Steel’s objections specifically include:

- a. The Department issued the permit without having received a complete application as required by Article XXI, § 2103.12(a)(2), which requires: “[t]he Department

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Officer which was required to be filed between March 19, 2020 and June 1, 2020 shall be deemed to have been timely filed if it is filed by June 2, 2020.

shall not issue or reissue *any* [emphasis added] Operating Permit, or any amended, revised, or modified Operating Permit under this Subpart, unless it has...2. *Received a complete application...*" [emphasis added]. In particular, the Department did not request nor did the Facility submit a permit application related to or for issuance of the RACT Permit.

- b. The Department's issued the amendment to the Facility's existing Title V Operating Permit in a manner which is contrary to law, including the requirements of Article XXI, including § 2103.4.
- c. The Department issued the RACT Permit with *substantively different* terms and conditions than what was presented in the draft permit *and which could not be reasonably anticipated*, without affording U. S. Steel the ability to comment on the substantive changes prior to including them in the final RACT Permit. Such action is contrary to law, including the APA and Article XXI, and an abuse of the Department's discretion.
- d. The Department issued the RACT Permit with new substantive conditions (including, but not limited to the requirement to implement a flare minimization plan, with many prescriptive requirements that would be inapplicable to the flares at Irvin) which were significantly different than what was provided in the draft permit (and for which could not be reasonably anticipated) *with an effective date being the same as the issued date*. U. S. Steel had no notice of the changes (and actually received the permit after its effective date), contrary to the requirements of the APA and Article XXI.

- e. The Department unilaterally and unlawfully issued the RACT Permit imposing conditions and limits contrary to those conditions and limits imposed by Plan Approval Order and Agreement Upon Consent No. 258 (hereinafter referred to as “RACT Order 258.”) A true and correct copy of RACT Order 258 is provided as Exhibit B to this notice of appeal. Specifically, the Department *unilaterally and unlawfully* reduced the VOC content limitation for lubricating oil at the 80-inch Hot Strip Mill that are in RACT Order 258, which the parties previously agreed to and which continue to be a part of the Pennsylvania State Implementation Plan (“SIP”.) While U. S. Steel acknowledges that ACHD can and, at times, is required to revise its portion of the Pennsylvania SIP, it cannot unilaterally modify a Federally enforceable agreement which includes RACT Order 258. In particular, RACT Order 258 provides that, “intending to be legally bound, the parties hereby consent to all of the terms and conditions of the foregoing Plan Approval Order and Agreement as of the date of the above written [December 30, 1996.]<sup>2</sup>
- f. Specifically, Condition V.A.1.(e) on page 40 of the RACT Permit has been derived in a manner inconsistent with the PADEP RACT II regulations (25 PA Code 129.96 – 129.100).
- g. Conditions in Section V.H (pages 74-75) of the RACT Permit inappropriately include emissions limits and requirements for emissions units no longer in

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<sup>2</sup> According to the Department, U. S. Steel provided the Department with all required information for the RACT determination. See attached letter from Jason Willis (ACHD) to David Hacker (U. S. Steel), dated November 1, 2016 (attached herein as Exhibit C). As noted therein, in 2014, U. S. Steel proposed a case by case RACT determination and that determination indicated that no changes to the existing RACT requirements are required for RACT II. In response, the Department advised U. S. Steel that U. S. Steel satisfied its RACT evaluation obligation. While in the letter the Department does not offer a final approval of the plan, the Department was afforded sufficient time to seek revision to RACT Order 258. Instead, the Department acted unlawfully by unilaterally issuing the RACT Permit with conditions that are unlawful and inconsistent with RACT Order 258.

operation (Galvanneal Furnace). The requirements are contrary to the Site Level Condition IV.27 on page 39 of the RACT Permit, in which the Department prohibits operation of the Galvanneal furnace, and therefore must be removed from any RACT permit or order.

- h. Condition V.A.1.(e) page 40 of the RACT Permit is unlawful in that it is inconsistent with RACT Order 258.
- i. Condition V.A.1.(e) substantially changed in final permit from what is in the draft permit, and from what the record appears, based upon no public comment.
- j. Condition V.A.1.(e) unlawfully and unreasonably restricts the Facility's hot strip mill operations.
- k. RACT Permit conditions V.J.5.c and V.J.6(a)-(g), on pages 80-81 of the RACT Permit, vaguely and ambiguously require U. S. Steel to implement a flare minimization plan for the Irvin flares. The conditions are ambiguous and not necessarily feasible, as the prescriptive requirements are not feasible or relevant to a coke oven gas system such as that used within the Mon Valley Works. U. S. Steel is not aware of any such RACT obligation for flares; and, furthermore, the requirement is contrary to the restrictions for other emission units which would limit the amount of process gases, such as coke oven gas and blast furnace gas, combusted in such combustion units. Because the conditions are vague, ambiguous, and incomprehensible they should not be included in any RACT permit or order.
- l. RACT Permit conditions V.J.5.c and V.J.6(a)-(g), on pages 80-81 of the RACT Permit are contrary to the PADEP RACT II regulations.

- m. The RACT Permit includes new substantive requirements that were not in the draft permit that was submitted for public comment in violation of the APA and Article XXI because U. S. Steel had no opportunity to provide comments on the new substantive requirements.
- n. The Department has failed to adequately explain the basis for its RACT determinations;
- o. In issuing the RACT Permit, the Department exceeded its authority under applicable law, including Article XXI, the CAA, the APCA, and the PADEP RACT II regulations;

**B. U. S. Steel’s Direct Interest in the Action**

4. U. S. Steel is a named entity to which the RACT Permit was issued, and whose activities are unlawfully and unreasonably restricted by the RACT Permit. As a result, U. S. Steel is negatively impacted by the RACT Permit and has a direct interest in the RACT Permit and this appeal.

**C. Conclusion**

5. Through this Notice of Appeal, U. S. Steel has identified its objections to the RACT Permit but reserves the right to amend or supplement the factual and legal basis of its Appeal as authorized by the Department’s Rules and Regulations.

6. For the foregoing reasons, U. S. Steel respectfully requests that the Director vacate the RACT Permit, or alternatively, vacate the RACT Permit *and* order the Department to implement its RACT obligations in a manner consistent with applicable laws including the CAA, the APCA, Article XXI, and PADEP RACT II regulations.

Respectfully submitted,



---

David W. Hacker, Esq. (PAID#91236)  
United States Steel Corporation  
600 Grant Street, Suite 1500  
Pittsburgh, Pennsylvania 15219  
Telephone: (412) 433-2919  
Email: [dwhacker@uss.com](mailto:dwhacker@uss.com)

Michael H. Winek (PAID#69464)  
Babst, Calland, Clements and Zomnir, P.C.  
Two Gateway Center  
Pittsburgh, PA 15222  
Telephone (412) 394-5400  
Email: [mwinek@babstcalland.com](mailto:mwinek@babstcalland.com)

*Counsel for Appellant*

Dated: June 1, 2020

**EXHIBIT A**

**TITLE V OPERATING PERMIT  
& FEDERALLY ENFORCEABLE STATE OPERATING PERMIT  
# 0050-OP16B  
ISSUED TO UNITED STATES STEEL CORPORATION  
IRVIN PLANT  
WEST MIFFLIN, PENNSYLVANIA**

# ALLEGHENY COUNTY HEALTH DEPARTMENT



**AIR QUALITY PROGRAM**  
301 39th Street, Bldg. #7  
Pittsburgh, PA 15201-1891

**Title V Operating Permit**

**&**

**Federally Enforceable State Operating Permit**

**Issued To:** U. S. Steel Mon Valley Works -  
Irvin Plant

**ACHD Permit #:** 0050-OP16b

**Facility:** U. S. Steel Irvin Plant  
Camp Hollow Road  
West Mifflin, PA 15122

**Date of Issuance:** December 9, 2016

**Amendment Date:** April 16, 2020

**Expiration Date:** December 8, 2021

**Renewal Date:** June 9, 2021

**Issued By:** \_\_\_\_\_  
JoAnn Truchan, P.E.  
Section Chief, Engineering

**Prepared By:** \_\_\_\_\_  
Gregson Vaux  
Air Quality Engineer

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AMENDMENTS:

AMENDMENTS:

**DATE**      **SECTION(S)**

- 05/22/19      Condition IV.26: Added SIP SO<sub>2</sub> requirements; Conditions V.A.1.g, V.E.1.f, V.F.1.o, V.G.1.h, V.K.1.g & V.L.1.g: Added SO<sub>2</sub> emissions limit table; Condition V.A.2.a: Revised SO<sub>2</sub> emissions test; Conditions V.E.2.a, V.F.2.a, V.G.2.a, V.K.2.a, V.L.2.a, V.M.2.a & V.N.2.a: Added SO<sub>2</sub> emissions test; Conditions V.A.3.a, V.E.3.a, V.F.3.a, V.G.3.a: Revised the COG monitoring condition; Conditions V.A.4.b, V.E.4.a, V.F.4.a, V.G.4.b, V.K.4.b, V.L.4.b, V.M.4.b & V.N.4.b: Revised the COG concentration recordkeeping; Conditions V.A.5.b, V.E.5.b, V.F.5.a, V.G.5.a, V.K.5.a, V.L.5.a, V.M.5.a & V.N.5.a: Revised the conditions.
- 04/16/20      Incorporated case-by-case RACT conditions and citations.



**I. CONTACT INFORMATION**

**Facility Location:** U. S. Steel Mon Valley Works – Irvin Plant  
Camp Hollow Road  
West Mifflin, PA 15122

**Permittee/Owner:** U. S. Steel Mon Valley Works – Irvin Plant  
Camp Hollow Road  
West Mifflin, PA 15122

**Responsible Official:** Kurt Barshick  
**Title:** General Manager  
**Company:** U. S. Steel Mon Valley Works  
**Address:** P. O. Box 878  
Dravosburg, PA 15034  
**Telephone Number:** (412) 675-2600  
**Fax Number:** (412) 675-7822

**Facility Contact:** Nicole Heinichen  
**Title:** Environmental Engineer  
**Telephone Number:** (412) 675-7382  
**Fax Number:** (412) 675-7822  
**E-mail Address:** nlheinichen@uss.com

**AGENCY ADDRESSES:**

**ACHD Contact:** Chief Engineer  
Allegheny County Health Department  
Air Quality Program  
301 39th Street, Building #7  
Pittsburgh, PA 15201-1891

**ACHD Engineer:** Gregson Vaux  
**Title:** Air Quality Engineer  
**Telephone Number:** 412-578-8148  
**Fax Number:** 412-578-8144  
**E-mail Address:** gregson.vaux@alleghenycounty.us

**EPA Contact:** Enforcement Programs Section (3AP12)  
USEPA Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

## II. FACILITY DESCRIPTION

The U. S. Steel Irvin Works is a secondary steel processing facility located in West Mifflin Borough, Allegheny County, Pennsylvania. The Irvin Plant receives steel slabs and performs one of several finishing processes on the steel slabs. The finishing processes commonly referred to as secondary steel processes, include hot and cold rolling, continuous pickling, annealing, and galvanizing. The facility is composed of an 80" hot strip mill, 64" & 84" continuous hydrochloric acid pickle lines, a cold reduction mill, HPH annealing furnaces, open coil annealing furnaces, a continuous annealing furnace, continuous galvanizing line no. 1, continuous galvanizing and aluminum coating line no. 2, a continuous terne line, four coke oven gas flares, and four natural gas/coke oven gas fired boilers.

The emission units regulated by this permit are summarized in Table II-1:

**TABLE II-1  
Emission Unit Identification**

<b>I.D.</b>	<b>SOURCE DESCRIPTION</b>	<b>CONTROL DEVICE(S)</b>	<b>MAXIMUM CAPACITY</b>	<b>FUEL/RAW MATERIAL</b>	<b>STACK I.D.</b>
P001 to P005	80-Inch Hot Strip Mill Reheat Furnaces No. 1 to No. 5	None	140 MMBtu/Hr	Coke Oven Gas and Natural Gas	SP1 to SP6
P016	Scale Breaker Roughing Mill & Finishing Mill	None	3,000,000 tons/yr	NA	Fugitive
P002	64-Inch Continuous Coil Hydrochloric Acid Pickle Line	Packed Tower Scrubber	1,047,174 tons/yr	Steel Coils, HCl Pickle Liquor	SP023
P007	84-Inch Continuous Coil Hydrochloric Acid Pickle Line	Packed Tower Scrubber	1,576,800 tons/yr	Steel Coils, HCl Pickle Liquor	SP7
P008	Cold Reduction Mill (Mill Stands No. 1 to No. 5)	Cyclone Mist Eliminator	3,767,676 tons/yr	Steel Coils and Rolling Oil Solution	SP9
P009	HPH Batch Annealing Furnaces (31 individual furnaces)	None	4.9 MMBtu/hr, each furnace	Coke Oven Gas and Natural Gas	SP10
P010	Open Coil Annealing Furnaces No. 1 to No. 9	None	7.2 MMBtu/hr, each	Coke Oven Gas and Natural Gas	SP12
P010	Open Coil Annealing Furnaces No. 10 to No. 13	None	9.0 MMBtu/hr, each	Coke Oven Gas and Natural Gas	SP12
P010	Open Coil Annealing Furnace No. 14	None	5.4 MMBtu/hr	Coke Oven Gas and Natural Gas	SP12
P010	Open Coil Annealing Furnace No. 15 & No. 16	None	7.47 MMBtu/hr, each	Coke Oven Gas and Natural Gas	SP12
P011	Continuous Annealing	None	45 MMBtu/hr	Coke Oven Gas and Natural Gas	SP13
P012	No.1 Continuous Galvanizing Preheat Furnace	None	50 MMBtu/hr	Natural Gas	SP16
P012	No. 1 Continuous Galvanizing Galvanneal Furnace	None	18 MMBtu/hr	Natural Gas	SP16

P013	No. 2 Continuous Galvanizing Galvalum Preheat Furnace	None	18MMBtu/hr	Natural Gas	SP18
P015	Coke Oven Gas Flares No. 1 to No.3 (5 lines)	None	6.75 MMSCF/d, each	Coke Oven Gas	SP20
P015	Peachtree Coke Oven Gas Flare (Line A and B)	None	6.75 MMSCF/d	Coke Oven Gas	SP21
B001	Boiler No. 1	None	79.8 MMBtu/hr	Coke Oven Gas and Natural Gas	SB1
B001	Boiler No. 2	None	84.6 MMBtu/hr	Coke Oven Gas and Natural Gas	SB2
B003	Boiler No. 3	None	41.6 MMBtu/hr, each	Coke Oven Gas and Natural Gas	SB3
B004	Boiler No. 4	None	41.6 MMBtu/hr, each	Coke Oven Gas and Natural Gas	SB3

**Figure II-1: 80-Inch Hot Strip mill Reheat Furnaces and Roughing & Finishing Mills**

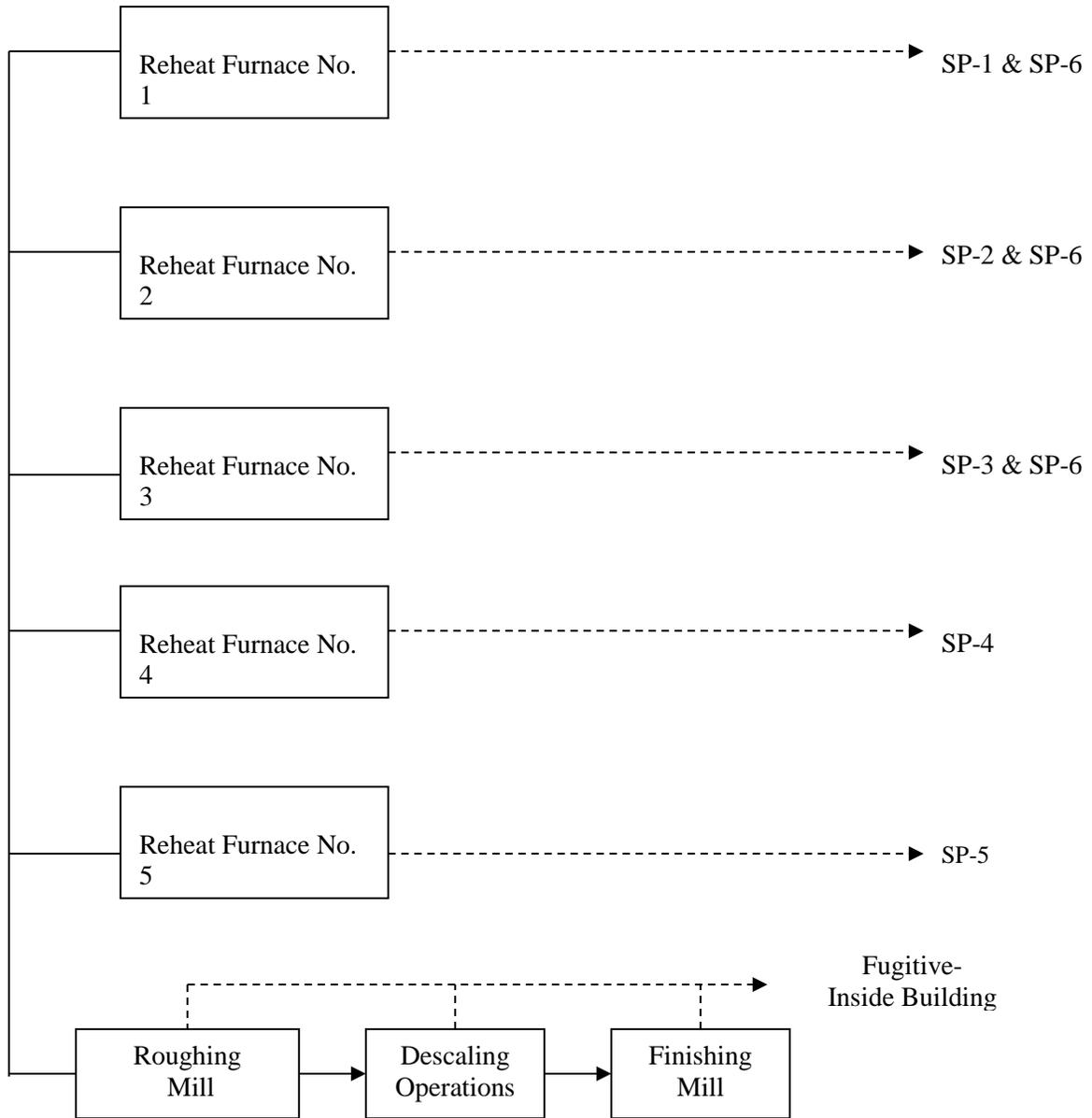


Figure II-2: 64-inch Continuous Coil HCl Pickle Line

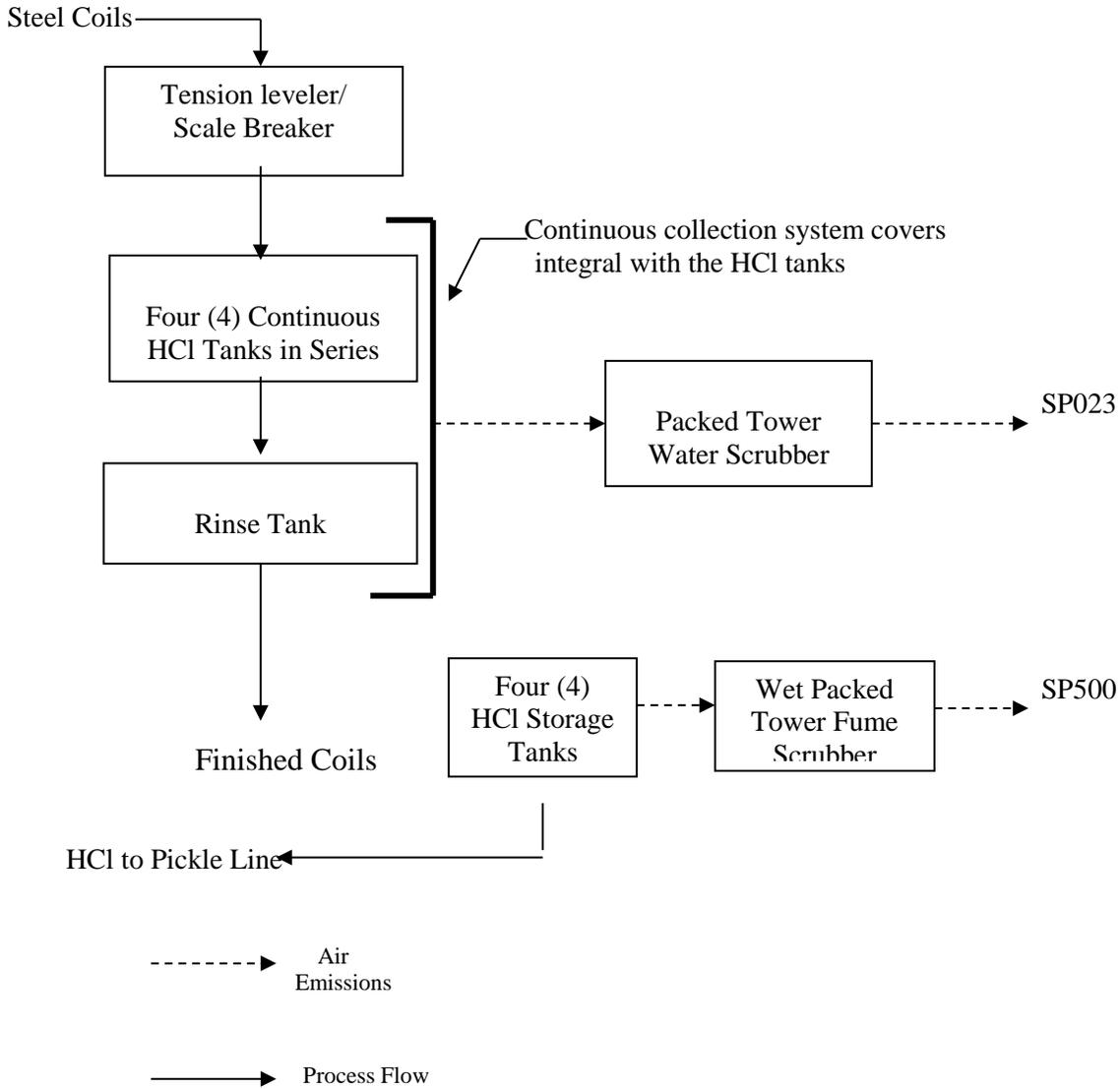


Figure II-3: 84-inch Continuous Coil Pickle Line

\*The Water Wash Scrubber is a Packed Tower Water Scrubber

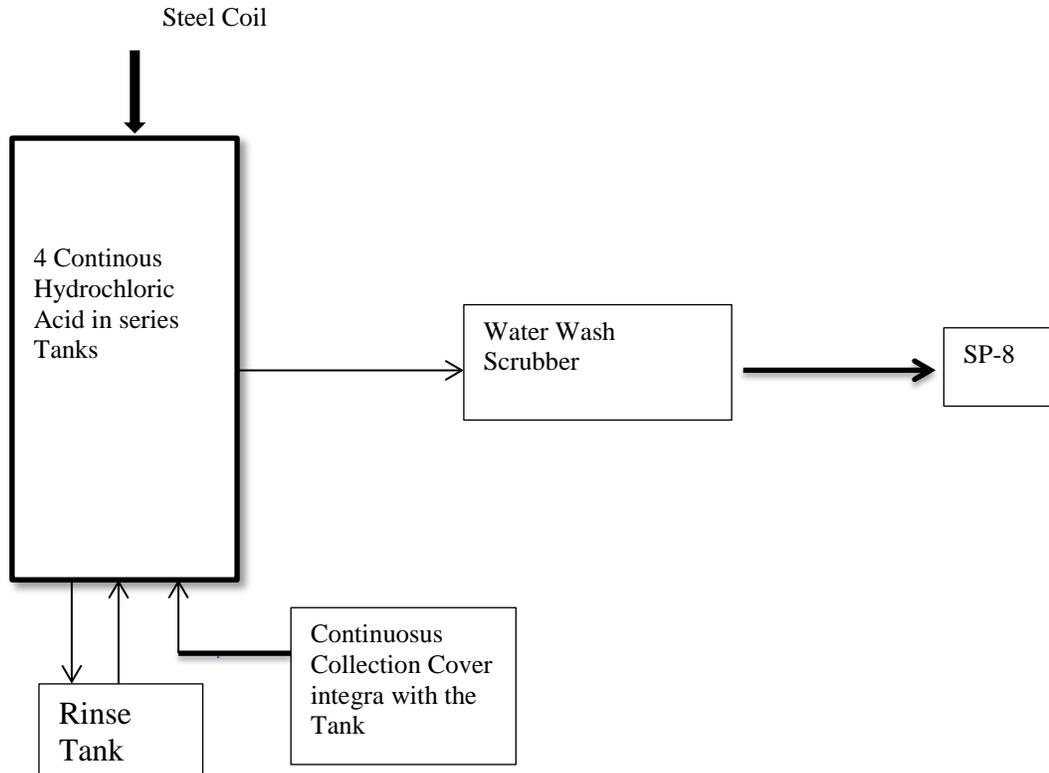


Figure II-4: Cold Reduction Mill

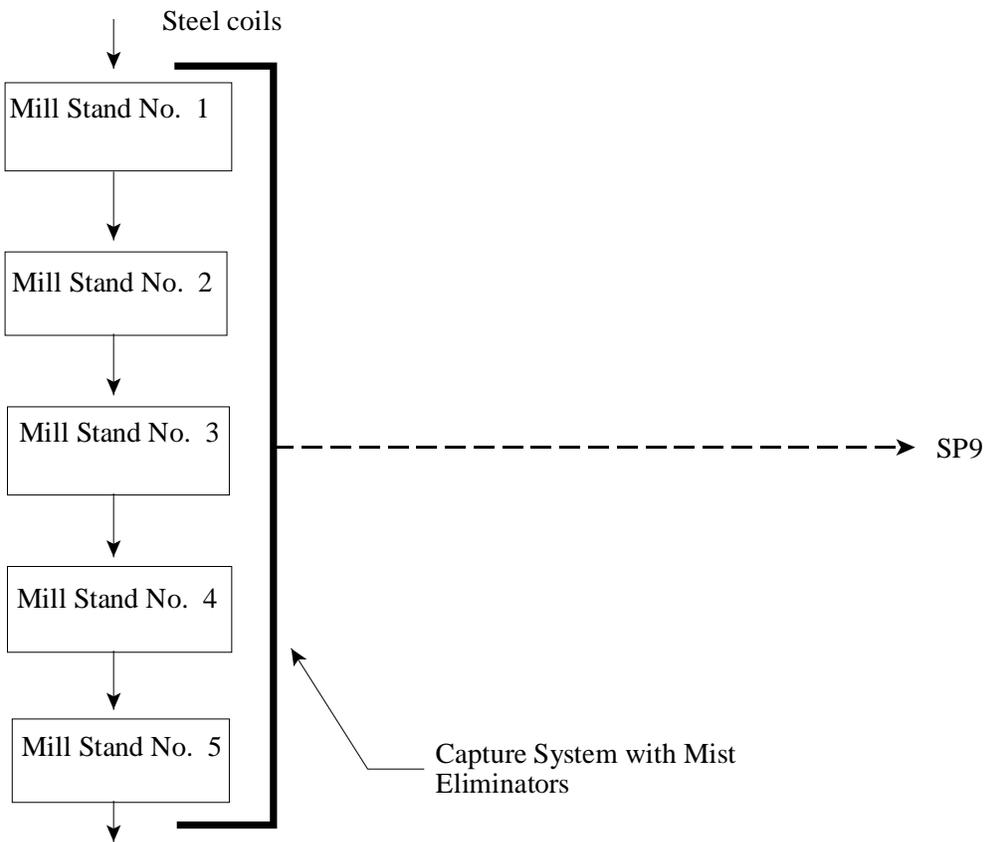
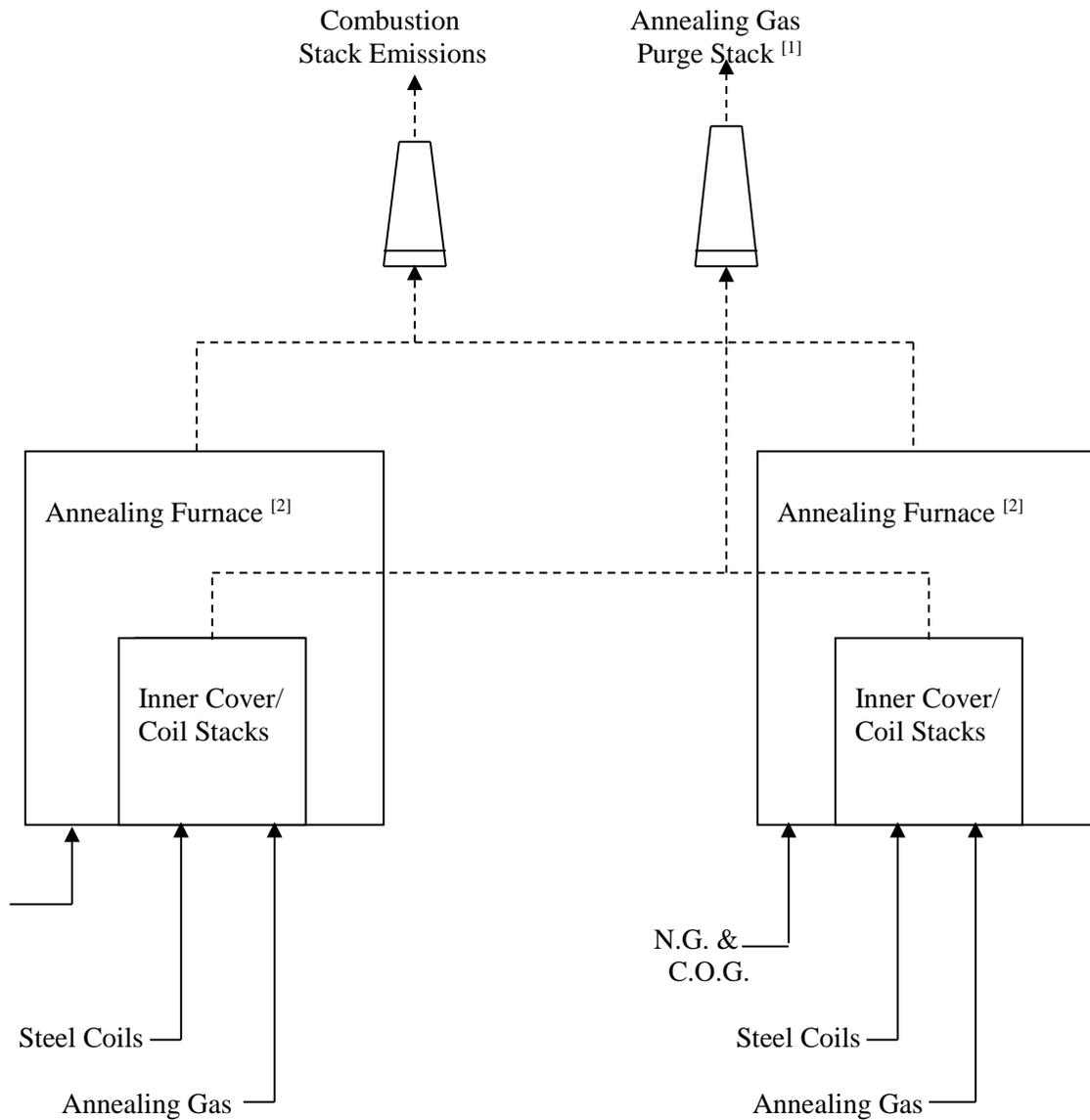


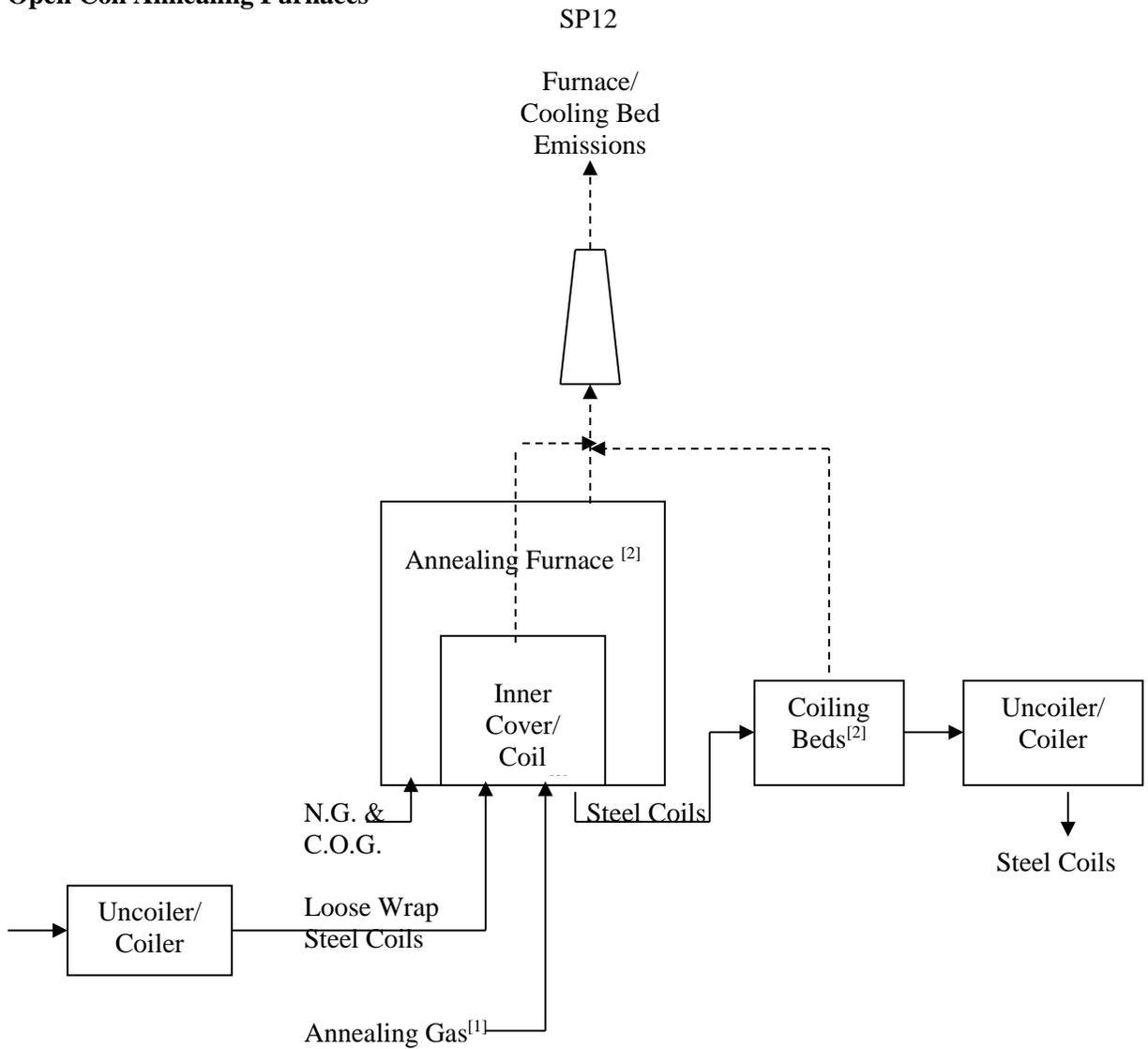
Figure II-5: HPH Annealing Furnaces



NOTES:

1. Annealing gases (hydrogen and nitrogen) are not regulated air pollutants
2. 31 individual furnaces; 29 furnace stacks and atmosphere purge stacks; 58 bases.

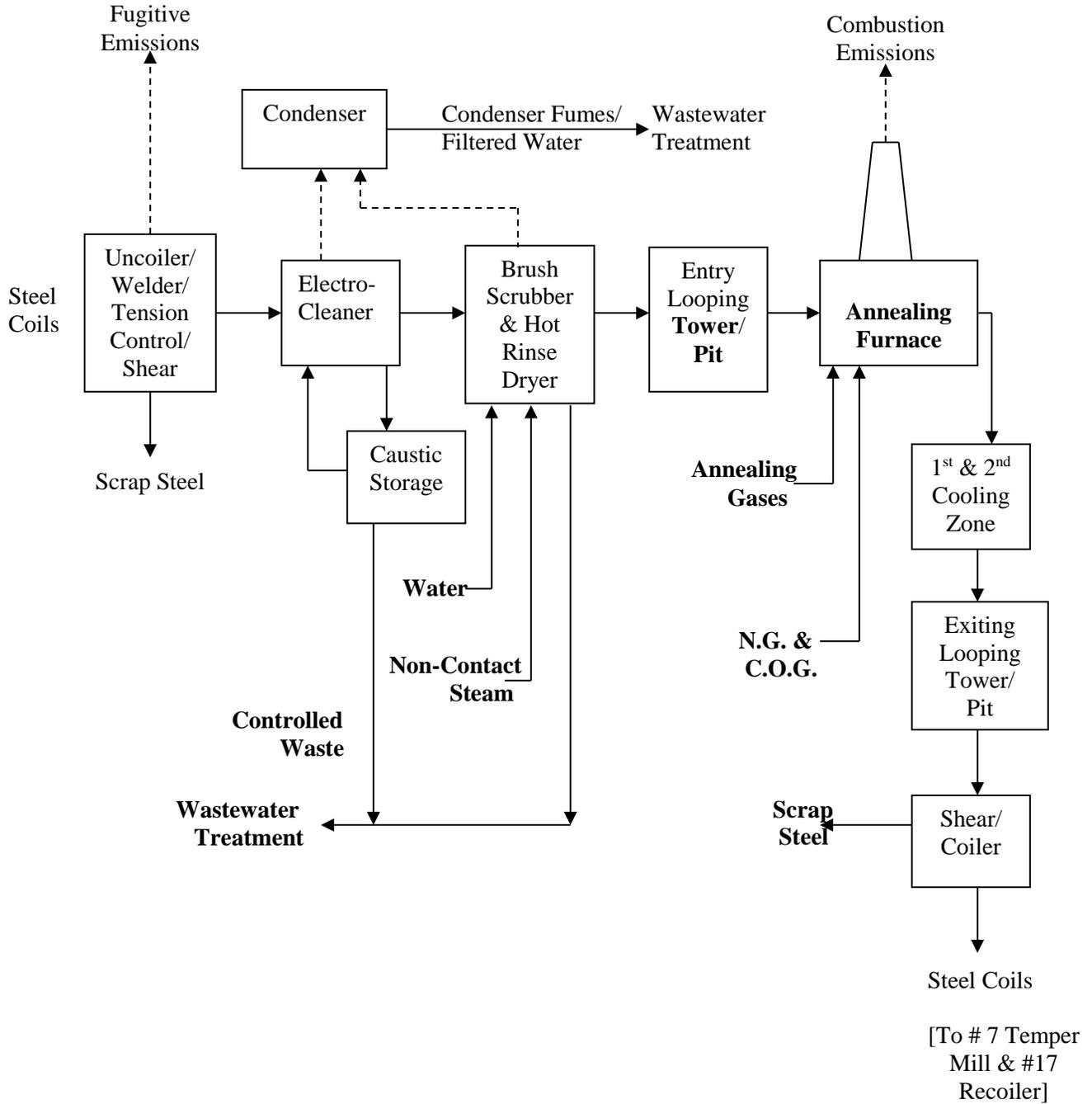
Figure II-6: Open Coil Annealing Furnaces



**NOTES:**

1. Annealing gases (hydrogen and nitrogen) are not regulated air pollutants.
2. Sixteen (16) moveable furnaces, 24 bases – all share a single duct.
3. Emissions from annealing furnace combustion, annealing gases, and cooling beds combine into one duct which then splits into 3 stacks.

**Figure II-7: Continuous Annealing Line**



**Figure II-8: No. 1 Continuous Galvanizing Line**

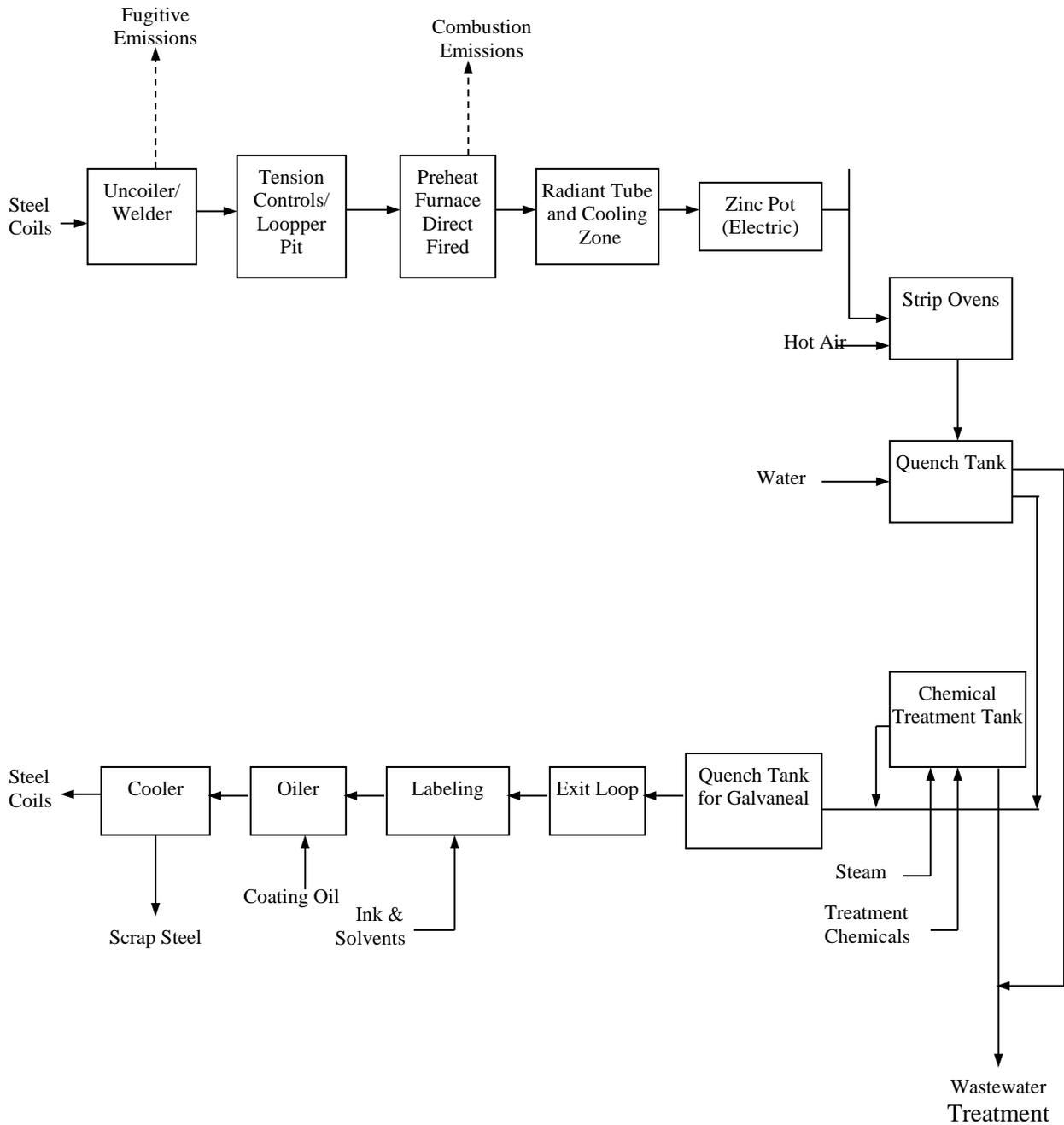


Figure II-10: No. 2 Continuous Galvanizing Line

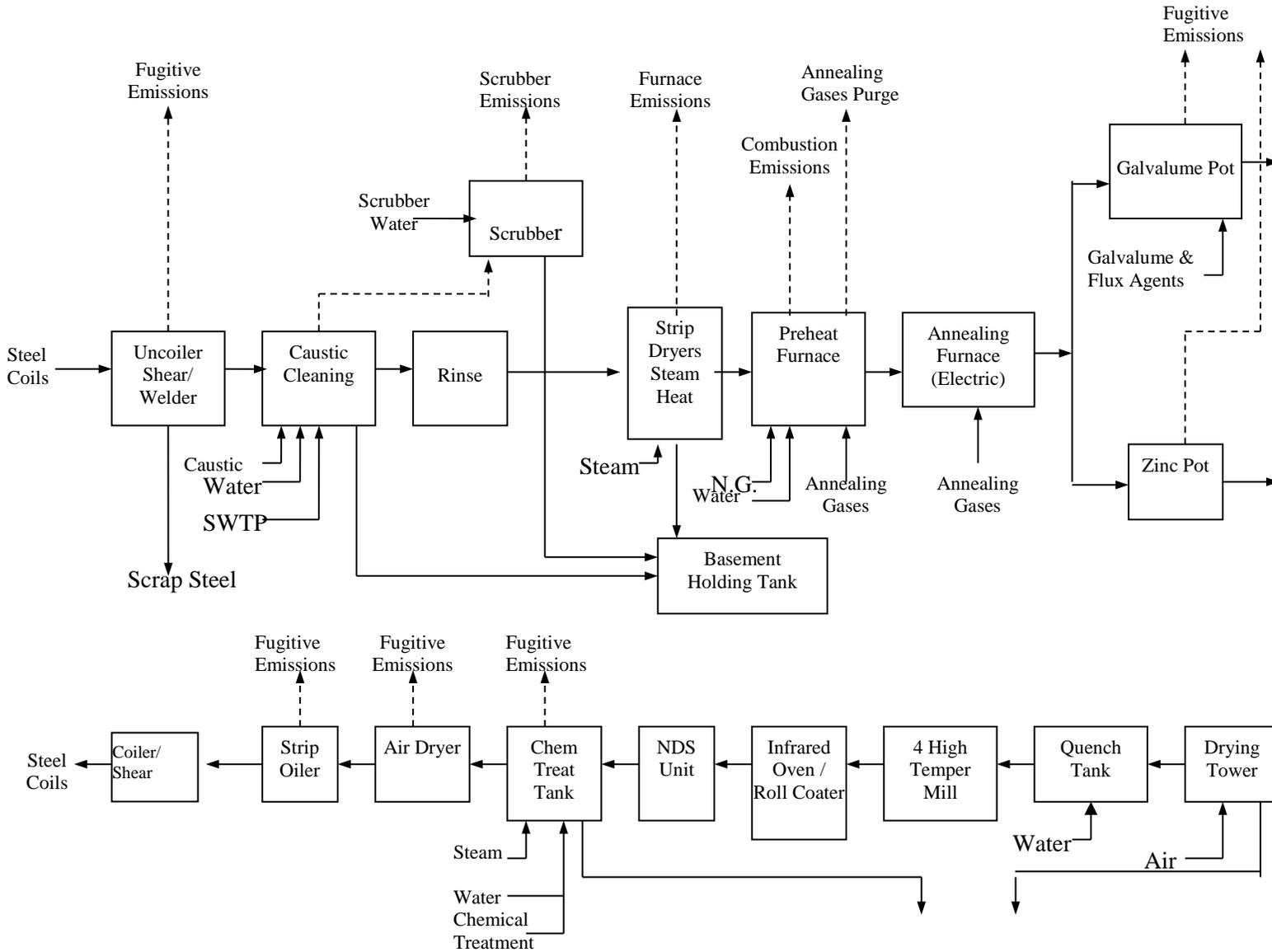


Figure II-11: No. 7 Temper Mill

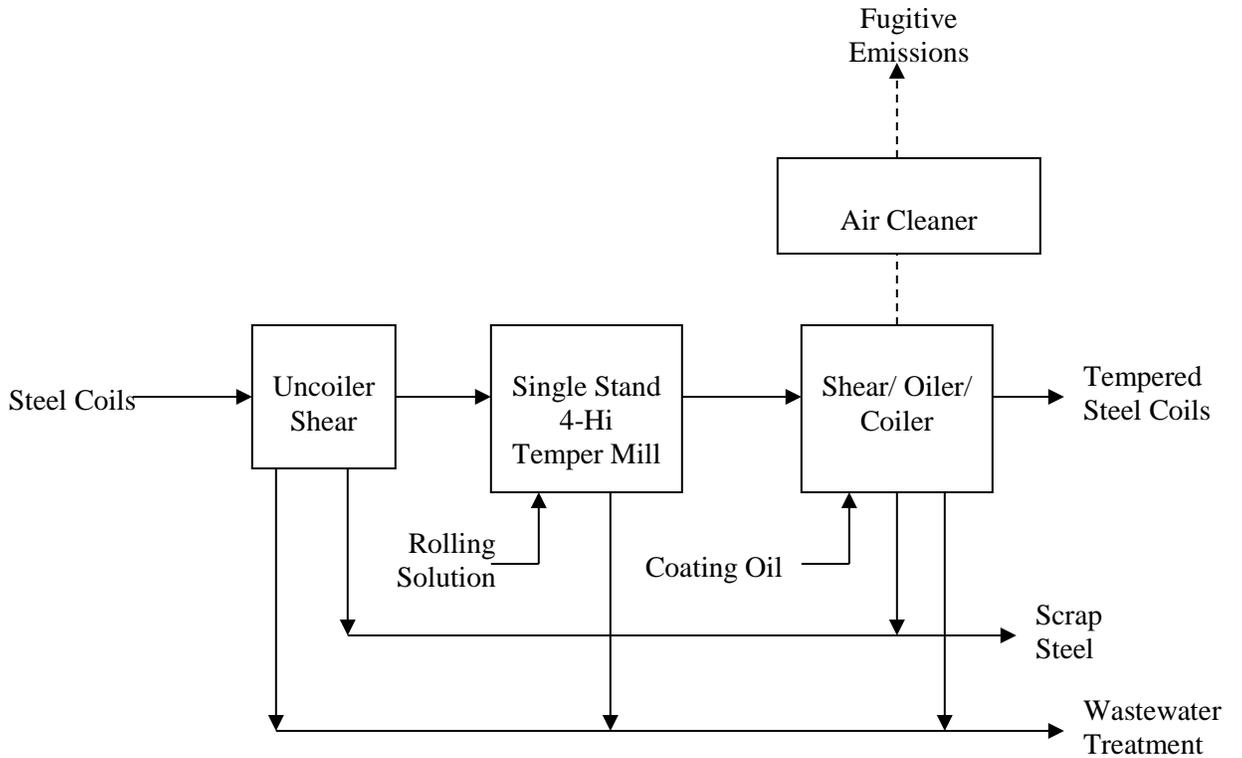


Figure II-12: No. 11 Coil and Shear Line

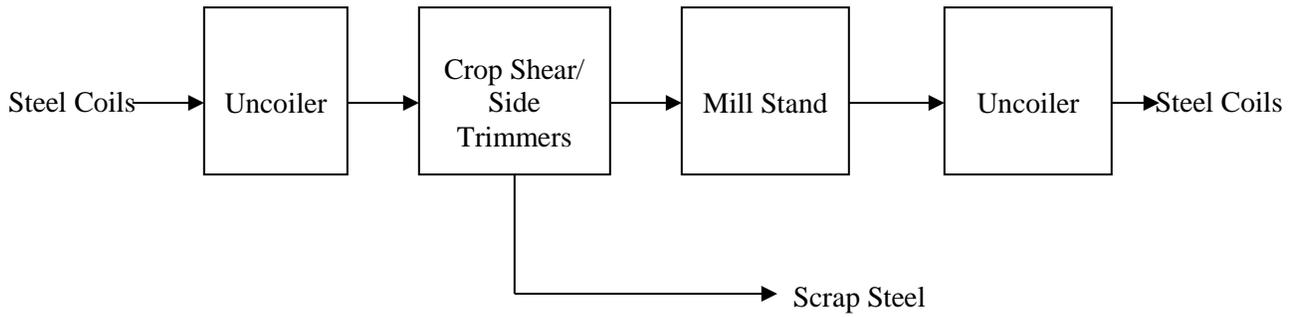


Figure II-13: No. 17 Recoiler

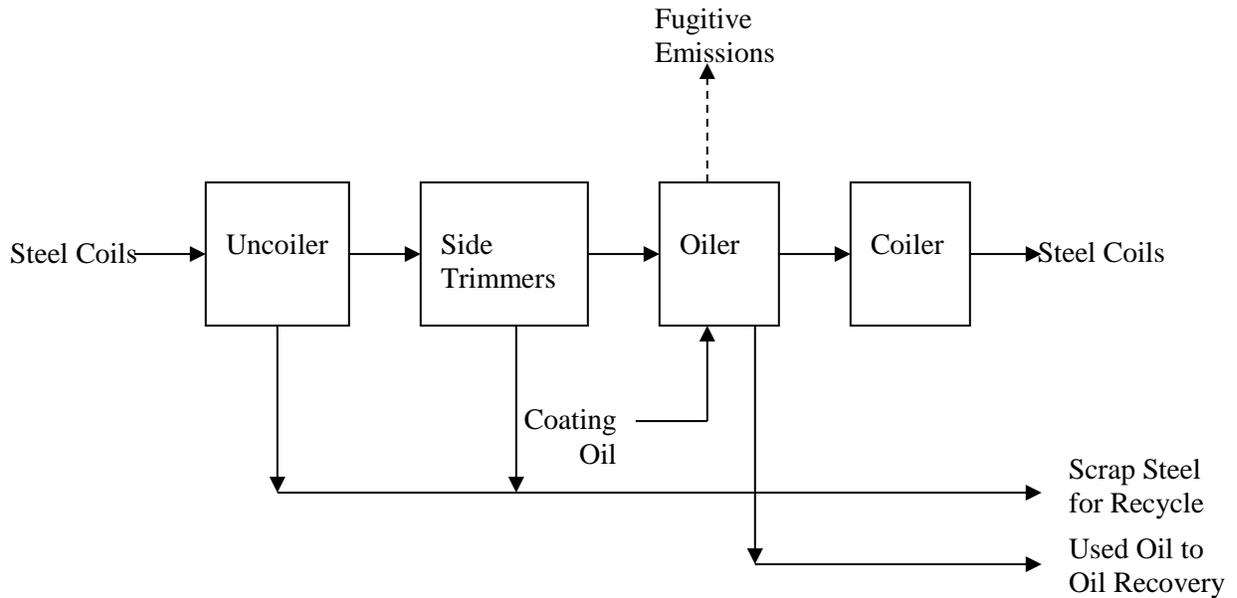


Figure II-13: Coke Oven Gas Flares

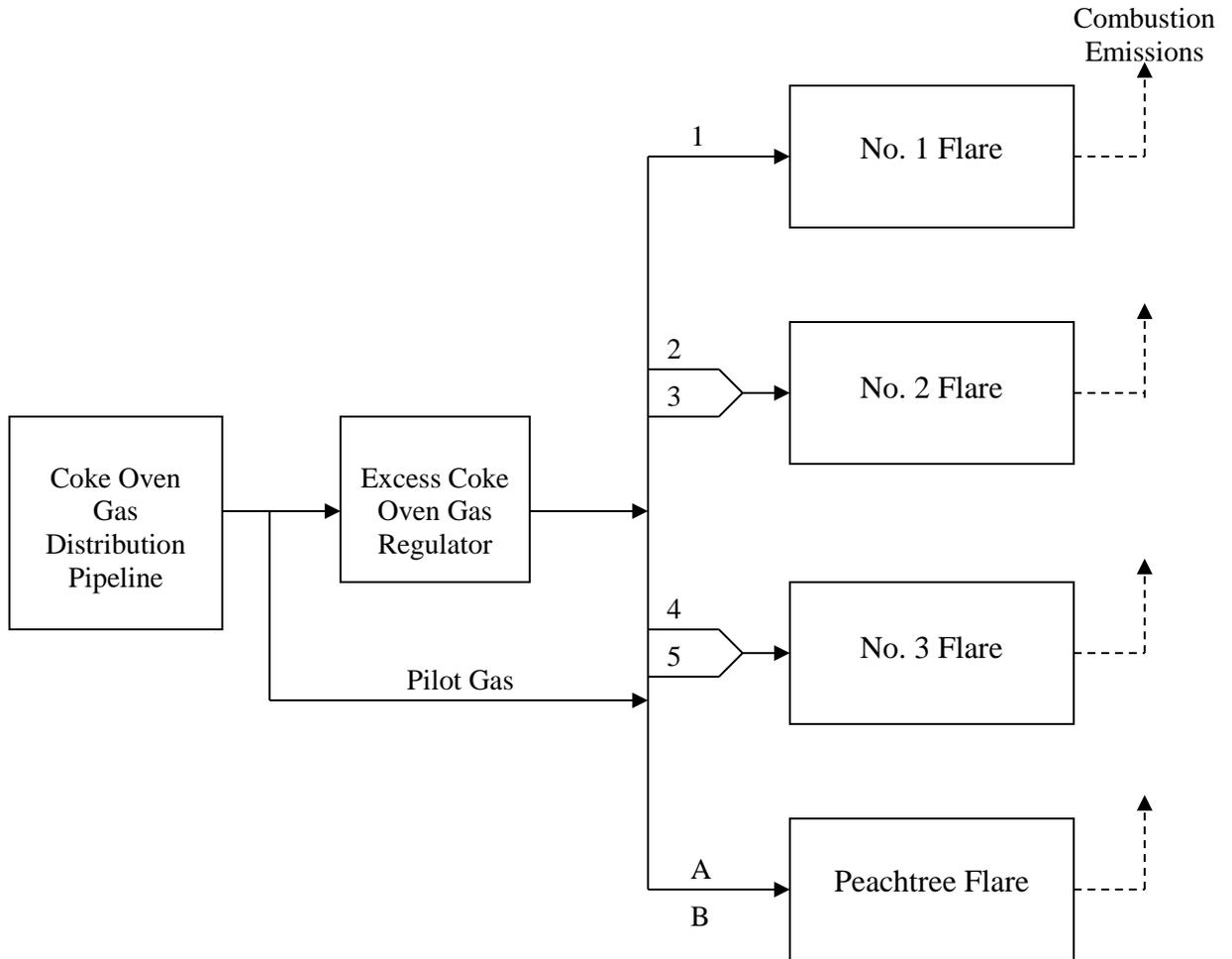
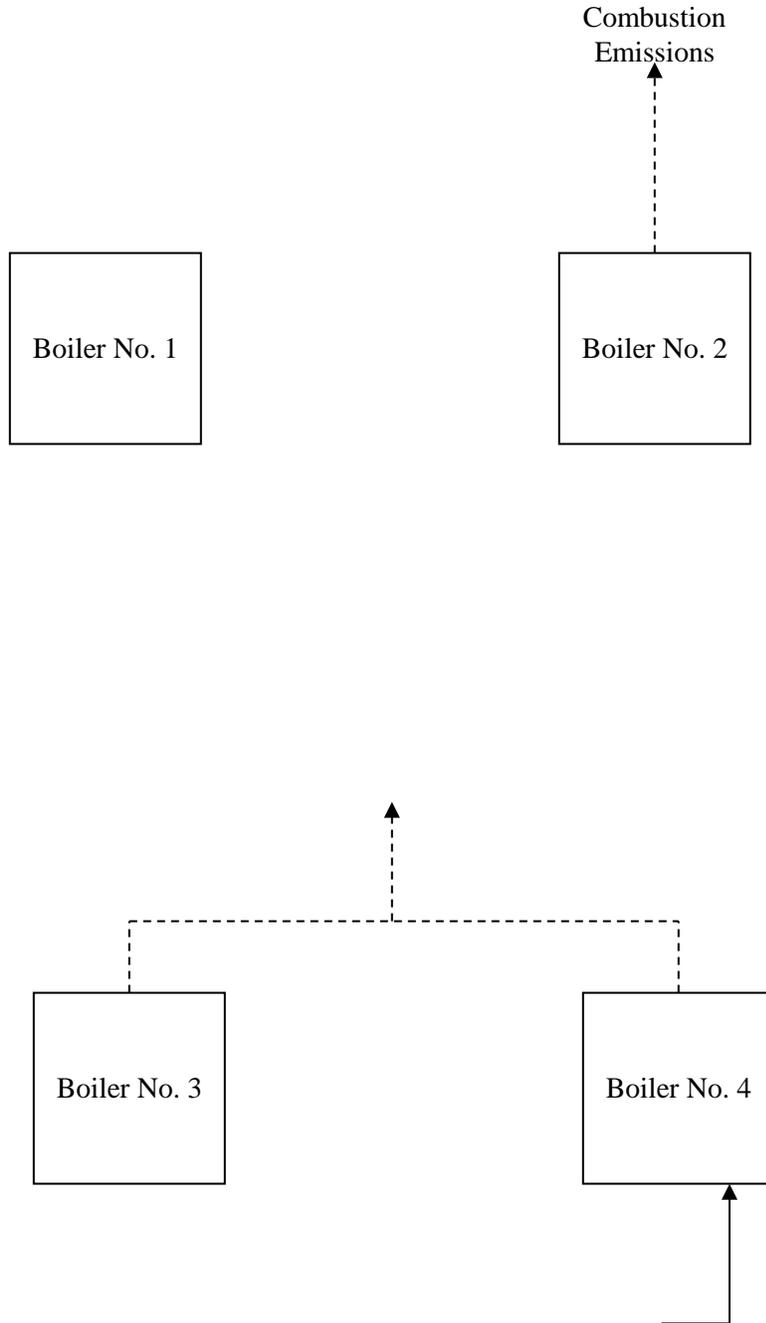


Figure II-14: Boilers No. 1 through No. 4





***DECLARATION OF POLICY***

*Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.*

**The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.**

**III. GENERAL CONDITIONS - Major Source**

**1. Prohibition of Air Pollution (§2101.11)**

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

- a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
- b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
- c. May reasonably be anticipated to endanger the public health, safety, or welfare.

**2. Definitions (§2101.20)**

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.
- b. Unless specified otherwise in this permit or in the applicable regulation, the term “year” shall mean any twelve (12) consecutive months.
- c. “RACT Order No. 258” shall be defined as Plan Approval Order and Agreement Upon Consent Number 258, dated December 30, 1996.

**3. Conditions (§2102.03.c)**

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

**4. Certification (§2102.01)**

Any report, or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**5. Transfers (§2102.03.e)**

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b The required documentation and fee must be received by the Department at least 30 days before the intended transfer date.

**6. Term (§2103.12.e, §2103.13.a)**

- a. This permit shall remain valid for five (5) years from the date of issuance, or such other shorter period if required by the Clean Air Act, unless revoked. The terms and conditions of an expired permit shall automatically continue pending issuance of a new operating permit provided the permittee has submitted a timely and complete application and paid applicable fees required under Article XXI Part C, and the Department through no fault of the permittee is unable to issue or deny a new permit before the expiration of the previous permit.
- b. Expiration. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with the requirements of Article XXI Part C.

**7. Need to Halt or Reduce Activity Not a Defense (§2103.12.f.2)**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**8. Property Rights (§2103.12.f.4)**

This permit does not convey any property rights of any sort, or any exclusive privilege.

**9. Duty to Provide Information (§2103.12.f.5)**

- a. The permittee shall furnish to the Department in writing within a reasonable time, any information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of any records required to be kept by the permit.
- b. Upon cause shown by the permittee the records, reports, or information, or a particular portion

thereof, claimed by the permittee to be confidential shall be submitted to the Department in accordance with the requirements of Article XXI, §2101.07.d.4. Information submitted to the Department under a claim of confidentiality, shall be available to the US EPA and the PADEP upon request and without restriction. Upon request of the permittee the confidential information may be submitted to the USEPA and PADEP directly. Emission data or any portions of any draft, proposed, or issued permits shall not be considered confidential.

**10. Modification of Section 112(b) Pollutants which are VOCs or PM<sub>10</sub> (§2103.12.f.7)**

Except where precluded under the Clean Air Act or federal regulations promulgated under the Clean Air Act, if this permit limits the emissions of VOCs or PM<sub>10</sub> but does not limit the emissions of any hazardous air pollutants, the mixture of hazardous air pollutants which are VOCs or PM<sub>10</sub> can be modified so long as no permit emission limitations are violated. A log of all mixtures and changes shall be kept and reported to the Department with the next report required after each change.

**11. Right to Access (§2103.12.h.2)**

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized Department and other federal, state, county, and local government representatives to:

- a. Enter upon the permittee's premises where a permitted source is located or an emissions-related activity is conducted, or where records are or should be kept under the conditions of the permit;
- b. Have access to, copy and remove, at reasonable times, any records that must be kept under the conditions of the permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. As authorized by either Article XXI or the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.

**12. Certification of Compliance (§2103.12.h.5, §2103.22.i.1)**

- a. The permittee shall submit on an annual basis, certification of compliance with all terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification of compliance shall be made consistent with General Condition 4 above and shall include the following information at a minimum:
  - 1) The identification of each term or condition of the permit that is the basis of the certification;
  - 2) The compliance status;
  - 3) Whether any noncompliance was continuous or intermittent;
  - 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the provisions of this permit; and
  - 5) Such other facts as the Department may require to determine the compliance status of the source.
- b. All certifications of compliance must be submitted to the Department by March 31 of each year for the time period beginning January 1 of the previous year and ending December 31 of the previous year.
- c. The permittee shall submit all compliance certifications to the Department. Compliance

certifications may be emailed to the Department at [agreports@alleghenycounty.us](mailto:agreports@alleghenycounty.us). in lieu of mailing a hard copy.

### 13. Record Keeping Requirements (§2103.12.j.1)

- a. The permittee shall maintain records of required monitoring information that include the following:
  - 1) The date, place as defined in the permit, and time of sampling or measurements;
  - 2) The date(s) analyses were performed;
  - 3) The company or entity that performed the analyses;
  - 4) The analytical techniques or methods used;
  - 5) The results of such analyses; and
  - 6) The operating parameters existing at the time of sampling or measurement.
- b. The permittee shall maintain and make available to the Department, upon request, records, including computerized records that may be necessary to comply with the reporting and emission statements in Article XXI §2108.01.e. Such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

### 14. Retention of Records (§2103.12.j.2)

The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

### 15. Reporting Requirements (§2103.12.k)

- a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.
- b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.
- c. All reports submitted to the Department shall comply with the certification requirements of General Condition 4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
  - 1) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
  - 2) One semiannual report is due by January 31 of each year for the time period beginning July 1 and ending December 31 of the previous year.
  - 3) The next semiannual report shall be due January 31, 2017 for the time period beginning on the issuance date of this permit through December 31, 2016.

- e. Quarterly reports required by this permit shall be submitted to the Department as follows:
- 1) One quarterly report is due by April 30 of each year for the time period beginning January 1 and ending March 31.
  - 2) One quarterly report is due by July 31 of each year for the time period beginning April 1 and ending June 30.
  - 3) One quarterly report is due by October 31 of each year for the time period beginning July 1 and ending September 30.
  - 4) One quarterly report is due by January 31 of each year for the time period beginning October 1 and ending December 31 of the previous year.
  - 5) The next quarterly report shall be due January 31, 2017 for the time period beginning on the issuance date of this permit through December 31, 2016.
- f. The permittee may submit reports electronically to [aqreports@alleghenycounty.us](mailto:aqreports@alleghenycounty.us). Certification by the responsible official in accordance with condition III.4 above shall be provided separately via hand copy.

**16. Severability Requirement (§2103.12.I)**

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

**17. Existing Source Reactivations (§2103.13.d)**

The permittee shall not reactivate any source that has been out of operation or production for a period of one year or more unless the permittee has submitted a reactivation plan request to, and received a written reactivation plan approval from, the Department. Existing source reactivations shall meet all requirements of Article XXI §2103.13.d.

**18. Administrative Permit Amendment Procedures (§2103.14.b, §2103.24.b)**

An administrative permit amendment may be made consistent with the procedures of Article XXI §2103.14.b and §2103.24.b. Administrative permit amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder.

**19. Revisions and Minor Permit Modification Procedures (§2103.14.c, §2103.24.a)**

Sources may apply for revisions and minor permit modifications on an expedited basis in accordance with Article XXI §2103.14.c and §2103.24.a.

**20. Significant Permit Modifications (§2103.14.d)**

Significant permit modifications shall meet all requirements of the applicable subparts of Article XXI, Part C, including those for applications, fees, public participation, review by affected States, and review by EPA, as they apply to permit issuance and permit renewal. The approval of a significant permit modification, if the entire permit has been reopened for review, shall commence a new full five (5) year permit term. The Department shall take final action on all such permits within nine (9) months following receipt of a complete application.

**21. Duty to Comply (§2103.12.f.1, §2103.22.g)**

The permittee shall comply with all permit conditions and all other applicable requirements at all times. Any permit noncompliance constitutes a violation of the Clean Air Act, the Air Pollution Control Act, and Article XXI and is grounds for any and all enforcement action, including, but not limited to, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

**22. Renewals (§2103.13.b., §2103.23.a)**

Renewal of this permit is subject to the same fees and procedural requirements, including those for public participation and affected State and EPA review that apply to initial permit issuance. The application for renewal shall be submitted at least six (6) months but not more than eighteen (18) months prior to expiration of this permit. The application shall also include submission of a supplemental compliance review as required by Article XXI §2102.01.

**23. Reopenings for Cause (§2103.15, §2103.25.a, §2103.12.f.3)**

a. This permit shall be reopened and reissued under any of the following circumstances:

- 1) Additional requirements under the Clean Air Act become applicable to a major source with a remaining permit term of three (3) or more years. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended solely due to the failure of the Department to act on a permit renewal application in a timely fashion.
- 2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.
- 3) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- 4) The Administrator or the Department determines that this permit must be reissued or revoked to assure compliance with the applicable requirements.

b. This permit may be modified; revoked, reopened, and reissued; or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in this permit.

**24. Reopenings for Cause by the EPA (§2103.25.b)**

This permit may be modified, reopened and reissued, revoked or terminated for cause by the EPA in accordance with procedures specified in Article XXI §2103.25.b.

**25. Annual Operating Permit Administration Fee (§2103.40)**

In each year during the term of this permit, on or before the last day of the month in which the application for this permit was submitted, the permittee shall submit to the Department, in addition to any other applicable administration fees, an Annual Operating Permit Administration Fee in accordance with §2103.40. by check or money order payable to the “Allegheny County Air Pollution Control Fund” in the amount specified in the fee schedule applicable at that time.

**26. Annual Major Source Emissions Fees Requirements (§2103.41)**

No later than September 1 of each year, the permittee shall pay an annual emission fee in accordance with Article XXI §2103.41 for each ton of a regulated pollutant (except for carbon monoxide) actually emitted from the source. The permittee shall not be required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant. The emission fee shall be increased in each year after 1995 by the percentage, if any, by which the Consumer Price Index for the most recent calendar year exceeds the Consumer Price Index for the previous calendar year.

**27. Other Requirements not Affected (§2104.08, §2105.02)**

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable Federal, State, or County statute, rule, regulation, or the like, including but not limited to the odor emission standards under Article XXI §2104.04, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology (GACT) standards now or hereafter established by the EPA, and any applicable requirements of BACT or LAER as provided by Article XXI, any condition contained in any applicable Installation or Operating Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Article XXI Part I.

**28. Termination of Operation (§2108.01.a)**

In the event that operation of any source of air contaminants is permanently terminated, the person responsible for such source shall so report, in writing, to the Department within 60 days of such termination.

**29. Emissions Inventory Statements (§2108.01.e & g)**

- a. Emissions inventory statements in accordance with Article XXI §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.
- b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**30. Tests by the Department (§2108.02.d)**

Notwithstanding any tests conducted pursuant to Article XXI §2108.02, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

**31. Other Rights and Remedies Preserved (§2109.02.b)**

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit.

**32. Enforcement and Emergency Orders (§2109.03, §2109.05)**

- a. The person responsible for this source shall be subject to any and all enforcement and emergency orders issued to it by the Department in accordance with Article XXI §2109.03, §2109.04 and §2109.05
- b. Upon request, any person aggrieved by an Enforcement Order or Emergency Order shall be granted a hearing as provided by Article XXI §2109.03.d; provided, however, that an Emergency Order shall continue in full force and effect notwithstanding the pendency of any and such appeal
- c. Failure to comply with an Enforcement Order or immediately comply with an Emergency Order shall be a violation of this permit, thus giving rise to the remedies provided by Article XXI §2109.02.

**33. Penalties, Fines, and Interest (§2109.07.a)**

A source that fails to pay any fee required under this permit when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have this permit revoked for failure to pay any fee required.

**34. Appeals (§2109.10)**

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI or any unsuccessful petitioner to the Administrator under Article XXI Part C, Subpart 2, shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

**35. Risk Management (§2104.08, 40 CFR Part 68)**

Should this stationary source, as defined in 40 CFR Part 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Part 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by *General Condition III.12* above.

**36. Permit Shield (§2103.22)**

- a. The permittee's compliance with the conditions of this permit shall be deemed compliance with all major source applicable requirements as of the date of permit issuance, provided that:
  - 1) Such major source applicable requirements are included and are specifically identified in the permit; or

- 2) The Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in Article XXI §2103.22.e or the Title V Permit shall alter or affect the following:
    - 1) The provisions of Section 303 of the Clean Air Act and the provisions of Article XXI regarding emergency orders, including the authority of the Administrator and the Department under such provisions;
    - 2) The liability of any person who owns, operates, or allows to be operated, a source in violation of any major source applicable requirements prior to or at the time of permit issuance;
    - 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; or
    - 4) The ability of the EPA or the County to obtain information from the permittee pursuant to Section 114 of the Clean Air Act, the provisions of Article XXI and State law.
  - c. Unless precluded by the Clean Air Act or regulations therein, final action by the Department on administrative amendments, minor and significant permit modifications, and operational flexibility changes shall be covered by the permit shield provided such amendments, modifications and changes meet the relevant requirements of Article XXI.
  - d. The permit shield authorized under Article XXI §2103.22 is in effect for the permit terms and conditions as identified in this permit.

### **37. Circumvention (§2101.14)**

For purposes of determining compliance with the provisions of this permit and Article XXI, no credit shall be given to any person for any device or technique, including but not limited to the operation of any source with unnecessary amounts of air, the combining of separate sources except as specifically permitted by Article XXI and the Department, the use of stacks exceeding Good Engineering Practice height as defined by regulations promulgated by the US EPA at 40 CFR §§51.100 and 51.110 and Subpart I, and other dispersion techniques, which without reducing the amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise violate the provisions of this Article; except that, for purposes of determining compliance with Article §2104.04 concerning odors, credit for such devices or techniques, except for the use of a masking agent, may be given.

### **38. Duty to Supplement and Correct Relevant Facts (§2103.12.d.2)**

- a. The permittee shall provide additional information as necessary to address the requirements that become applicable to the source after the date it files a complete application but prior to the Department taking action on the permit application.
- b. The permittee shall provide supplementary fact or corrected information upon becoming aware that incorrect information has been submitted or relevant facts were not submitted.
- c. Except as otherwise required by this permit and Article XXI, the Clean Air Act, or the regulations thereunder, the permittee shall submit additional information as necessary to address changes occurring at the source after the date it files a complete application but prior to the Department taking action on the permit application.

- d. The applicant shall submit information requested by the Department which is reasonably necessary to evaluate the permit application.

**39. Effect (§2102.03.g.)**

- a. Except as specifically otherwise provided under Article XXI, Part C, issuance of a permit pursuant to Article XXI Part B or Part C shall not in any manner relieve any person of the duty to fully comply with the requirements of this permit, Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of this permit or Article XXI, whether occurring before or after the issuance of such permit. Further, except as specifically otherwise provided under Article XXI Part C the issuance of a permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of this permit or Article XXI.

**40. Installation Permits (§2102.04.a.1.)**

It shall be a violation of this permit giving rise to the remedies set forth in Article XXI Part I for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment which would require an installation permit or permit modification in accordance with Article XXI Part B or Part C.

***PERMIT SHIELD IN EFFECT***

#### IV. SITE LEVEL TERMS AND CONDITIONS

##### 1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

##### 2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- b. Equal or exceed an opacity of 60% at any time.

##### 3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

##### 4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

##### 5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

##### 6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

##### 7. Breakdowns (§2108.01.c)

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the



**SITE LEVEL  
TERMS AND CONDITIONS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.

- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
  - 1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
  - 2) The nature and probable cause of the breakdown.
  - 3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
  - 4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
  - 5) The estimated quantity of each material being or likely to be emitted.
  - 6) The measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
  - 7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.
- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.
- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

**8. Cold Start (§2108.01.d)**

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

**9. Emissions Inventory Statements (§2108.01.e)**

The permittee shall submit to the Department a written emissions inventory statement, in accordance with §2108.01.e, showing the actual emissions of all regulated air pollutants from such source(s) during each calendar year and all supporting and identifying information deemed necessary by the Department.

**10. Orders (§2108.01.f)**

In addition to meeting the requirements of General Condition III.28 and Site Level Conditions IV.7 through IV.9 above, inclusive, and IV.16 below, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

**11. Violations (§2108.01.g)**

The failure to submit any report or update thereof required by General Condition III.28 and Site Level Conditions IV.7 through IV.10 above, inclusive, and IV.16 below within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**12. Emissions Testing (§2108.02)**

- a. On or before December 31, 1981, and at two-year intervals thereafter, any person who operates, or allows to be operated, any piece of equipment or process which has an allowable emission rate, of 100 or more tons per year of particulate matter, sulfur oxides or volatile organic compounds shall conduct, or cause to be conducted, for such equipment or process such emissions tests as are necessary to demonstrate compliance with the applicable emission limitation(s) of this permit and shall submit the results of such tests to the Department in writing. Emissions testing conducted pursuant to this section shall comply with all applicable requirements of Article XXI §2108.02.e.
- b. **Orders.** In addition to meeting the requirements of Site Level Condition IV.12.a above, the person responsible for any source shall, upon order by the Department, conduct, or cause to be conducted, such emissions tests as specified by the Department within such reasonable time as is specified by the Department. Test results shall be submitted in writing to the Department within 20 days after completion of the tests, unless a different period is specified in the Department's order. Emissions testing shall comply with all applicable requirements of Article XXI §2108.02.e.

- c. **Tests by the Department.** Notwithstanding any tests conducted pursuant to Site Level Conditions IV.12.a and IV.12.b above, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- d. **Testing Requirements.** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.
- e. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.
- f. **Violations.** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

### 13. Abrasive Blasting (§2105.51)

- a. Except where such blasting is a part of a process requiring an operating permit, no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.
- b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

### 14. Asbestos Abatement (§2105.62, §2105.63, 40 CFR 61.145 & 61.150)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63. In the event of demolition or renovation of asbestos, the permittee shall comply with all applicable provisions of 40 CFR 61.145 and 40 CFR 61.150.

### 15. Protection of Stratospheric Ozone (40 CFR Part 82)

- a. Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - 1) All containers in which a Class I or Class II substance is stored or transported, all products containing a Class I substance, and all products directly manufactured with a process that uses a Class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106;
  - 2) The placement of the required warning statement must comply with the requirements pursuant to §82.108;
  - 3) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110; and
  - 4) No person may modify, remove or interfere with the required warning statement except as described in §82.112.
  
- b. Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F:
  - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156;
  - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
  - 3) Persons maintaining, servicing, repairing or disposing of appliances, must be certified by an approved technician certification program pursuant to §82.161;
  - 4) Persons maintaining, servicing, repairing or disposing of appliances must certify to the Administrator of the U.S. Environmental Protection Agency pursuant to §82.162;
  - 5) Persons disposing of small appliances, motor vehicle air conditioners (MVAC) and MVAC-like appliances, must comply with the record keeping requirements pursuant to §82.166;
  - 6) Owners of commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
  - 7) Owners or operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
  
- c. If the permittee manufactures, transforms, destroys, imports or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A (Production and Consumption Controls).
  
- d. If the permittee performs a service on a motor vehicle that involves an ozone-depleting substance, refrigerant or regulated substitute substance in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B (Servicing of Motor Vehicle Air Conditioners).

- e. If the permittee has containers or products containing or manufactured with certain ozone-depleting substances, the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart E (The Labeling of Products Using Ozone-Depleting Substances).
- f. If the permittee services, performs maintenance or repairs, or disposes of appliances that contain class I or class II refrigerants, the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart F (Recycling and Emissions Reduction).
- g. The permittee may switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G.
- h. If the permittee tests, services, maintains, repairs, or disposes of equipment that contains halons or uses such equipment during technician training, the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart H (Halon Emissions Reduction)

#### **16. Shutdown of Control Equipment (§2108.01.b)**

- a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment is shut down.
- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.
- c. The prior report required by Site Level Condition IV.16.a above shall include:
  - 1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
  - 2) The reasons for the shutdown;
  - 3) The expected length of time that the equipment will be out of service;
  - 4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
  - 5) The measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
    - i. Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and

- ii. Such other information as may be required by the Department.

**17. Volatile Organic Compound Storage Tanks (§2105.12.a)**

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

**18. Permit Source Premises (§2105.40)**

- a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:
  - 1) Are visible at or beyond the property line of such source;
  - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
  - 3) Have an opacity of 60% or more at any time.
- b. **Deposition on Other Premises.** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.18.a above.

**19. Parking Lots and Roadways (§2105.42)**

- a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:
  - 1) Are visible at or beyond the property line;
  - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
  - 3) Have an opacity of 60% or more at any time.
- b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.

- c. Site Level Condition IV.19.a above shall apply during any repairs or maintenance done to such parking lot or roadway.
- d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.19.

**20. Permit Source Transport (§2105.43)**

- a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.20.

**21. Construction and Land Clearing (§2105.45)**

- a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:
  - 1) Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
  - 2) Equal or exceed 60% at any time.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

**22. Demolition (§2105.47)**

- a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period.  
Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.22 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.22

**23. Fugitive Emissions (§2105.49)**

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

- a. The use of asphalt, oil, water, or suitable chemicals for dust control;
- b. The paving and maintenance of roadways, parking lots and the like;
- c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
- d. The adoption of work or other practices to minimize emissions;
- e. Enclosure of the source; and
- f. The proper hooding, venting, and collection of fugitive emissions.

**24. Episode Plans (§2106.02)**

The permittee shall, upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

**25. 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters:**

The provisions of 40 CFR 63, Subpart DDDDD, which are incorporated by reference in ACHD Article XXI §2104.08.a, apply to the 4 boilers; HPH Batch Annealing Furnaces (31 individual furnaces); Open Coil Annealing Furnaces (16 furnaces); Continuous Annealing, and No.1 Continuous Galvanizing Galvaneal Furnace. The permittee shall comply with the emissions limitation, testing, monitoring, recordkeeping, reporting and workpractice standards. The facility shall submit an application to Department within 6 months of the compliance date January 31, 2016 to incorporate specific requirements from 40 CFR 63, Subpart DDDDD in accordance with §2103.25.a.1. [§2103.12.h.6; §2103.12.f.3; §2103.25.a.1; §63.7495.b.]

**26. SO<sub>2</sub> Compliance Monitoring (SO<sub>2</sub> SIP IP 0050-1008, Condition IV.25)**

- a. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted as a fuel for or at any source 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 oven gas. (§2105.21.h)
- b. For the sources V.A, V.E, V.F, V.G, V.K V.L V.M and V.N, the permittee shall determine the H<sub>2</sub>S grain loading and flow rate of the fuel as combusted. The permittee shall record the output of each system for measuring sulfur dioxide emissions discharged to the atmosphere
- c. SO<sub>2</sub> emissions from Boilers No. 3 & 4 (aggregate) shall not exceed the limitations in Table V-L-2 below: [§§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]



**TABLE IV-1  
SO<sub>2</sub> Emission Limitations for Boilers 3 & 4**

30 day rolling average limit (lb/hr)*	Supplementary 24-hr Limit* (lb/hr)	Tons/year**
8.21	9.30	35.96

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

\*\*Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

- 27. The Continuous Terne Line (P014), and Galvaneal Furnace (part of P012) have been removed from the permit. They are no longer in operation, and shall not be operated.

***PERMIT SHIELD IN EFFECT***

**V. EMISSION UNIT LEVEL TERMS AND CONDITIONS**

**A. Process P001: 80-inch Hot Strip Mill**

**Process Description:** 80” Hot Strip Mill Reheat Furnaces, Roughing and Finishing Mills  
**Facility ID:** P001 – P005 and P016  
**Max. Design Rate:** 140 mmBtu/hr maximum heat input, each reheat furnace  
**Capacity:** 3,000,000 tons of sheets per year  
**Raw Materials:** Steel Slabs, Natural Gas and Coke Oven Gas  
**Control Device:** None

As identified above, the 80” Hot Strip Mill includes five reheat furnaces (P001 – P005) and the roughing and finishing mills (P016).

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in reheat furnaces No. 1 through No. 5. [§2103.12.h.5.D]
- b. The permittee shall not operate or, allow to be operated reheat furnaces No. 1 through No. 5 such a manner that the emissions of particulate matter exceeds 7 pounds in any 60 minute period or 100 pounds in any 24-hour period [§2104.02.b]
- c. The permittee shall not operate or, allow to be operated the scale breaking/roughing and finishing mill stands in such a manner that the emissions of particulate matter exceeds 7 pounds in any 60 minute period or 100 pounds in any 24-hour period [§2104.02.b]
- d. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in reheat furnaces No. 1 through No. 5, 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 oven gas. [§2105.21.h.4]
- e. The permittee shall operate the 80" Hot Strip Mill scale breaking/roughing and finishing mill stands with lubricating oil, which is an oil-water emulsion and does not exceed a maximum VOC content by weight, of 1%, at any time. [RACT Order No. 258; §2105.06; 25 PA Code §129.99]
- f. Emissions from the Hot Strip Mill Reheat Furnaces No. 1 through No. 5 shall not exceed the emission limitations in Table V-A-1. [§2104.02; §2104.03; §2101.02.c.4]

**TABLE V-A-1  
Emission Limitations for each Hot Strip Mill Reheat Furnace**

Pollutant	Coke Oven Gas (lb/hr)	Natural Gas (lb/hr)	Annual Emission Limit (tons/year)*
PM-10	7.0	7.0	18.25

\*A year is defined as any consecutive 12-month period.

- g. SO<sub>2</sub> emissions from the Hot Strip Mill Reheat Furnaces (aggregate) shall not exceed the limitations in Table V-A-2 below: [§§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]

**TABLE V-A-2  
SO<sub>2</sub> Emission Limitations for each Hot Strip Mill Reheat Furnace (Aggregate)**

30 day rolling average limit (lb/hr)*	Supplementary 24-hr Limit* (lb/hr)	Tons/year**
108.63	118.75	475.80

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD’s SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.  
 \*\* Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD’s SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

**2. Testing Requirements:**

- a. The permittee shall have sulfur dioxide (SO<sub>2</sub>) emissions tests performed on the stacks of reheat furnaces No. 1 through No. 5 at least once every two years to demonstrate compliance with the mass emission limitations for the reheat furnaces No. 2 through No. 5 in condition V.A.1.g above. The test shall be conducted according to Method 6, 6A, 6B, or 6B specified in 40 CFR 60, Appendix A, and as approved by the Department. The permittee shall submit a stack test protocol to the Department for approval at least 45 days prior to the test dates. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.a; §2108.02.b & .e]
- b. The permittee shall perform emissions tests and evaluations for NO<sub>x</sub>, CO, and VOC on the stacks of reheat furnaces No. 1 through No. 5 to develop emission factors that can be applied to quantify NO<sub>x</sub>, CO, and VOC emissions. Testing for NO<sub>x</sub>, CO, and VOCs shall be conducted in accordance with approved EPA Methods in Appendix A of 40 CFR 60, Article XXI §2108.02, and as approved by the Department. Reports of the evaluation and stack testing results shall be submitted to the Department within 90 days of the date of the stack test. If testing results indicate emissions in excess of the thresholds identified in §2108.02.b, testing shall be conducted biennially for the applicable pollutant.
- c. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition 12 entitled “Emissions Testing.” (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Condition IV.26.b above. Continuously shall be defined as at least once every 15 minutes. [SIP IP 0050-1008, Condition V.A.3; §2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.A.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.A.3.a. However, if there is a change to the current operating

scenario, the sulfur concentration will be taken at the Irvin Plant. (§2103.12.h.5.B)

#### 4. Record Keeping Requirements:

- a. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order No. 258; 25 PA Code §129.100]
  - 1) The date of the annual tune-up;
  - 2) The name of the service company and/or individuals performing the annual tune-up;
  - 3) The operating rate or load after the annual tune-up; and
  - 4) The CO and NO<sub>x</sub> emission rate before and after the annual tune-up
- b. The permittee shall maintain hourly, monthly and 12 month rolling totals of the fuel type (COG & natural gas), and fuel usage and hourly H<sub>2</sub>S concentration expressed in grains per 100 dscf for each 80" Hot Strip Mill reheat furnace. [§2103.12.h.5.B; §2103.12.j; SIP IP 0050-1008, Condition V.A.4.a; 25 PA Code §129.100]
- c. The permittee shall maintain sufficient documentation to demonstrate compliance with the VOC requirements in RACT Order No. 258 for the 80" Hot Strip Mill. Compliance with this RACT requirement may be demonstrated by documentation from all suppliers of oils for the 80" Hot Strip Mill that includes the VOC content of these oils. [§2103.12.j, 25 PA Code §129.100]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2, 25 PA Code §129.100]

#### 5. Reporting Requirements:

- a. The permittee shall provide semi-annual reports, as specified in Condition III.15 above, of the type and amount of each fuel combusted in the reheat furnaces required by Condition V.A.4.a. [§2103.12.k]
- b. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with General Condition III.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [§2103.12.k; §2103.12.j; SIP IP 0050-1008, Condition V.A.5.a]
- c. Reporting instances of non-compliance in accordance with Condition V.A.5.b above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

#### 6. Work Practice Standards:

- a. The permittee shall perform an annual adjustment or "tune-up" on each furnace once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include: [RACT Order No. 258; 25 PA Code §129.99]
  - 1) Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total



**EMISSION UNIT LEVEL  
TERMS AND CONDITIONS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

emissions of NO<sub>x</sub>, and to the extent practicable minimizes emissions of carbon monoxide (hereafter referred as "CO"); and

- 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**B. Process P002: 64” Continuous Coil HCl Pickle Line**

**Process Description:** The pickle line consists of steel roll uncoilers, four (4) hydrochloric acid pickling tanks in series, a rinse tank, a dryer, a coiler and hydrochloric acid storage storage tanks.

**Facility ID:** P002

**Max. Design Rate:** 1,047,174 tons of sheets per year

**Capacity:** 1,047,174 tons of sheets per year

**Raw Materials:** Steel coils, HCl pickle liquor

**Control Device:** HCl Scrubber

As identified above, Process SP023 consists of the following number and type of equipment: steel roll uncoilers, four hydrochloric acid pickling tanks in series, a dryer and a coiler.

**1. Restrictions - Installation Permits, Standards for Issuance, BACT**

a. The permittee shall not operate or allow to be operated the 64” continuous coil HCl pickle line unless the four hydrochloric acid pickling tanks and the rinse tank, are equipped with an acid mist capture system that exhausts to a water wash packed tower scrubbing system. The collection and scrubbing system shall be properly maintained and operated, controlling hydrochloric acid emissions from the pickle line, according to the following specifications while the line is in operation: [Installation Permit No. 0050-I001b, Condition V.A.1.a, §2103.12.a.2.B and §2102.04.b.6]

- 1) The acid mist capture system shall have a slight negative air flow into the system at all times and cover the acid and rinse tanks completely with minimum openings for the steel sheet inlet and outlet and associated piping.
- 2) The water washed packed tower scrubber shall have the minimum scrubber makeup water and recirculating water flow rates determined by the average of the values recorded during the initial and/or subsequent scrubber emission testing as specified in Conditions V.B.2.a and V.B.2.b below.

b. The permittee shall not cause or allow to be discharged into the atmosphere from the pickling line: [IP No. 0050-I001b, Condition V.A.1.b §63.1158(a); §2102.04.b.6]

- 1) Any gases that contain HCl in a concentration in excess of 6 parts per million by volume (ppmv); and
- 2) HCl at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

c. The pickle line wet scrubber and HCl storage tank scrubber exhausts are subject to opacity requirements in Site Level Condition IV.2 above. [IP No. 0050-I001b, Condition V.A.1.c; §2104.01.a]

d. The permittee of a hydrochloric acid storage vessel(s) shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device. The HCl fume scrubber shall be in place and operating according to the following specifications while in operation: [IP No. 0050-I001b, Condition V.A.1.d; §63.1159(b)]

- 1) Packed tower HCl fume scrubber minimum scrubbing liquid flow rate of 11 gallons per minute.

- 2) Instrumentation shall be provided to measure the scrubbing liquid flow rate at any time, to within 5% of actual flow rate. Calibrations shall be performed semiannually.
- e. The permittee shall comply with the operation and maintenance requirements prescribed under §63.6(e) of 40 CFR Part 63, Subpart A. [IP No. 0050-I001b, Condition V.A.1.f; §63.1160(b)(1)]
- f. The permittee shall at no time, operate or allow to be operated, the tension leveler/scale breaker unless it is enclosed with all particulate emissions exhausted to the tension leveler/scale breaker dust collector. The dust collector shall be in place and operating, treating all particulate matter emissions from the tension leveler/scale breaker according to the following specifications while in operation. [Installation Permit No. 0050-I001b, Condition V.A.1.g and §2102.04.b.6]
  - 1) Tension leveler/scale breaker dust collector – minimum and maximum pressure drop across the dust collector equal to 0.5 and 8.0 inches of water column, gauge.
- g. Emissions from the Tension Leveler/Scale Breaker Dust Collector (SP023) shall not exceed the emission limitations in Table V-B-1 at any time. [IP No. 0050-I001b, Condition V.A.1.h; §2102.04.b.6; §2103.12.g]:

**Table V-B-1 - Tension Leveler/Scale Breaker Dust Collector Emission Limitations**

Pollutant	lbs/hr	tons/yr <sup>1</sup>
Particulate Matter	0.02	0.09
PM-10	0.02	0.09

<sup>1</sup> A year is defined as any 12 consecutive months.

- h. Emissions from the 64” continuous coil pickle line shall not exceed the emission limitations in Table V-B-2 at any time. [IP No. 0050-I001b, Condition V.A.1.i; §63.1158(a); §2102.04.b.6; §2103.12.g]

**Table V-B-2 - 64” Continuous Coil HCl Pickle Line Emission Limitations**

Pollutant	Hourly Emission lbs/hr	Annual Emission tons/yr <sup>1</sup>
Particulate Matter	0.41	1.79
PM-10	0.41	1.79
HCl	0.41	1.79

<sup>1</sup>A year is defined as any 12 consecutive months.

- i. Compliance with the hydrochloric acid emission limitations for the 64” Continuous Coil HCl Pickle Line in Condition V.B.1.h above, shall be determined by initial and subsequent HCl emission testing annually as specified in Condition V.B.2.a below. Compliance with the particulate emission limitation for the wet scrubber shall be determined by assuming all hydrochloric acid emissions are PM-10 emissions. [Installation Permit No. 0050-I001b, Condition V.A.1.j and §2105.03]

**2. Testing Requirements**

- a. The permittee shall conduct a performance test for each process or emission control device to

determine and demonstrate compliance with the applicable emission limitation according to the requirements in §63.7 of 40 CFR 63, Subpart A. [IP No. 0050-I001b, Condition V.A.2.a; §63.1161(a) and §2102.04.b.6]

- 1) Following approval of the site-specific test plan, the permittee shall conduct a performance test of the 64" continuous coil HCl pickle line wet scrubber control device to measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) and measure the concentration of HCl in gases exiting the process or the emission control device. [§63.1161(a)(1)]
  - 2) Compliance with the applicable concentration standard and collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations. (§63.1161(a)(2))
  - 3) Compliance with V.B.1.b above is achieved if the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, and the average measured concentration of HCl exiting the emission control device is less than or equal to the applicable emission concentration standard. (§63.1161(a)(3))
- b. During the performance test for the wet scrubber emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for a scrubber that operates with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration and the collection efficiency per Condition V.B.1.b above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests. [IP No. 0050-I001b, Condition V.A.2.b; §63.1161(b)]
- c. The permittee shall notify the Department in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Department to review and approve the site-specific test plan required under Subpart A of 40 CFR 63.7(c) and, if requested by the Department, to have an observer present during the test. [IP No. 0050-I001b, Condition V.A.2.c; §63.1163(d)]
- d. The permittee shall conduct performance tests to measure the HCl mass flows at the control device inlet and outlet and the concentration of HCl exiting the control device according to the procedures described in Condition V.B.2.a above. Performance tests to measure the HCl mass flows at the control device inlet and outlet shall be conducted at least once every five years. Performance tests to measure the concentration of HCl exiting the control device shall be conducted either annually or according to an alternative schedule that is approved by the Department, but no less frequently than every 2 1/2 years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the permittee is in violation of the emission limit. [Installation Permit No. 0050-I001b, Condition V.A.2.d; §63.1162(a) and §2108.02.b]

- e. The following test methods in Appendix A of 40 CFR Part 60 shall be used to determine compliance with Condition V.B.1.b above: [IP No. 0050-I001b, Condition V.A.2.e §63.1161(d)]
- 1) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;
  - 2) Method 2, to determine gas velocity and volumetric flow rate;
  - 3) Method 3, to determine the molecular weight of the stack gas;
  - 4) Method 4, to determine the moisture content of the stack gas; and
  - 5) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources -- Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl and Cl<sub>2</sub> shall be calculated for each run as follows:

$$C_{\text{HCl}}(\text{ppmv}) = 0.659 C_{\text{HCl}}(\text{mg/dscm}),$$

Where C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

- f. The permittee may use equivalent alternative measurement methods to those specified in paragraph V.B.2.e above, subject to approval by the Administrator and the Department [IP No. 0050-I001b, Condition V.A.2.f; §63.1161(d)(2) and §63.1166(a)(2)]
- g. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (IP No. 0050-I001b, Condition V.A.2.g; §2103.12.h.1)

### **3. Monitoring Requirements**

- a. The tension leveler/scale breaker dust collector shall be provided with instrumentation to continuously monitor the pressure drop across the dust collector, when treating particulate emissions from the tension leveler/scale breaker. [IP No. 0050-I001b, Condition V.A.3.a]
- b. If the pressure drop exceeds the normal range as specified in V.B.1.f.1) above, the permittee shall initiate an investigation and implement corrective action. Operation outside the pressure drop range shall not be considered a deviation if corrective action is taken in 7 days. [IP No. 0050-I001b, Condition V.A.3.b; §2102.04.b.6]
- c. The permittee shall inspect the tension leveler/scale breaker dust collector on a weekly basis to insure compliance with Conditions V.B.1.f and V.B.3.a above. Any excursions from these conditions shall be corrected as soon as possible. [IP No. 0050-I001b, Condition V.A.3.c; §2102.04.b.6]
- d. The water wash packed tower scrubber shall be provided with instrumentation that shall monitor the pressure drop across the scrubber once per shift. [IP No. 0050-I001b, Condition V.A.3.d; §63.1160(b)(2)(i) and §2102.04.b.6]
- e. The permittee shall install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate, and recirculation water flow rate. These flow rates must be

monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in V.B.6.a below. [IP No. 0050-I001b, Condition V.A.3.e; §63.1162(a)(2)]

- f. Failure to record each of the operating parameters listed in paragraph V.B.3.e above is a violation of the monitoring requirements of this permit. [IP No. 0050-I001b, Condition V.A.3.f; §63.1162(a)(4)]
- g. Each monitoring device specified in paragraphs V.B.3.d and V.B.3.e above shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year. [IP No. 0050-I001b, Condition V.A.3.g; §63.1162(a)(5)]
- h. The permittee may develop and implement alternative monitoring requirements subject to approval by the Department and the Administrator. [IP No. 0050-I001b, Condition V.A.3.h; §63.1162(a)(6)]
- i. The permittee shall inspect each hydrochloric acid storage vessel semiannually to determine that the closed-vent system and the air pollution control device are installed and operating when required. [IP No. 0050-I001b, Condition V.A.3.i; §63.1162(c)]

**4. Record Keeping Requirements**

- a. The results of inspections required by Condition V.B.3.c above, and the differential pressure drop across the tension leveler/scale breaker dust collector, shall be recorded weekly. Episodes of noncompliance with Conditions V.B.1.f and V.B.3.a above and corrective action taken shall be recorded upon occurrence. All records shall be kept on a monthly basis. [IP No. 0050-I001b, Condition V.A.4.a; §2102.04.b.6]
- b. The results of inspections required by Condition V.B.3.i above shall be recorded upon each occurrence. Episodes of noncompliance with Conditions V.B.1.d above and corrective action taken shall be recorded upon occurrence. All records shall be kept on a semiannual basis. [IP No. 0050-I001b, Condition V.A.4.b; §2102.04.b.6]
- c. The permittee shall maintain a record of each inspection, including each item identified in paragraph V.B.6.a.4) below, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken. [IP No. 0050-I001b, Condition V.A.4.c; §63.1160(b)(2)(vii)]
- d. As required by §63.10(b)(2), the permittee shall maintain records for 5 years from the date of each record of: [IP No. 0050-I001b, Condition V.A.4.d; §63.1165(a)]
  - 1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
  - 2) The occurrence and duration of each malfunction of the air pollution control equipment;
  - 3) All maintenance performed on the air pollution control equipment;
  - 4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
  - 5) All information necessary to demonstrate conformance with the startup, shutdown, and

- malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form [see 40 CFR 63.10(b)(2)(v)];
- 6) All required measurements needed to demonstrate compliance with the standard and to support data that the permittee is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
  - 7) All results of initial or subsequent performance tests;
  - 8) All documentation supporting initial notifications and notifications of compliance status required by 40 CFR 63.9; and
  - 9) Records of any applicability determination, including supporting analyses.
- e. In addition to the general records required by paragraph V.B.4.d above, the permittee shall maintain records for 5 years from the date of each record of: [IP No. 0050-I001b, Condition V.A.4.e;§63.1165(b)(1); §2103.12.j]
- 1) Scrubber makeup water flow rate and recirculation water flow rate;
  - 2) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
  - 3) Each maintenance inspection and repair, replacement, or other corrective action.
- f. The permittee shall record the production and hours of operation of the 64” continuous coil HCl pickle line on a daily basis, and the monthly throughput of HCl for each storage tank. [IP No. 0050-I001b, Condition V.A.4.f;§2103.12.j]
- g. The pressure drop across the scrubber shall be recorded at least once daily and during the initial and/or subsequent scrubber emission testing. (IP No. 0050-I001b, Condition V.A.1.a.3; §2102.04.b.6; §2103.12.j]
- h. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Department for the life of the affected source or until the source is no longer subject to these provisions. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Department for a period of 5 years after each revision to the plan. [IP No. 0050-I001b, Condition V.A.4.g; §63.1165(b)(3)]
- i. Records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site. [IP No. 0050-I001b, Condition V.A.4.h;§63.1165(c)]

## 5. Reporting Requirements

- a. The permittee shall submit a notification of compliance status as required by 40 CFR 63.9(h). [IP No. 0050-I001b, Condition V.A.5.a; §63.1163(e)]
- b. The permittee shall report the results of any performance test required in paragraph V.B.2.a and V.B.2.d above. [IP No. 0050-I001b, Condition V.A.5.b; §63.1164(a)]
- c. As required by 40 CFR §63.10(d)(5)(i), if actions taken by the permittee during a startup, shutdown, or malfunction of the 64” continuous coil pickle line (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction

plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half. [IP No. 0050-I001b, Condition V.A.5.c; §63.1164(c)(2)]

- d. Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii). [IP No. 0050-I001b, Condition V.A.5.d; §63.1164(c)(3)]
- e. Reporting instances of non-compliance in accordance with condition V.B.5.c above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. (IP No. 0050-I001b, Condition V.A.5.e; §2103.12.k.1)

#### 6. Work Practice Standard (§2102.04.b.6)

- a. In addition to the requirements specified in paragraph V.B.1.e above, the permittee shall prepare an operation and maintenance plan for the 64” continuous coil HCl pickle line scrubber emission control devices. The plan shall be submitted to the Department for approval. The plan must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum: [IP No. 0050-I001b, Condition V.A.6.a; §63.1160(b)(2) and §2102.04.b.6]
  - 1) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
  - 2) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system;
  - 3) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;
  - 4) Require an inspection of each scrubber at intervals of no less than 3 months with:
    - a) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
    - b) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
    - c) Repair or replacement of droplet eliminator elements as needed;
    - d) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
    - e) Adjustment of damper settings for consistency with the required air flow.
  - 5) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Department may be used.
  - 6) The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirements of this permit.
- b. The permittee shall operate and maintain the 64” continuous coil HCl pickle line and the wet scrubber emission control device, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by paragraph V.B.1.b above at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and



malfunction plan specified in paragraph V.B.6.c below. [IP No. 0050-I001b, Condition V.A.6.b; §63.1164(c)]

- c. As required by §63.6(e)(3) of 40 CFR Part 63, Subpart A, the permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the 64” continuous coil HCl pickle line and the wet scrubber emission control device during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the emission limitations in paragraph V.B.1.b above. [IP No. 0050-I001b, Condition V.A.6.c; §63.1164(c)(1)]

**7. Additional Requirements**

*None except as provided elsewhere.*

***PERMIT SHIELD IN EFFECT***

**C. Process P007: 84” Continuous Pickle Line**

**Process Description:** The pickle line consists of steel roll uncoilers, 4 hydrochloric acid pickling tanks in series, a rinse tank, a dryer and a coiler.

**Facility ID:** P007

**Max. Design Rate:** 1,576,800 tons of sheet per year

**Capacity:** 1,576,800 tons of sheet per year

**Raw Materials:** Steel coils, HCl pickle liquor

**Control Device:** HCl Scrubber

As identified above, Process P007 consists of the following number and type of equipment: steel roll uncoilers, four hydrochloric acid pickling tanks in series, a dryer and a coiler.

**1. Restrictions: - Installation Permits, Standards for Issuance, BACT**

- a. The permittee shall not operate or allow to be operated the 84” continuous coil HCl pickle line unless the four hydrochloric acid pickling tanks and the rinse tank are equipped with an acid mist capture system that exhausts to a water wash scrubbing system. The collection and scrubbing system shall be properly maintained and operated, controlling hydrochloric acid emissions from the pickle line. [§2102.04.b.5]
- b. The permittee shall not cause or allow to be discharged into the atmosphere from the 84” continuous pickling line scrubber: [§63.1157(a)]
  - 1) Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or
  - 2) HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.
- c. The pickle line wet scrubber exhaust is subject to the opacity requirements in Site Level Condition IV.2. [§2104.01.a]
- d. The permittee shall comply with the operation and maintenance requirements prescribed under paragraph 63.6(e) of 40 CFR Part 63, Subpart A. [§63.1160(b)(1)]
- e. Emissions from the 84” Continuous Coil HCl Pickle Line shall not exceed the emission limitations in Table V-C at any time. [§63.1157(a)(1) and §2102.04.b.5]:

Pollutant	Hourly Emission Limit lbs/hr	Annual Emission Limit tons/yr <sup>1</sup>
HCl	2.9	12.55

<sup>1</sup> A year is defined as any 12 consecutive months.

**2. Testing Requirements:**

- a. The permittee shall conduct a performance test for each process or emission control device to determine and demonstrate compliance with the emission limitation in Condition V.C.1.b above, according to the requirements in §63.7 of 40 CFR Part 63, Subpart A. The testing shall be completed as follows: [§63.1161(a)]
  - 1) Following approval of the site-specific test plan, the permittee shall conduct a performance test

of the 84” continuous coil HCl pickle line wet scrubber control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the collection efficiency standard of 97 percent) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the emission concentration standard of 18 ppmv). [§63.1161(a)(1)]

- 2) Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations. [§63.1161(a)(2)]
  - 3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl exiting the emission control device is less than or equal to the applicable emission concentration standard. [§63.1161(a)(3)]
- b. During the performance test for the wet scrubber emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for a scrubber that operates with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration and the collection efficiency per Condition V.C.1.b above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests. [§63.1161(b)]
  - c. The permittee shall notify the Department in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Department to review and approve the site-specific test plan required under Subpart A of 40 CFR 63.7(c) and, if requested by the Department, to have an observer present during the test. [§63.1163(d)]
  - d. The permittee shall conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in Condition V.B.2.a above. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by the Department, but no less frequently than every 2 1/2 years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the permittee is in violation of the emission limit. [§63.1162(a) and §2108.02.b]
  - e. The following test methods in Appendix A of 40 CFR Part 60 shall be used to determine compliance with Condition V.C.1.b above: [§63.1161(d)]
    - 1) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;
    - 2) Method 2, to determine gas velocity and volumetric flow rate;
    - 3) Method 3, to determine the molecular weight of the stack gas;
    - 4) Method 4, to determine the moisture content of the stack gas; and

- 5) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources -- Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere, and also to determine the concentration of Cl<sub>2</sub> discharged to the atmosphere from acid regeneration plants. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl and Cl<sub>2</sub> shall be calculated for each run as follows:

$$C_{\text{HCl}}(\text{ppmv}) = 0.659 C_{\text{HCl}}(\text{mg/dscm}),$$

where C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

- f. The permittee may use equivalent alternative measurement methods to those specified in paragraph V.C.2.c above, subject to approval by the Administrator and the Department [§63.1161(d)(2) and §63.1166(a)(2)]
- g. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

### 3. Monitoring Requirements:

- a. The wet scrubber shall be provided with instrumentation that shall monitor the pressure drop across the scrubber at least once per shift. [§63.1160(b)(2) and §2103.12j]
- b. The permittee shall install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in V.C.6.a below. [§63.1162(a)(2)]
- c. Failure to record each of the operating parameters listed in paragraph V.C.3.b above is a violation of the monitoring requirements. [§63.1162(a)(4)]
- d. Each monitoring device specified in paragraphs V.C.3.a and V.C.3.b above shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year. [§63.1162(a)(5)]
- e. The permittee may develop and implement alternative monitoring requirements subject to approval by the Administrator and the Department. [§63.1162(a)(6)]

### 4. Record Keeping Requirements:

- a. The permittee shall maintain a record of each inspection, including each item identified in paragraph V.C.6.a.4) below, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other

- corrective action taken, and the date of the repair, replacement, or other corrective action taken. [63.1160(b)(2)(vii)]
- b. As required by §63.10(b)(2), the permittee shall maintain records for 5 years from the date of each record of: [§63.1165(a)]
- 1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
  - 2) The occurrence and duration of each malfunction of the air pollution control equipment;
  - 3) All maintenance performed on the air pollution control equipment;
  - 4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
  - 5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form [see 40 CFR 63.10(b)(2)(v)];
  - 6) All required measurements needed to demonstrate compliance with the standard and to support data that the permittee is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
  - 7) All results of initial or subsequent performance tests;
  - 8) All documentation supporting initial notifications and notifications of compliance status required by 40 CFR 63.9; and
  - 9) Records of any applicability determination, including supporting analyses.
- c. In addition to the general records required by paragraph V.C.4.b above, the permittee shall maintain records for 5 years from the date of each record of: [§63.1165(b)(1)]
- 1) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;
  - 2) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
  - 3) Each maintenance inspection and repair, replacement, or other corrective action.
- d. The permittee shall record the production and hours of operation of the 84” continuous coil HCl pickle line on a monthly basis. [§2103.12.j]
- e. The permittee shall maintain records that document that compliance was demonstrated in accordance 40 CFR Part 63, Subpart CCC §63.1160(a)(1) [§2103.12.j]
- f. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Department for the life of the affected source or until the source is no longer subject to these provisions. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Department for a period of 5 years after each revision to the plan. [§63.1165(b)(3)]
- g. Records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site. [§63.1165(c)]

**5. Reporting Requirements:**

- a. The permittee shall submit a notification of compliance status as required by 40 CFR 63.9(h). [§63.1163(e)]
- b. The permittee shall report the results of any performance test required in condition V.C.2.a. [§63.1164(a)]
- c. As required by 40 CFR§63.10(d)(5)(i), if actions taken by the permittee during a startup, shutdown, or malfunction of the 84”continuous coil pickle line (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half. [§63.1164(c)(2)]
- d. Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii). [§63.1164(c)(3)]
- e. Reporting instances of non-compliance in accordance with condition V.C.5.c above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. (§2103.12.k.1)

**6. Work Practice Standard:**

- a. In addition to the requirements specified in condition V.C.1.d above, the permittee shall prepare an operation and maintenance plan for the 84” continuous coil pickle line scrubber emission control device. The plan shall be submitted to the Department for approval. The plan must be consistent with good maintenance practices and, must at a minimum: [63.1160(b)(2) and §2102.04.b.6]
  - 1) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
  - 2) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system;
  - 3) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;
  - 4) Require an inspection of each scrubber at intervals of no less than 3 months with:
    - i. Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
    - ii. Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
    - iii. Repair or replacement of droplet eliminator elements as needed;
    - iv. Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
    - v. Adjustment of damper settings for consistency with the required air flow.
  - 5) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Department may be used.
  - 6) The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures

to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirements of this permit.

- b. The permittee shall operate and maintain the 84” continuous coil HCl pickle line and the wet scrubber emission control device, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by condition V.C.1.b above at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan specified in paragraph V.C.6.c below. [§63.1164(c)]
- c. As required by §63.6(e)(3) of 40 CFR 63, Subpart A, the permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the 84” continuous coil HCl pickle line and the wet scrubber emission control device during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the emission limitations in paragraph V.C.1.b above. [§63.1164(c)(1)]

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**D. Process P008: No. 3 Five Stand Cold Reduction Mill**

<b>Process Description:</b>	Process P008 consists of steel roll uncoilers, cold reduction mill stands, steel roll hydraulic shear, and a roll coiler.
<b>Facility ID:</b>	P008
<b>Max. Design Rate:</b>	3,767,676 tons of steel coils per year
<b>Capacity:</b>	2,500,000 tons of steel coils per year
<b>Raw Materials:</b>	Steel Coils
<b>Control Device:</b>	Cyclonic Mist Eliminator

As identified above, Process P008 consists of following types of equipment: steel roll uncoilers, cold reduction mill stands, steel coil hydraulic shear, and a roll coiler.

**1. Restrictions - Installation Permits, Standards for Issuance, BACT**

- a. The permittee shall not, operate or allow to be operated, the cold reduction mill unless the five mill stands are equipped with a capture system that exhausts to a mist eliminator control system. The collection and control system shall be properly maintained and operated, controlling oil mist emissions from the cold reduction mill, according to the following specifications while the line is in operation: [Installation Permit No. 0050-I002a, §2102.04.b.6, and 25 PA Code §129.99]
  - 1) The capture system shall have a negative air flow into the system at all times and partially enclose the mill stands with openings for the steel sheet inlet and outlet and openings for observation and access to the rollers and steel.
  - 2) The mist eliminator control system shall be comprised of five identical cyclone mist eliminators, in parallel with a design minimum combined air flowrate of 200,000 ACFM.
  - 3) The North and South fans shall maintain an inlet static pressure that is no more negative than - 8.0" w.c.
- b. The permittee shall conduct cleaning of the cyclone mist eliminators specified in Condition V.D.1.a above once every four months. This cleaning will be conducted in such a way as to thoroughly remove all material or corrosion that could decrease the mist eliminator efficiencies. Notwithstanding the previous, cleaning shall be conducted immediately following any inspection of the mist eliminators as specified in Condition V.D.3.a below if warranted by the inspection findings or when a measured inlet pressure exceeds Condition V.D.1.a.3) above. [Installation Permit No. 0050-I002a, 2/12/04 and §2102.04.b.6]
- c. The permittee shall not operate or allow to be operated, the cold reduction mill in such a manner that the production during any 12 consecutive months exceeds 2,500,000 tons of steel or the daily average hourly production rate exceeds 525 tons of steel per hour based on the number of hours of operation in a day. [Installation Permit No. 0050-I002a]
- d. The permittee shall operate the Cold Reduction Mill with a water-oil emulsion in which the oil content, by volume is less than or equal to 7%. The lubricating oil used in the water-oil emulsion shall have a VOC content, by weight less than or equal to 2%. [Installation Permit No. 0050-I002a; RACT Order No. 258, §2105.06; 25 PA Code §129.99]

- e. Emissions from the cold reduction mill shall not exceed the limitations in Table V-D-1 at any time: [Installation Permit No. 0050-I002a, 2/12/04 and §2102.04.b.6]

**Table V-D-1 - No. 3 Five Stand Cold Reduction Mill Emission Limits**

<b>Pollutant</b>	<b>lbs/ton steel rolled</b>	<b>lbs/hour</b>	<b>tons/year <sup>1</sup></b>
<b>Particulate Matter</b>	0.025	13.12	31.25
<b>PM-10</b>	0.025	13.12	31.25
<b>Volatile Organic Compound</b>	0.025	13.12	31.25

<sup>1</sup>A year is defined as any consecutive 12-month period

**2. Testing Requirements:**

- a. The permittee shall conduct emission testing for particulate matter on the cold reduction mill oil mist capture and control system in order to determine compliance with the emissions limitations of condition V.D.1.e above. Testing shall be at least once every 5 years thereafter. Such testing shall be performed according to EPA approved test methods No. 1, No. 2, No. 3, No. 4 and No. 5 as specified in 40 CFR 60, Appendix A and in accordance with Section §2108.02 of Article XXI, or as approved by the Department. [Installation Permit No. 0050-I002a, 2/12/04 and §2108.02.a.]
- b. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. The permittee shall inspect the cold reduction mill capture system and control system specified in Condition V.D.1.a above to insure the proper operation and physical integrity of all collection and control equipment and verify negative air flow into the collection and control system daily to insure compliance with Condition V.D.1.a above. The permittee shall inspect one cyclone per week so that each cyclone is inspected a minimum of once every five weeks to insure that the cyclones are clean and free of all material or corrosion that could decrease the efficiencies of the cyclones. Notwithstanding the previous, inspections of all other cyclones shall be conducted immediately following the specified monthly single cyclone inspection if the cyclone is found to be nonfunctional, in a condition that would reduce the operating efficiency or if a measured inlet pressure exceeds Condition V.D.1.a.3) above. Any excursions from Condition V.D.1.a above shall be corrected as soon as possible. [Installation Permit No. 0050-I002a, 2/12/04; 40 C.F.R. §64.3 & 64.6; and 25 PA Code §129.100]
- b. Instrumentation shall be provided that can directly measure the inlet pressure of each of the collection and control system exhaust fans to within 1/10" w.c. The inlet pressure shall be measured for each fan weekly and after any cleaning conducted on the cyclones. [Installation Permit No. 0050-I002a, 2/12/04; 40 C.F.R. §64.3 & §64.6; and 25 PA Code §129.100]

**4. Record Keeping Requirements:**

- a. The permittee shall record the production and the hours of operation of the cold reduction mill on a daily basis. [Installation Permit No. 0050-I002a, 2/12/04 and §2103.12.j]
- b. The permittee shall record the type and VOC content of all rolling oils, the percent of rolling oil in the water-oil emulsion as applied and the amount of emulsion used for the cold reduction mill on a daily basis. In addition, all emission test data from tests required by Condition V.D.2.a above shall be retained at the facility as per Condition V.D.4.d below. [Installation Permit No. 0050-I002a, 2/12/04 and 40 C.F.R. §64.9(b); §2103.12.j; 25 PA Code §129.100]
- c. The results of the inspections required by Condition V.D.3.a above shall be recorded weekly. The monitoring data specified Condition V.D.3.b above shall be recorded weekly and after every cyclone cleaning. Episodes of non-compliance with Conditions V.D.1.a, V.D.1.b or V.D.3.a above and corrective actions taken shall be recorded upon occurrence. All such records shall be summarized monthly. [Installation Permit No. 0050-I002a, 2/12/04 and 40 C.F.R. §64.9(b); §2103.12.j]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [Installation Permit No. 0050-I002a, 2/12/04;§§2103.12.j.2; ; 25 PA Code §129.100]

**5. Reporting Requirements:**

- a. The permittee shall provide quarterly reports that contain monthly summaries of production, hours of operation, and maximum percent VOC content, by weight, of the rolling oil and the maximum percent, by weight, of the rolling oil in the water-oil emulsion. The due dates of these reports are prescribed in General Condition III.15.e above. [Installation Permit No. 0050-I002a, 2/12/04; §2103.12.k.1; 40 C.F.R. §64.9(a)]
- b. The permittee shall report the exhaust fans inlet pressures weekly measurements specified in Condition V.D.3.b above within thirty days of the end of each calendar half as required in General Condition III.15.d. §2103.12.k.1; 40 C.F.R. §64.9(a)]
- c. The permittee shall report all instances of non-compliance with Conditions V.D.1.a, V.D.1.b, V.D.1.c, V.D.1.d, V.D.1.e, V.D.3.a, and V.D.3.b above along with all corrective action taken to restore the subject equipment to compliance, to the Department every three months in accordance with General Condition III.15.e above. [§2103.12.k.1]
- d. Reporting instances of non-compliance in accordance with Condition V.D.5.c above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k.1]

**6. Work Practice Standard:**

- a. The permittee shall maintain and operate the cold rolling mill in accordance with good air pollution control practices, by performing regular maintenance as required by condition V.D.3, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258; 25 PA Code §129.99]



**EMISSION UNIT LEVEL  
TERMS AND CONDITIONS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**E. Process P009: HPH Annealing Furnaces**

**Process Description:** The HPH Annealing Process consists of 31 individual movable furnaces with 58 bases in one unit that treat coiled steel rolls. Each furnace is fired with coke oven gas enriched with natural gas and has a maximum heat input rating of 4.9 MMBtu/hr

**Facility ID:** P009

**Max. Design Rate:** 38,000 tons of sheets per year per furnace (31 individual furnaces)

**Capacity:** 38,000 tons of sheets per year per furnace

**Raw Materials:** Steel Coils, Annealing Gases, Coke Oven Gas, Natural gas

**Control Device:** N/A.

As identified above, Process P009 consists of 31 individual, moveable batch annealing furnaces with 58 stationary bases.

**1. Restrictions:**

- a. The HPH Annealing Furnaces shall only combust coke oven gas and natural gas. [§2102.04.b.5]
- b. The permittee shall not operate or allow to be operated, the HPH annealing furnaces in a manner such that emissions of PM-10 from the HPH annealing furnaces exceed at any time, 0.011 lbs/ton of steel. [§2104.02.d.1]
- c. The permittee shall not operate, or allow to be operated, HPH furnaces No. 1 through No. 31 in such manner that emissions of sulfur oxides from each furnace, expressed as sulfur dioxide, exceed 1.0 lb/MMBtu at any time: [§2104.03.a.2.A]
- d. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in HPH furnaces No. 1 through No. 31, 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 oven gas. [§2105.21.h.4]
- e. Emissions from HPH furnaces No. 1 through No. 31, shall not exceed the limitations in Table V-E-1 below at any time: [§2104.02.d.1, §2104.03.a.2.A and §2105.21.h.4]

**Table V-E-1 - HPH Annealing Furnace Emissions**

<b>Pollutant</b>	<b>lbs/hr – each unit (natural gas)</b>	<b>lbs/hr – each unit (coke oven gas)</b>	<b>tons/yr <sup>1</sup> (each unit)</b>	<b>tons/yr <sup>1</sup> (combined)</b>
<b>Particulate Matter</b>	0.04	0.10	0.43	13.33
<b>PM-10</b>	0.04	0.10	0.43	13.33
<b>NOx</b>	0.49	0.74	3.22	99.82
<b>CO</b>	0.47	0.21	2.07	64.17
<b>VOC</b>	0.03	0.01	0.14	4.21

<sup>1</sup> A year is defined as any consecutive 12-month period

- f. SO<sub>2</sub> emissions from the HPH Annealing Furnaces (aggregate) shall not exceed the limitations in Table V-A-2 below: [§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]

**TABLE V-E-2  
SO<sub>2</sub> Emission Limitations for each Hot Strip Mill Reheat Furnace**

30 day rolling average limit (lb/hr)*	Supplementary 24-hr Limit* (lb/hr)	Tons/year**
12.0	13.58	52.56

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD’s SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

\*\*Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD’s SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate, to pounds per hour to determine compliance with the emission limitations in condition V.E.1.f above. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.b; §2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SIP IP 0050-1008, Condition V.A.3; §§2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.E.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.E.3.a. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (§2103.12.h.5.B)

**4. Record Keeping Requirements:**

- a. The permittee shall maintain hourly, monthly, 12 month rolling totals of the fuel type, fuel usage (COG and natural gas), hours of operation and sulfur compound concentration expressed as H<sub>2</sub>S in grains per 100 dscf in coke oven gas used for combustion, for the HPH Annealing Furnaces. [SIP IP 0050-1008, Condition V.A.4.a; §2103.12.h.5.B]
- b. The permittee shall calculate emissions to demonstrate compliance with conditions V.E.1.b, V.E.1.c and Table V-E-1. These calculations shall be recorded on a monthly basis.” [§2103.12.h.5.B]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made



available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

**5. Reporting Requirements:**

- a. The permittee shall submit semiannual reports, as prescribed in General Condition III.15.d, of monthly fuel usage for each fuel combusted in the HPH Annealing Furnaces and the hours of operation of each furnace. [§2103.12.k]
- b. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with General Condition III.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SIP IP 0050-1008, Condition V.A.5.a; §2103.12.k]
- c. Reporting instances of non-compliance in accordance with V.E.5.b above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

**6. Work Practice Requirements:**

- a. The permittee shall maintain and operate the HPH Annealing Furnaces in accordance with good combustion and air pollution control practices by performing regular maintenance and operating the furnaces in accordance with the manufacturer's specifications, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258, 25 PA Code §129.97(c)(3)]

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**F. Process P010: Open Coil Annealing Furnaces No. 1 Through No. 16**

**Process Description:** The Open Coil Annealing Process consists of 16 individual furnaces that heat treat open coiled steel rolls. Each furnace is fired with coke oven gas that is enriched with natural gas. Furnaces No. 1 through No. 9 have a maximum heat input rating of 7.2 MMBTU/Hr each; furnaces No. 10 through No. 13 have a maximum heat input rating of 9.0 MMBTUs/Hr, each; furnace No. 14 has a maximum heat input rating of 5.4 MMBtu/hr and Furnaces No. 15 and 16 have a maximum heat input rating of 7.47 MMBtu/hr, each.

**Facility ID:** P010  
**Max. Design Rate:** 176,000 tons of sheets per year  
**Capacity:** 176,000 tons of sheets per year  
**Raw Materials:** Steel Coils, Annealing Gases, Coke Oven Gas, Natural Gas  
**Control Device:** N/A

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in the No. 1 through No. 16 Open Coil Annealing Furnaces. [§2102.04.b.5; §2102.04.b.6 and IP No. 0050-I006, Condition V.A.1.a ]
- b. The permittee shall not operate or, or allow to be operated Open Coil Annealing Furnace No. 14 unless the furnace is properly operated and maintained according to the following specifications, at all times: [Installation Permit No. 0050-I003, and §2102.04.b.6]
  - 1) All furnace burners shall be low-NO<sub>x</sub> burners with maximum NO<sub>x</sub> emissions of 0.18 Lbs/MMBtu and 0.29 Lbs/MMBtu for natural gas and coke oven gas combustion, respectively.
  - 2) All burners shall combust natural gas and/or coke oven gas only.
  - 3) Natural gas fuel usage, adjusted to a heating value of 1,020 BTU/SCF shall not exceed 46.5 MMSCF per consecutive twelve-month period. Coke oven gas usage, adjusted to 514.4 BTU/SCF shall not exceed 92 MMSCF per consecutive twelve-month period.
- c. The permittee shall not operate, or allow to be operated Open Coil Annealing Furnace No. 14 unless the low-NO<sub>x</sub> burners specified in Condition V.F.1.b above are properly installed, maintained, and operated consistent with good air pollution control practice. [§2102.04.b.6]
- d. The permittee shall not operate or allow to be operated Open Coil Annealing Furnaces No. 1 through No. 13 fueled entirely by natural gas in such a manner that the emissions of particulate matter exceeds 0.008 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- e. The permittee shall not operate or allow to be operated Open Coil Annealing Furnaces No. 1 through No. 13 fueled entirely by coke oven gas in such a manner that the emissions of particulate matter exceed 0.02 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- f. The permittee shall not operate or allow to be operated Open Coil Annealing Furnaces No. 1 through No. 13 fueled with natural gas and coke oven gas, in such a manner that the emissions of particulate matter exceeds the rate determined by the formula: [§2104.02.a.3]

$$A = \sum x_i a_i$$

Where: A = Allowable emissions in pounds per million BTUs of actual heat input,  
 i = Fuel type (i.e. natural gas and coke oven gas),

- $x_i$  = Fraction of total actual heat input in BTUs provided by fuel type  $i$ , and
- $a_i$  = Allowable emissions in pounds per million BTUs of actual heat input for fuel type  $i$ , where  $a_i = 0.008$  for natural gas and  $0.02$  for coke oven gas.

- g. The permittee shall not operate, or allow to be operated, Open Coil Annealing Furnaces No. 1 through No. 13 in such manner that emissions of sulfur oxides, expressed as sulfur dioxide, exceed 1.0 lb/MMBtu at any time: [§2104.03.a.2.A]
- h. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Open Coil Annealing Furnaces No. 1 through No. 16, 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 oven gas. [§2105.21.h.4; IP-0050-I006, Condition V.A.1.b]
- i. Emissions from Open Coil Annealing Furnaces No. 1 through No. 9, shall not exceed the limitations for each furnace in Table V-F-1 below at any time: [§2104.02.a.1, §2104.03.a.2.A and §2105.21.h.4]

**Table V-F-1  
Open Coil Annealing Furnace 1 through 9 Emissions**

<b>Pollutant</b>	<b>lbs/hr – each unit (natural gas)</b>	<b>lbs/hr – each unit (coke oven gas)</b>	<b>tons/yr<sup>1</sup> (each unit)</b>	<b>tons/yr<sup>1</sup> (combined)</b>
<b>Total Particulate</b>	0.06	0.14	0.63	5.68
<b>PM-10</b>	0.06	0.14	0.63	5.68
<b>NOx</b>	0.72	2.88	12.61	113.46
<b>CO</b>	0.70	0.30	3.05	27.42
<b>VOC</b>	0.05	0.02	0.20	1.80

<sup>1</sup> A year is defined as any consecutive 12-month period

- j. Emissions from Open Coil Annealing Furnaces No. 10 through No. 13, shall not exceed the limitations for each furnace in Table V-F-2 below at any time: [§2104.02.a.1, §2104.03.a.2.A and §2105.21.h.4]

**Table V-F-2 - Open Coil Annealing Furnace 10 through 13 Emissions**

<b>Pollutant</b>	<b>lbs/hr – each unit (natural gas)</b>	<b>lbs/hr – each unit (coke oven gas)</b>	<b>tons/yr<sup>1</sup> (each unit)</b>	<b>tons/yr<sup>1</sup> (combined)</b>
<b>Total Particulate</b>	0.07	0.18	0.79	3.15
<b>PM-10</b>	0.07	0.18	0.79	3.15
<b>NOx</b>	0.90	3.60	15.77	63.08
<b>CO</b>	0.87	0.38	3.81	15.24
<b>VOC</b>	0.06	0.02	0.25	1.00

<sup>1</sup> A year is defined as any consecutive 12-month period

- k. Emissions from Open Coil Annealing Furnace No. 14, shall not exceed the limitations in Table V-

F-3 below at any time: [Installation Permit No. 0050-I003, §2104.02.a.1, §2104.03.a.2.A and §2105.21.h.4]

**TableV-F-3 - Open Coil Annealing Furnace No. 14 Emission Limitations**

<b>Pollutant</b>	<b>lbs/hr (natural gas)</b>	<b>lbs/hr (coke oven gas)</b>	<b>tons/yr<sup>1</sup></b>
<b>Total Particulate</b>	0.04	0.07	0.30
<b>PM-10</b>	0.04	0.05	0.22
<b>NO<sub>x</sub></b>	0.75	1.20	5.20
<b>CO</b>	0.47	0.21	2.10
<b>VOC</b>	0.03	0.02	0.13

<sup>1</sup> A year is defined as any consecutive 12-month period

- l. The permittee shall not operate, or allow to be operated OCA furnaces No. 15 and No. 16 unless the furnace is properly installed, operated and maintained according to good combustion and air pollution control practices, at all times. [§2102.04.b.6; IP No. 0050-I006, Condition V.A.1.c]
- m. The permittee shall not operate, or allow to be operated OCA furnaces No. 15 and No. 16 unless the furnaces are equipped with low-NO<sub>x</sub> burners with maximum NO<sub>x</sub> emissions of 0.0375 lbs/MMBtu for natural gas combustion, corrected to 3 percent excess oxygen, and 0.0465 lbs/MMBtu for coke oven gas combustion, corrected to 3 percent excess oxygen. [§2102.04.b.6 and IP No. 0050-I006, Condition V.A.1.d]
- n. Emissions from Open Coil Annealing Furnaces No. 15 and No. 16, shall not exceed the limitations in Table V-F-1 below at any time: [§§2105.21.h.4 and IP No. 0050-I006, Condition V.A.1.e]

**TableV-F-4 - Open Coil Annealing Furnaces No. 15 and No. 16 Emission Limitations**

<b>Pollutant</b>	<b>lbs/hr – each furnace (natural gas)</b>	<b>lbs/hr – each furnace (coke oven gas)</b>	<b>tons/yr<sup>1</sup>- (each furnace)</b>	<b>tons/yr<sup>1</sup>- (both furnaces)</b>
<b>Particulate Matter</b>	0.015	0.102	0.45	0.90
<b>PM-10</b>	0.015	0.071	0.31	0.63
<b>NO<sub>x</sub></b>	0.28	0.35	1.52	3.04
<b>CO</b>	0.68	0.30	2.96	5.93
<b>VOC</b>	0.044	0.020	0.19	0.39

<sup>1</sup> A year is defined as any consecutive 12-month period

- o. SO<sub>2</sub> emissions from the Open Coil Annealing Furnaces No. 1 through No. 16 (aggregate) shall not exceed the limitations in Table V-F-5 below: [§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition

V.A.1.b]

**TABLE V-F-5  
SO<sub>2</sub> Emission Limitations for Open Coil Annealing Furnaces No. 1 through No. 16 (aggregate)**

30 day rolling average limit (lb/hr)*	Supplementary 24-hr Limit (lb/hr)	Tons/year**
11.50	13.02	50.37

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

\*\* Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate to pounds per hour to determine compliance with the emission limitations in condition V.F.1.o, Table V-A-5 above. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.b; §2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirement:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SIP IP 0050-1008, Condition V.A.3.a; IP No. 0050-I006, Condition V.A.3; §§2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.F.3.a V.E.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.F.3.a. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (0050-I006, Condition V.A.3; §2103.12.h.5.B)

**4. Record Keeping Requirements:**

- a. The permittee shall record, hourly monthly, the type and total amount of fuel used (COG and natural gas) and the total production of furnaces No. 1 through No. 16, combined. [§2103.12.j and IP No. 0050-I003, 6/29/00 and IP No. 0050-I006, Condition V.A.4.a; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.4.a]
- b. The permittee shall maintain monthly and 12 month rolling totals of the combined hours of operation of OCA Furnaces No. 1 through No. 16, and hourly summaries of the sulfur compound concentration expressed as H<sub>2</sub>S in grain per 100 dscf in coke oven gas used for combustion in

furnaces No. 1 through No. 16. [§2103.12.h.5.B, §2103.12.j and IP No. 0050-I006, Condition V.A.4.b; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.4.a]

- c. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2102.04.b.5 and §2102.04.b.6 and IP No. 0050-I006, Condition V.A.4.c]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2102.04.b.6 and IP No. 0050-I006, Condition V.A.4.d, 25 PA Code §129.100]

#### 5. Reporting Requirements:

- a. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with General Condition III.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.5.a; IP No. 0050-I006, Condition V.A.5.a; §2103.12.k]
- b. Reporting instances of non-compliance in accordance with condition V.F.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k and IP No. 0050-I006, Condition V.A.5.b]

#### 6. Work Practice Requirements:

The permittee shall maintain and operate Open Coil Annealing Furnaces No. 1 through No. 16 in accordance with good combustion and air pollution control practices by performing regular maintenance and operating the furnaces in accordance with the manufacturer's specifications, at all times, and measure the sulfur concentration of the coke oven gas with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258, 25 PA Code §129.97(c)(3), and §2102.04.b.6]

#### 7. Additional Requirements:

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**G. Process P011: Continuous Annealing**

**Process Description:** The Continuous Annealing Process consists of one furnace rated at 45 MMBtu/hr along with associated coiling, uncoiling and cleaning equipment.

**Facility ID:** P011

**Max. Design Rate:** 348,000 tons of sheets per year

**Capacity:** 348,000 tons of sheets per year

**Raw Materials:** Steel Coils, Caustic Solutions, Annealing Gases, Coke Oven Gas, Natural Gas

**Control Device:** N/A

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in the Continuous Annealing furnace. [§2102.04.b.5]
- b. The permittee shall not operate or allow to be operated Continuous Annealing furnace fueled entirely by natural gas in such a manner that the emissions of particulate matter exceed 0.008 lbs/MMBTU of actual heat input, at any time. [§2104.02.a.1]
- c. The permittee shall not operate or allow to be operated Continuous Annealing furnace fueled entirely by coke oven gas in such a manner that the emissions of particulate matter exceed 0.02 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- d. The permittee shall not operate or allow to be operated Continuous Annealing furnace fueled with natural gas and coke oven gas, in such a manner that the emissions of particulate matter exceed the rate determined by the formula: [§2104.02.a.3]

$$A = \sum x_i a_i$$

where A = allowable emissions in pounds per million BTUs of actual heat input,

i = fuel type (i.e. natural gas and coke oven gas),

$x_i$  = fraction of total actual heat input in BTUs provided by fuel type i, and

$a_i$  = allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where  $a_i = 0.008$  for natural gas and 0.02 for coke oven gas.

- e. The permittee shall not operate, or allow to be operated, Continuous Annealing furnace in such manner that emissions of sulfur oxides, expressed as sulfur dioxide, exceed 1.0 lb/mmBtu at any time: [§2104.03.a.2.A]
- f. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Continuous Annealing furnace, 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 oven gas. [§2105.21.h.4]

- g. Emissions from Continuous Annealing Line furnace, shall not exceed the limitations specified Table V-G-1 below, at any time: [§2104.02.a.1, §2104.03.2.A, §2105.21.h.4]

**Table V-G-1  
Continuous Annealing Furnace Emissions**

Pollutant	lbs/hr (natural gas)	lbs/hr (coke oven gas)	tons/yr <sup>1</sup>
<b>Total Particulate</b>	0.36	0.90	3.94
<b>PM-10</b>	0.36	0.90	3.94
<b>NOx</b>	4.50	18.00	78.84
<b>CO</b>	4.35	1.66	19.04
<b>VOC</b>	0.28	0.12	1.25

<sup>1</sup>A year is defined as any consecutive 12-month period

- h. SO<sub>2</sub> emissions from the Continuous Annealing Furnace shall not exceed the limitations in Table V-G-2 below: [§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b; §2104.03.2.A, §2105.21.h.4]

**TABLE V-G-2  
SO<sub>2</sub> Emission Limitations for the Continuous Annealing Furnace**

30 day rolling average limit (lb/hr)*	Supplementary 24-hr Limit (lb/hr)	Tons/year**
8.07	9.14	35.35

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

\*\*Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate, to pounds per hour to determine compliance with the emission limitations in condition V.G.1.h above. [§2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. The permittee shall measure monthly the quantity of natural gas and coke oven gas combusted in the Annealing Furnace. [§2103.12.i]
- b. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.3; §§2103.12.h.5.B; §2103.12.i]

- c. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.G.3.b V.E.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.G.3.b. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (0050-I006, Condition V.A.3; §2103.12.h.5.B)

#### 4. Record Keeping Requirements:

- a. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order Number 258]
- 1) The date of the annual tune-up;
  - 2) The name of the service company and/or individuals performing the annual tune-up;
  - 3) The operating rate or load after the annual tune-up; and
  - 4) The CO and NO<sub>x</sub> emission rate after the annual tune-up.
- b. The permittee shall maintain hourly records of fuel type, fuel usage (COG and natural gas), hours of operation, and hourly H<sub>2</sub>S concentration in grains per 100 dscf. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.4.a; §§2103.12.h.5.B; §2103.12.j; §2103.12.h.5.B]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

#### 5. Reporting Requirements:

- a. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with General III.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.5.a; §2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.G.5.a does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

#### 6. Work Practice Requirements:

- a. The permittee shall perform an annual adjustment or "tune-up" on the combustion process of the equipment once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include: [RACT Order No. 258, 25 PA Code §129.97(b)(1)]
- 1) Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimize emissions of carbon monoxide (hereafter referred to as "CO"); and
  - 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper



**EMISSION UNIT LEVEL  
TERMS AND CONDITIONS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

calibration and operation as specified by the manufacturer.

***PERMIT SHIELD IN EFFECT***



**H. Process P012: No. 1 Continuous Galvanizing Line**

**Process Description:** The Continuous Galvanizing Process consists of one natural gas-fired preheat furnace rated at 50 MMBTUs/hr and one natural gas-fired galvanneal furnace rated at 18 MMBTUs/hr, along with associated coiling, uncoiling and cleaning equipment.

**Facility ID:** P012

**Max. Design Rate:** 187,700 tons of sheets per year

**Capacity:** 187,700 tons of sheets per year

**Raw Materials:** Steel Coils, Zinc, Treatment Chemicals, and Natural Gas

**Control Device:** N/A

**1. Restrictions**

- a. Only natural gas shall be combusted in the No. 1 Continuous Galvanizing Line preheat and galvanneal furnaces [§2102.04.b.5]
- b. The permittee shall not operate, or allow to be operated the No. 1 Galvanizing Line Preheat Furnace and galvanneal furnace in such a manner that the emissions of particulate matter from each furnace exceeds 0.008 lbs/mmBtu when combusting natural gas. [§2104.02.a.1]
- c. Emissions from the continuous galvanizing line furnaces shall not exceed the limitations specified in Table V-H-1 below, at any time: [25 PA Code §129.97(g)(1)(i); §2104.02.a.1.A; and §2104.03.a.1]

**Table V-H-1 - -No. 1 Continuous Galvanizing Line Emissions**

Pollutant	Preheat Furnace		Galvanneal Furnace	
	lbs/hr (natural gas)	ton/yr <sup>1</sup>	lbs/hr (natural gas)	ton/yr <sup>1</sup>
Particulate Matter	0.40	1.75	0.14	0.63
PM-10	0.40	1.75	0.14	0.63
CO	4.83	21.16	1.70	7.47
SO <sub>2</sub>	0.03	0.13	0.01	0.05
NO <sub>x</sub> <sup>2</sup>	3.0	13.14	2.0	8.9
VOC	0.32	1.40	0.11	0.49

<sup>1</sup>A year is defined as any consecutive 12-month period

<sup>2</sup>The hourly rate of 3.0 lbs/hr is less than the presumptive RACT rate of 0.10 lb NO<sub>x</sub>/MMBtu

**2. Testing Requirements:**

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

The permittee shall monitor the monthly quantity of natural gas combusted in the No. 1 Galvanizing Line furnaces. [§2103.12.i]

**4. Record Keeping Requirements:**

- a. The permittee shall maintain monthly, 12 month rolling totals of the following data for the No. 1 Galvanizing Line Preheat and Galvanneal Furnaces [§2103.12.5.B]
  - 1) Fuel usage;
  - 2) Monthly production (tons of sheet processed);
  - 3) Hours of operation.
- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

**5. Reporting Requirements:**

- a. The permittee shall report to the Department every six months, in accordance with General Condition III.15.d above, all instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance. If all the terms and conditions of this permit are complied with during the reporting period, then no report is necessary under this permit condition. [§2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.H.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

**6. Work Practice Standards:**

- a. The permittee shall maintain and operate the No. 1 Continuous Galvanizing Line in accordance with good combustion and air pollution control practices by performing regular maintenance, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258 and 25 PA Code §129.97(c)(3)]

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**I. Process P013: No. 2 Continuous Galvanizing & Aluminum Coating Lines**

**Process Description:** The Continuous Galvanizing & Aluminum Coating Process consists of one preheat furnace rated at 18 MMBTUs/Hr along with associated cleaning, treating and galvalume equipment

**Facility ID:** P013

**Max. Design Rate:** 156,400 tons of sheets per year

**Capacity:** 156,400 tons of sheets per year

**Raw Materials:** Steel Coils, Natural Gas, Zinc, Galvalume, Treatment Chemicals, Caustic Solution, Annealing Gases, Coating Oil

**Control Device:** NA

**1. Restrictions:**

- a. Only natural gas shall be combusted in the No. 2 Continuous Galvanizing and Aluminum Coating Line preheat furnace. [§2102.04.b.5]
- b. The permittee shall not operate, or allow to be operated the No. 2 Galvanizing & Aluminum Coating Line Preheat Furnace in such a manner that the emissions of particulate matter exceed 0.008 lbs/MMBTU when combusting natural gas. [§2104.02.a.1]
- c. The permittee of each coil coating line shall limit organic HAP emissions to no more than 0.046 kilograms (kg) of organic HAP per liter of solids applied during each 12-month compliance period. [§63.5120(a)(2)]
- d. Emissions from the preheat furnace shall not exceed the limitations specified in Table V-I-1 below, at any time: [§2104.02.a.1.A and §2104.03.a.1]

**Table V-I-1 - No. 2 Continuous Galvanizing & Aluminum Coating Lines Emission Limits**

<b>Pollutant</b>	<b>lbs/hr (natural gas)</b>	<b>Tons/Yr<sup>1</sup></b>
<b>Particulate Matter</b>	0.14	0.61
<b>PM-10</b>	0.14	0.61
<b>CO</b>	1.74	7.62
<b>SO<sub>2</sub></b>	0.01	0.04
<b>NO<sub>x</sub></b>	7.20	31.54
<b>VOC</b>	0.11	0.48

<sup>1</sup> A year is defined as any consecutive 12-month period

**2. Testing Requirements:**

- a. On and after June 10, 2005, the permittee shall determine the organic HAP weight fraction of each coating material applied by following one of the procedures in paragraphs §63.5160(b)(1) through (4) and the solids content of each coating material applied by following the procedure in paragraph §63.5160(c). [§63.5160]

- b. For the purpose of demonstrating continuous compliance with Condition V.I.1.c above, a compliance period consists of 12 months. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months. [§63.5130(e)]
- c. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

### 3. Monitoring Requirements:

- a. The permittee shall demonstrate compliance with the emission limitation in Condition V.I.1.c above by using at least one of the compliance options in §63.5170(a) or (b). The permittee may apply any of the compliance options to an individual coil coating line, or to multiple lines as a group, or to the entire affected source. [§63.5170(a) and (b)]

### 4. Record Keeping Requirements:

- a. The permittee shall maintain monthly, 12 month rolling totals of the following data for the No. 2 Galvanizing & Aluminum Coating Line Preheat Furnace: [§2103.12.h.5.B]
  - 1) Fuel usage;
  - 2) Hours of operation;
  - 3) Production (tons of sheet processed).
- b. On and after June 10, 2005, the permittee subject to 40 CFR 63, Subpart SSSS shall maintain the following records: [§63.5190(a)]
  - 1) Records of the coating lines on which the permittee used each compliance option in Condition V.I.3.a above and the time periods (beginning and ending dates and times) the permittee used each option.
  - 2) Records specified in 40 CFR Part 63, §63.10(b)(2) of all measurements needed to demonstrate compliance including:
    - i. Organic HAP content data for the purpose of demonstrating compliance in accordance with §63.5160(b);
    - ii. Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with §63.5160(c);
    - iii. Material usage, HAP usage, volatile matter usage, and solids usage and compliance demonstrations using these data in accordance with §63.5170(a) and (b);
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

### 5. Reporting Requirements:

- a. The permittee shall report to the Department every six months, in accordance with General Condition III.15.d, all instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance. If all the terms and conditions of this permit are complied with during the reporting period, then no report is necessary

under this permit condition. [§2103.12.k]

- b. The permittee shall maintain records that document that initial notification was made in accordance with 40 CFR Part 63, Subpart SSS [§63.5180(b)]
- c. The permittee shall submit semi-annual compliance reports containing the following information: [§63.5180(g)]
  - 1) The semi-annual compliance report shall contain the following information:
    - i. Company name and address.
    - ii. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
    - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
    - iv. Identification of the compliance option or options specified in Table 1 to 40 CFR Part 63, §63.5170 that the permittee used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning dates you used each option.
    - v. A statement that there were no deviations from the standards during the reporting period.
- d. The permittee shall submit, for each deviation occurring at an affected source subject to Subpart SSSS, the semi-annual compliance report containing the information in Condition V.I.5.c.1) above and the following information: [§63.5180(h)]
  - 1) The total operating time of each affected source during the reporting period.
  - 2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
  - 3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable).
- e. Reporting instances of non-compliance in accordance with V.I.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

#### 6. **Work Practice Standards:**

The permittee shall maintain and operate the No. 2 Continuous Galvanizing and Aluminum Coating Line preheat furnace in accordance with good combustion and air pollution control practices by performing regular maintenance and operating the preheat furnaces in accordance with the manufacturer's specifications, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258, 25 PA Code §129.97(c)(3)]

#### 7. **Additional Requirements:**

None except as provided elsewhere

***PERMIT SHIELD IN EFFECT***

**J. Process P015: Coke Oven Gas Flares No. 1 through No. 3 and Peachtree A & B Flare**

**Process Description:** Four flares used for combusting excess coke oven gas.  
**Facility ID:** P015  
**Max. Design Rate:** 6.75 million cubic feet per day of COG, each  
**Capacity:** 27 million cubic feet per day for four flares  
**Raw Materials:** Coke oven gas  
**Control Device:** Flare minimization plan

**1. Restrictions:**

- a. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in C.O.G. Flares No.1 to No. 3 and Peachtree Flare, 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 oven gas. [§2105.21.h.4]

**2. Testing Requirements:**

- a. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. The permittee shall measure the sulfur concentration of all coke oven gas used for combustion or flaring at the facility, a minimum of once per each successive twenty-four hour time period. The sulfur concentration shall be expressed and recorded as hydrogen sulfide. Measurements of hydrogen sulfide concentrations in coke oven gas shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy this condition (V.K.3.a). However, if there is a change to the current operating scenario, the sulfur concentration measurements required by this condition (V.K.3.a) will be taken at the Irvin Plant. [§2103.12.h.5.B]

**4. Record Keeping Requirements**

- a. The permittee shall maintain daily and 12 month rolling totals of the fuel usage, COG sulfur concentration (expressed as H<sub>2</sub>S) and hours of operation for Flares No.1, No. 2 and No. 3 and the Peachtree Flare: [§2103.12.h.5.B, 25 PA Code §129.100]
- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

**5. Reporting Requirements:**

- a. The permittee shall report to the Department every six months, in accordance with General Condition III.15.d above, all instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance. [§2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.J.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

- c. The permittee shall submit the flare minimization electronically to the Allegheny County Health Department Air Quality program within 90 days after the issuance of this permit. [§2103.12.k]

## 6. Work Practice Standards:

The U.S. Steel Irvin Plant shall implement a flare minimization plan for all four flares that includes: [§2103.12.a.2.B; 25 PA Code §129.99]

- a. A listing of all process units and ancillary equipment connected to the flare for each affected flare, including:
- 1) A complete description and technical specifications for each flare and associated knock-out pots, surge drums, water seals and flare gas recovery systems;
  - 2) Detailed process flow diagrams of all upstream equipment and process units venting to each flare, identifying the type and location of all control equipment;
- b. An evaluation of the baseline flow to the flares, not including pilot gas flow or purge gas flow. Separate baseline flow rates may be established for different operating conditions provided that the management plan includes:
- 1) A primary baseline flow rate that shall be used as the default baseline for all conditions except those specifically delineated in the plan;
  - 2) A description of each special condition for which an alternate baseline is established, including the rationale for each alternate baseline, the daily flow for each alternate baseline and the expected duration of the special conditions for each alternate baseline.
  - 3) Procedures to minimize discharges to the affected flare during each special condition.
- c. A description of the equipment, processes and procedures installed or implemented within the last five years to reduce flaring; and a description of any equipment, processes or procedures the owner or operator plans to install or implement to eliminate or reduce flaring for:
- 1) A primary baseline flow rate that shall be used as the default baseline for all conditions except those specifically delineated in the plan;
  - 2) A description of each special condition for which an alternate baseline is established, including the rationale for each alternate baseline, the daily flow for each alternate baseline and the expected duration of the special conditions for each alternate baseline.
  - 3) Procedures to minimize discharges to the affected flare during each special condition.
- d. A description of the equipment, processes and procedures installed or implemented within the last five years to reduce flaring; and a description of any equipment, processes or procedures the owner or operator plans to install or implement to eliminate or reduce flaring for:
- 1) Planned, turnarounds and other scheduled maintenance, based on an evaluation of these activities during the previous five years;
  - 2) Essential operational needs and the technical reason for which the vent gas cannot be prevented from being flared during each specific situation, based on supporting documentation on flare gas recovery systems, excess gas storage and gas treating capacity available for each flare; and
  - 3) Emergencies, including procedures that will be used to prevent recurring equipment breakdowns and process upset, based on an evaluation of the adequacy of maintenance schedules for equipment, process and control instrumentation.
- e. The facility shall follow the flare minimization plan and operate all flares in such a manner that minimizes all flaring except during emergencies, shutdowns, startups, turnarounds or essential operational needs.
- f. The plan shall be updated periodically to account for changes in the operation of the flares, such as new connections to the flares or the installation of a flare gas recovery system, but the plan



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- shall be re-submitted to the Department only if the owner or operator adds an alternative baseline flow rate, revises an existing baseline, or installs a flare gas recovery system.
- g. The flare minimization plan shall be implemented within 90 days after the issuance of this permit.

**7. Additional requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**K. Boiler No. 1**

**Process Description:** One 79.8 MMBTUs/hr natural gas and coke oven gas fired boiler  
**Facility ID:** B001  
**Max. Design Rate:** 79.8 MMBtu/hr  
**Capacity:** 79.8 MMBtu/hr  
**Raw Materials:** Coke oven gas and natural gas  
**Control Device:** N/A

This emission unit is also subject to the following requirements and restrictions:

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in Boiler No. 1. [2102.04.b.5]
- b. The permittee shall not operate, or allow to be operated Boiler No. 1 fueled entirely by Natural Gas in such a manner that the emissions of particulate matter exceed 0.008 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- c. The permittee shall not operate, or allow to be operated Boiler No. 1 fueled entirely by Coke Oven Gas in such a manner that the emissions of particulate matter exceed 0.02 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- d. The permittee shall not operate or allow to be operated Boiler No. 1 fueled with Natural Gas and Coke Oven Gas, in such a manner that the emissions of particulate matter from Boiler No.1 exceeds the rate determined by the formula: [§2104.02.a.3]

$$A = \sum x_i a_i$$

Where: A = allowable emissions in pounds per million BTUs of actual heat input,

i = fuel type (i.e. natural gas and coke oven gas),

$x_i$  = fraction of total actual heat input in BTUs provided by fuel type i, and

$a_i$  = allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where  $a_i$  = 0.008 for natural gas and 0.02 for coke oven gas.

- e. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boiler No. 1, 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 oven gas. [§2105.21.h.4]

- f. Emissions from Boiler No. 1, shall not exceed the limitations specified in Table V-K-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

**Table V-K-1 - Boiler No. 1 Emission Limitations**

<b>Pollutant</b>	<b>lbs/hr (natural gas)</b>	<b>lbs/hr (coke oven gas)</b>	<b>tons/yr <sup>1</sup></b>
<b>Total Particulate</b>	0.64	1.60	6.99
<b>PM-10</b>	0.64	1.60	6.99
<b>NOx</b>	7.98	12.77	55.92
<b>CO</b>	7.71	3.38	33.76
<b>VOC</b>	0.51	0.22	2.21

<sup>1</sup> A year is defined as any consecutive 12-month period

- g. SO<sub>2</sub> emissions from Boiler No. 1 shall not exceed the limitations in Table V-K-2 below: [§§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]

**TABLE V-K-2  
SO<sub>2</sub> Emission Limitations for Boiler 1**

<b>30 day rolling average limit (lb/hr)*</b>	<b>Supplementary 24-hr Limit* (lb/hr)</b>	<b>Tons/year**</b>
7.88	8.92	34.51

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

\*\*Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD's SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate, to pounds per hour to determine compliance with the emission limitations in condition V.K.1.g, Table V-K-2 above. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.b §2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.3; §2103.12.h.5.B; §2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.K.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current

operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.K.3.a. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (0050-I006, Condition V.A.3; §2103.12.h.5.B)

#### 4. Record Keeping Requirements:

- a. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order No.0258, §2105.06, and §2103.12.j; 40 CFR 63, Subpart DDDDD; 25 PA Code §129.100]
  - 1) The date of the annual tune-up;
  - 2) The name of the service company and/or individuals performing the annual tune-up;
  - 3) The operating rate or load after the annual tune-up;
  - 4) The CO and NO<sub>x</sub> emission rate before and after the annual tune-up; and
  - 5) The excess oxygen rate after the annual tune-up.
- b. The permittee shall maintain hourly, monthly, 12-month rolling totals of the following data for Boiler no. 1: [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.4.a; §2103.12.h.5.B]
  - 1) Fuel type, fuel usage, hours of operation and sulfur concentration expressed as H<sub>2</sub>S in grain per 100 dscf in coke oven gas used for combustion, for the subject boiler.
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

#### 5. Reporting Requirements:

- a. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with GeneralIII.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.5.a; §2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.K.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level ConditionIV.7 above, if appropriate. [§2103.12.k]

#### 6. Work Practice Standards:

- a. The permittee shall perform an annual adjustment or "tune-up" on Boiler No. 1 once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include: [RACT Order No. 258; 25 PA Code §129.99]
  - 1) Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimizes emissions of carbon monoxide (hereafter referred as "CO"); and



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- 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

**7. Additional Requirements:**

None except as provided elsewhere

***PERMIT SHIELD IN EFFECT***

**L. Boiler No. 2**

**Process Description:** One 84.6 MMBTUs/Hr natural gas and coke oven gas fired boiler  
**Facility ID:** B002  
**Max. Design Rate:** 84.6 MMBtu/hr  
**Capacity:** 84.6 MMBtu/hr  
**Raw Materials:** Coke oven gas and natural gas  
**Control Device:** NA

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in Boiler No. 2. [2102.04.b.5]
- b. The permittee shall not operate, or allow to be operated Boiler No. 2 fueled entirely by Natural Gas in such a manner that the emissions of particulate matter from Boiler No. 1 exceeds 0.008 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- c. The permittee shall not operate, or allow to be operated Boiler No. 2 fueled entirely by Coke Oven Gas in such a manner that the emissions of particulate matter exceed 0.02 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- d. The permittee shall not operate or allow to be operated Boiler No. 2 fueled with Natural Gas and Coke Oven Gas, in such a manner that the emissions of particulate matter from Boiler No.2 exceeds the rate determined by the formula: [§2104.02.a.3]

$$A = \sum x_i a_i$$

where A = allowable emissions in pounds per million BTUs of actual heat input,  
i = fuel type (i.e. natural gas and coke oven gas),  
 $x_i$  = fraction of total actual heat input in BTUs provided by fuel type i, and  
 $a_i$  = allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where  $a_i = 0.008$  for natural gas and 0.02 for coke oven gas.

- e. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boiler No. 2, 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 oven gas. [§2105.21.h.4]

- f. Emissions from Boiler No. 2, shall not exceed the limitations in Table V-L-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

**Table V-L-1 - Boiler No. 2 Emissions**

<b>Pollutant</b>	<b>lbs/hr (natural gas)</b>	<b>lbs/hr (coke oven gas)</b>	<b>tons/yr <sup>1</sup></b>
<b>Total Particulate</b>	0.68	1.69	7.41
<b>PM-10</b>	0.68	1.69	7.41
<b>SO<sub>2</sub></b>	0.05	18.20	45.90
<b>NO<sub>x</sub></b>	8.46	13.54	59.29
<b>CO</b>	8.17	3.58	35.80
<b>VOC</b>	0.54	0.23	2.37

<sup>1</sup> A year is defined as any consecutive 12-month period

- g. SO<sub>2</sub> emissions from Boiler No. 1 shall not exceed the limitations in Table V-L-2 below: [§§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]

**TABLE V-L-2  
SO<sub>2</sub> Emission Limitations for Boiler 2**

<b>30 day rolling average limit (lb/hr)*</b>	<b>Supplementary 24-hr Limit* (lb/hr)</b>	<b>Tons/year**</b>
8.36	9.46	36.62

\*Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit. These limits are based on ACHD’s SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

\*\*Tons/year value is used to demonstrate the expected tons/year from this unit. The value is derived by converting the 30-day rolling average limit lb/hr to an annual tons per year value. These limits are based on ACHD’s SO<sub>2</sub> State Implementation Plan (SIP) Permit Revision and USEPA SO<sub>2</sub> Guidance dated September 14, 2017.

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate, to pounds per hour to determine compliance with the emission limitations in condition V.L.1.g, Table V-L-2 above. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.b; §2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.3; §§2103.12.h.5.B; §2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.L.3.a

above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.L.3.a. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (0050-I006, Condition V.A.3; §2103.12.h.5.B)

#### 4. Record Keeping Requirements:

- a. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order No.0258 and §2103.12.j; 40 CFR 63, Subpart DDDDD; 25 PA Code §129.100]
  - 1) The date of the annual tune-up;
  - 2) The name of the service company and/or individuals performing the annual tune-up;
  - 3) The operating rate or load after the annual tune-up;
  - 4) The CO and NO<sub>x</sub> emission rate before and after the annual tune-up; and
  - 5) The excess oxygen rate after the annual tune-up.
- b. The permittee shall maintain hourly, monthly and 12-month rolling totals of the following data for Boiler No. 2: [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.3; §2103.12.h.5.B]
  - 1) Fuel type (COG and natural gas), fuel usage, hours of operation and sulfur concentration expressed as H<sub>2</sub>S in grains per 100 dscf in coke oven gas used for combustion, for the subject boiler.
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

#### 5. Reporting Requirements:

- a. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with General III.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.5.a; §2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.L.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

#### 6. Work Practice Standards:

- a. The permittee shall perform an annual adjustment or "tune-up" on Boiler No. 2 once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include: [RACT Order No.0258; 25 PA Code §129.99]
  - 1) Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimize emissions of carbon monoxide



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(hereafter referred as "CO"); and

- 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**M. Boiler No. 3**

**Process Description:** One 41.6 MMBTUs/Hr natural gas and coke oven gas fired boiler  
**Facility ID:** B003  
**Max. Design Rate:** 41.6 MMBtu/hr  
**Capacity:** 41.6 MMBtu/hr  
**Raw Materials:** Coke oven gas and natural gas  
**Control Device:** NA

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in Boiler No. 3. [2102.04.b.5]
- b. The permittee shall not operate, or allow to be operated Boiler No. 3 fueled entirely by Natural Gas in such a manner that the emissions of particulate matter from Boiler No. 1 exceeds 0.008 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- c. The permittee shall not operate, or allow to be operated Boiler No. 3 fueled entirely by Coke Oven Gas in such a manner that the emissions of particulate matter exceed 0.02 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- d. The permittee shall not operate or allow to be operated Boiler No. 3 fueled with Natural Gas and Coke Oven Gas, in such a manner that the emissions of particulate matter from Boiler No.3 exceeds the rate determined by the formula: [§2104.02.a.3]

$$A = \sum x_i a_i$$

Where A = allowable emissions in pounds per million BTUs of actual heat input,

i = fuel type (i.e. natural gas and coke oven gas),

x<sub>i</sub> = fraction of total actual heat input in BTUs provided by fuel type i, and

a<sub>i</sub> = allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where a<sub>i</sub> = 0.008 for natural gas and 0.02 for coke oven gas.

- e. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boiler No. 3, 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 oven gas. [§2105.21.h.4]

- f. Emissions from Boiler No. 3, shall not exceed the limitations specified in Table V-M-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

**Table V-M-1 - Boiler No. 3 Emission Limitations**

<b>Pollutant</b>	<b>lbs/hr (natural gas)</b>	<b>lbs/hr (coke oven gas)</b>	<b>tons/yr <sup>1</sup></b>
<b>Total Particulate</b>	0.33	0.83	3.64
<b>PM-10</b>	0.33	0.83	3.64
<b>NOx</b>	4.16	6.66	29.15
<b>CO</b>	4.02	1.76	17.60
<b>VOC</b>	0.26	0.11	1.15

<sup>1</sup> A year is defined as any consecutive 12-month period

- g. SO<sub>2</sub> emission from Boiler No. 3 (aggregate) shall not exceed the limitations in condition IV.26.c above: [§§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate, to pounds per hour to determine compliance with the emission limitations in condition IV.26.c, Table IV-1 above. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.b; §2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.3; §§2103.12.h.5.B; §2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.M.3.a V.E.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.M.3.a. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (0050-I006, Condition V.A.3; §2103.12.h.5.B)

**4. Record Keeping Requirements:**

- a. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order No.0258 and §2103.12.j; 40 CFR 63, Subpart DDDDD]
- 1) The date of the annual tune-up;
  - 2) The name of the service company and/or individuals performing the annual tune-up;
  - 3) The operating rate or load after the annual tune-up;

- 4) The CO and NO<sub>x</sub> emission rate before and after the annual tune-up; and
  - 5) The excess oxygen rate after the annual tune-up.
- b. The permittee shall maintain hourly, monthly and 12-month rolling totals of the following data for Boiler No. 3: [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.4.a; §2103.12.h.5.B]
- 1) Fuel type (COG and natural gas), fuel usage, hours of operation and sulfur concentration expressed as H<sub>2</sub>S in grains per 100 dscf in coke oven gas used for combustion, for the subject boiler.
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

**5. Reporting Requirements:**

- a. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with GeneralIII.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.5.a; §2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.M.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

**6. Work Practice Standards:**

- a. The permittee shall perform an annual adjustment or "tune-up" on Boiler No. 3 once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include: [RACT Order No.0258]
  - 1) Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimizes emissions of carbon monoxide (hereafter referred as "CO"); and
  - 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**N. Boiler No. 4**

**Process Description:** One 41.6 MMBTUs/Hr natural gas and coke oven gas fired boiler  
**Facility ID:** B004  
**Max. Design Rate:** 41.6 MMBtu/hr  
**Capacity:** 41.6 MMBtu/hr  
**Raw Materials:** Coke oven gas and natural gas  
**Control Device:** NA

**1. Restrictions:**

- a. Only coke oven gas and natural gas shall be combusted in Boiler No. 4. [2102.04.b.5]
- b. The permittee shall not operate, or allow to be operated Boiler No. 4 fueled entirely by Natural Gas in such a manner that the emissions of particulate matter from Boiler No. 4 exceeds 0.008 lbs./MMBTU of actual heat input, at any time or Boiler No. 4 fueled entirely by Coke Oven Gas in such a manner that the emissions of particulate matter exceed 0.02 lbs./MMBTU of actual heat input, at any time. [§2104.02.a.1]
- c. The permittee shall not operate or allow to be operated Boiler No. 4 fueled with Natural Gas and Coke Oven Gas, in such a manner that the emissions of particulate matter from Boiler No.4 exceeds the rate determined by the formula: [§2104.02.a.3]

$$A = \sum x_i a_i$$

Where: A = allowable emissions in pounds per million BTUs of actual heat input,

i = fuel type (i.e. natural gas and coke oven gas),

$x_i$  = fraction of total actual heat input in BTUs provided by fuel type i, and

$a_i$  = allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where  $a_i = 0.008$  for natural gas and 0.02 for coke oven gas.

- d. The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boiler No. 4, 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 oven gas. [§2105.21h.4]

- e. Emissions from Boiler No. 4, shall not exceed the limitations specified in Table V-N-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

**Table V-N-1 - Boiler No. 4 Emission Limitations**

<b>POLLUTANT</b>	<b>lbs/hr (natural gas)</b>	<b>lbs/hr (coke oven gas)</b>	<b>tons/yr <sup>1</sup></b>
<b>Total Particulate</b>	0.33	0.83	3.64
<b>PM-10</b>	0.33	0.83	3.64
<b>NOx</b>	4.16	6.66	29.15
<b>CO</b>	4.02	1.76	17.60
<b>VOC</b>	0.26	0.11	1.15

<sup>1</sup> A year is defined as any consecutive 12-month period.

- f. SO<sub>2</sub> emission from Boiler No. 4 (aggregate) shall not exceed the limitations in condition IV.26.c above: [§§2105.21.h; SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.1.b]

**2. Testing Requirements:**

- a. Emissions of SO<sub>2</sub> shall be determined by converting the H<sub>2</sub>S grain loading of the fuel burned and the fuel flow rate, to pounds per hour to determine compliance with the emission limitations in condition IV.26.c, Table IV-1 above. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.2.b; §2103.12.h]
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

- a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H<sub>2</sub>S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.26.b. Continuously shall be defined as at least once every 15 minutes. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.3; §§2103.12.h.5.B; §2103.12.i]
- b. Measurements of hydrogen sulfide concentrations in coke oven gas required in condition V.N.3.a above shall be conducted according to Section §2107.08 of Article XXI. Under the current operating scenario coke oven gas measurements are taken at the Clairton Plant, and these measurements will satisfy condition V.N.3.a. However, if there is a change to the current operating scenario, the sulfur concentration will be taken at the Irvin Plant. (0050-1006, Condition V.A.3; §2103.12.h.5.B)

**4. Record Keeping Requirements:**

- a. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order No.0258 and §2103.12.j; 40 CFR 63, Subpart DDDDD]
  - 1) The date of the annual tune-up;
  - 2) The name of the service company and/or individuals performing the annual tune-up;
  - 3) The operating rate or load after the annual tune-up;

- 4) The CO and NO<sub>x</sub> emission rate before and after the annual tune-up; and
  - 5) The excess oxygen rate after the annual tune-up.
- b. The permittee shall maintain hourly, monthly and 12-month rolling totals of the following data for Boiler no. 4: [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.4.a; §2103.12.h.5.B]
- 1) Fuel type (COG and natural gas), fuel usage, hours of operation and sulfur concentration expressed as H<sub>2</sub>S in grain per 100 dscf in coke oven gas used for combustion, for the subject boiler.
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

**5. Reporting Requirements:**

- a. The permittee shall report the concentration of H<sub>2</sub>S per 100 dscf of COG averaged over a calendar day to the Department on a quarterly basis, in accordance with GeneralIII.15.e. All instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance shall be reported. [SO<sub>2</sub> SIP IP 0050-1008, Condition V.A.5.a; §2103.12.k]
- b. Reporting instances of non-compliance in accordance with V.N.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

**6. Work Practice Standards:**

- a. The permittee shall perform an annual adjustment or "tune-up" on Boiler No. 4 once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include: [RACT Order No.0258]
  - 1) Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimize emissions of carbon monoxide (hereafter referred as "CO"); and
  - 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**O. Fugitive Particulate Emissions From Roads and Vehicles**

**Process Description:** Approximately 3.23 miles of paved roads, approximately 0.85 miles of unpaved roads, and approximately 4.3 acres of parking areas.

**Facility ID:** F001

**1. Restrictions:**

- a. The permittee shall apply a chemical dust suppressant to the entire surface of all unpaved parking areas in use on the west side of the plant and on all unpaved roads at appropriate rates and intervals of time to maximize dust suppression and comply with Site Level Conditions IV.18, IV.19 and IV.23 above. [§2105.40, §2105.42 and §2105.49]
- b. The permittee shall comply with the following conditions for the paved road from the railroad trestle to the loading dock at the Irvin Plant and any paved road and paved areas at the coal storage area at the Irvin Plant to comply with Site Level Conditions IV.18, IV.19 and IV.23 above. [§2105.40, §2105.42 and §2105.49]
  - 1) Properly maintain, repair, patch and repave all paved roads and areas.

**2. Testing Requirements:**

None except as provided elsewhere.

**3. Monitoring Requirements:**

None except as provided elsewhere.

**4. Record Keeping Requirements:**

- a. The permittee shall record or have access to records that list the date, time, amount of undiluted chemical dust suppressant and the dilution ratio of each application of chemical dust suppressant. [§2103.12.j]

**5. Reporting Requirements:**

- a. The permittee shall prepare a report within 30 days of each calendar quarter, in accordance with General Condition III.15.e, that includes: [§2103.12.k]
  - 1) An identification of any maintenance, repairs, patching or repaving of the paved roads or areas.
  - 2) The dates on which chemical dust suppressant was applied, and for each date, the location(s) and the dilution ratio(s) of the application.
- b. The permittee shall report to the Department every six months, in accordance with General Condition III.15.d above, all instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance. [§2103.12.k]
- c. Reporting instances of non-compliance in accordance with Conditions V.O.5.a and V.O.5.b above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

**6. Work Practice Standard:**



**EMISSION UNIT LEVEL  
TERMS AND CONDITIONS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

None except as provided elsewhere.

**7. Additional Requirements:**

None except as provided elsewhere.

***PERMIT SHIELD IN EFFECT***

**P. Solvents Parts Cleaning****Process Description:** Solvents parts cleaning for maintenance.**Facility ID:** F002**1. Restrictions:**

- a. The permittee shall maintain all cleaning solvents containing volatile organic compounds in closed containers at all times except when in use. [§2103.12.a.2.B]
- b. The permittee shall clean any spilled cleaning solvent that contains volatile organic compounds as expeditiously as possible. [§2103.12.a.2.B]
- c. The emissions from parts solvent cleaning shall not exceed 30 tons/year of volatile organic compounds or 1.0 tons of hazardous air pollutants.
- d. The permittee shall not operate, or allow to be operated, any cold cleaning degreaser with a degreaser opening exceeding ten (10) square feet, unless [§2105.15.a]:
  - 1) There is in operation on such degreaser:
    - i. A cover to prevent evaporation of solvent during periods of non-use;
    - ii. Equipment for draining cleaned parts; and
    - iii. A permanent conspicuous label summarizing the operating requirements set forth in Paragraph V.P.1.d.2) below; and
  - 2) Such degreaser is operated at all times in such manner that:
    - i. Waste solvents are transferred to another party or disposed of by means insuring that no more than 20% by weight of the solvents evaporate into the open air;
    - ii. Waste solvents are stored in covered containers;
    - iii. The degreaser cover is closed when parts are not being processed through the degreaser; and,
    - iv. Cleaned parts are drained for at least 15 seconds or until dripping ceases.
- e. Compliance with the above VOC and HAP emission limitations shall be determined by accepted mass balance methodology applied to records of solvent usage and recovery. A year shall be defined as any 12 consecutive months for the above emission limitations. [§2103.12.5.B]

**2. Testing Requirements:**

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with §2108.02. (§2103.12.h.1)

**3. Monitoring Requirements:**

None except as provided elsewhere.

**4. Record Keeping Requirements:**

- a. The permittee shall maintain records of the type of cleaning solvent used, the pounds of VOC per gallon of the solvent, the amount purchased and the amount disposed of for each cleaning solvent containing volatile organic compounds sufficient to demonstrate compliance with the above



**EMISSION UNIT LEVEL  
TERMS AND CONDITIONS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

emission limitations by Condition V.P.1.e above. These records shall be compiled on a 12 month rolling total basis. [§2103.12.h.5.B]

- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

**5. Reporting Requirements:**

- a. The permittee shall report to the Department every six months, in accordance with General Condition III.15.d, all instances of non-compliance with the conditions of this permit along with all corrective action taken to restore the subject equipment to compliance. [§2103.12.k]
- b. Reporting instances of non-compliance in accordance with Condition V.P.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. [§2103.12.k]

**6. Work Practice Standards:**

None except as provided elsewhere.

**7. Additional Requirements:**

None except as provided elsewhere

***PERMIT SHIELD IN EFFECT***



**ALTERNATIVE  
OPERATING SCENARIOS**

**U. S. Steel Mon Valley Works – Irvin Plant  
Title V Operating Permit No. 0050-OP16b**

**VI. ALTERNATIVE OPERATING SCENARIOS**

No alternative operating scenarios exist for this facility

***PERMIT SHIELD IN EFFECT***



**VII. MISCELLANEOUS**

*PERMIT SHIELD IN EFFECT*



### **VIII. EMISSIONS LIMITATIONS SUMMARY**

The following table summarizes the estimated annual maximum potential emissions, including the four flares from the U. S. Steel Mon Valley Works - Irvin Plant. These annual (consecutive 12 month) emission estimates assume that all sources operate continuously at their maximum capacity.

<b>POLLUTANT</b>	<b>tons/year <sup>1</sup></b>
<b>Particulate</b>	<b>123.89</b>
<b>PM-10</b>	<b>124.52</b>
<b>SO<sub>2</sub></b>	<b>1,248.74.</b>
<b>NO<sub>x</sub></b>	<b>749.15</b>
<b>CO</b>	<b>1,179.08</b>
<b>VOC</b>	<b>203.99</b>
<b>Lead</b>	<b>0.08</b>
<b>Hydrochloric Acid</b>	<b>36.77</b>

<sup>1</sup>A year is defined as any consecutive 12-month period.

**EXHIBIT B**

**PLAN APPROVAL ORDER AND AGREEMENT UPON CONSENT NO. 258  
DECEMBER 30, 1996**

ALLEGHENY COUNTY HEALTH DEPARTMENT

IN RE:

USX Corporation	)	PLAN APPROVAL ORDER
U.S. Steel Group	)	AND AGREEMENT No. 258
Irvin Works PA 15207	)	<u>UPON CONSENT</u>
Allegheny County		
Dravosburg, PA 15034		

AND NOW, this 30th day of December, 1996,

WHEREAS, the Allegheny County Health Department, (hereafter referred to as "Department"), has determined that the USX Corporations, U.S. Steel Group, (hereafter referred to as "USX"), 600 Grant Avenue, Allegheny County, Pittsburgh, PA 15219, as the operator and the owner of a steel processing facility at Camp Hollow Road, Allegheny County, West Mifflin, PA 15122, (hereafter referred to as the "Irvin Plant"), is a major stationary source of oxides of nitrogen and volatile organic compounds (hereafter referred to as "NO<sub>x</sub>" and "VOCs") emissions as defined in Section 2101.20 of Article XXI, Rules and Regulations of the Allegheny County Health Department, Air Pollution Control (hereafter referred to as "Article XXI"); and

WHEREAS, the Department has determined that Section 2105.06 of Article XXI, entitled "Major Sources of Nitrogen Oxides and Volatile Organic Compounds is applicable to Irvin Plant's operations; and

WHEREAS, USX has timely submitted to the Department all of

the documents required by Section 2105.06.b of Article XXI (hereafter collectively referred to as "the proposal"); and

WHEREAS, the Department has determined, after review, that the proposal is complete; and

WHEREAS, the Department has further determined, after review, that the proposal, constitutes Reasonably Available Control Technology (hereafter referred to as "RACT") for control of emissions of NO<sub>x</sub> and VOCs from the Irvin Plant; and

WHEREAS, the Department and USX desire to memorialize the details of the proposal by entry of this RACT Plan Approval Order and Agreement Upon Consent; and

WHEREAS, pursuant to Section 2109.03 of Article XXI, the Director of the Allegheny County Health Department or his designated representative may issue such orders as are necessary to aid in the enforcement of the provisions of Article XXI;

NOW, THEREFORE, this day first written above, the Department, pursuant to Section 2109.03 of Article XXI, and upon agreement of the parties as hereinafter set forth, hereby issues the following RACT Plan Approval Order and Agreement upon Consent.

## I. ORDER

1.1. Irvin Plant shall maintain and operate the following equipment in accordance with good combustion and air pollution control practices and air pollution control practices, at all times with the exception of emergency or planned outages, repairs or maintenance.

1. Boilers #1, #2, #3 and #4
2. 80" Hot Strip Mill Reheat Furnaces 1 through 5
3. No. 1 Galvanizing Line Furnace
4. No. 1 Galvanneal Furnace 6
5. No. 2 Galvalume Furnace
6. Terne Line Pot Heater
7. Open Coil Annealing Furnace
8. No. 2 Continuous Annealing Furnace
9. HPH Box Annealing Furnace
10. 80" Hot Strip Mill Rolling Stands
11. Five Stand Cold Rolling Mill

1.2 Irvin Plant shall conduct an annual adjustment on the combustion processes of the following equipment:

1. 80" Hot Strip Mill Reheat Furnaces #1

through #5

2. Boilers #1, #2, #3 and #4
3. No. 2 Continuous Annealing Furnace

Such annual adjustment shall include:

- a. Inspection, adjustment, cleaning, or necessary replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
- b. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of  $\text{NO}_x$ , and to the extent practicable minimize emissions of carbon monoxide (hereafter referred as "CO"; and
- c. Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

Irvin Plant shall maintain the following records of the for the subject equipment:

- a. the date of the annual tune-up;
- b. the name of the service company and/or individuals performing the annual tune-up;
- c. the operating rate or load after the annual tune-up;
- d. the CO and NO<sub>x</sub> emission rate after the annual tune-up; and *Restored to design conditions*

1.3 Irvin Plant shall operate the No. 3 Five Stand Cold Rolling Mill and the 80" Hot Strip Mill Rolling Stand with lubricating oil, which is an oil-water emulsion and does not exceed a maximum VOC content by weight, ~~of 2% and 4%,~~ respectively.

1.4. Irvin Plant shall maintain all appropriate records to demonstrate compliance with the requirements of both Section 2105.06 Article XXI and this Order.

1.5. Irvin Plant shall retain all records required by both Section 2105.06 of Article XXI and this Order for the facility for at least two (2) years and shall make the same available to the Department upon request.

## II. AGREEMENT

The foregoing Plan Approval Order shall be enforced in accordance with and is subject to the following agreements of the parties, to wit:

- 2.1. The contents of this Order shall be submitted to the U.S. EPA as a revision to Allegheny County's portion of the Commonwealth of Pennsylvania's State Implementation Plan.
- 2.2. Failure to comply with any portion of this Order or Agreement is a violation of Article XXI that may subject USX to civil proceedings, including injunctive relief, by the Department.
- 2.3. This Order does not, in any way, preclude, limit or otherwise affect any other remedies available to the Department for violations of this Order or of Article XXI, including, but not limited to, actions to require the installation of additional pollution control equipment and the implementation of additional corrective operating practices.

2.4. USS hereby consents to the foregoing Order and hereby knowingly waives all rights to appeal said Order, and the undersigned represents that he is authorized to consent to the Order and to enter into this Agreement on behalf of USS.

2.5. USX acknowledges and understands that the purpose of this Agreement is to establish RACT for the control of emissions of NO<sub>x</sub> and VOC emissions from the Irvin Plant. USX further acknowledges and understands the possibility that the U.S. EPA may decide to not accept the Agreement portion of this RACT Plan Approval Order and Agreement by Consent as a revision to the Commonwealth of Pennsylvania's SIP.

IN WITNESS WHEREOF, and intending to be legally bound,  
the parties hereby consent to all of the terms and conditions of  
the foregoing Order and Agreement as of the date of the above  
written.

USX CORPORATION  
U. S. STEEL GROUP

By: David W. Lohr  
(signature)

Print or type Name: D. H. Lohr

Title: General Manager  
Mon Valley Works

Date: 12/17/96

ALLEGHENY COUNTY HEALTH DEPARTMENT

By: Bruce W. Dixon 12/30/96  
Bruce W. Dixon, M.D., Director  
Allegheny County Health Department

and By: Thomas J. Puzniak

Thomas J. Puzniak, Engineering Manager  
Air Quality Program

**EXHIBIT C**

**NO ACTION ASSURANCE LETTER FROM ACHD TO U. S. STEEL  
DATED NOVEMBER 1, 2016**

COUNTY OF



ALLEGHENY

RICH FITZGERALD  
COUNTY EXECUTIVE

November 1, 2016

via electronic and first-class mail: [DWHacker@uss.com](mailto:DWHacker@uss.com)

David W. Hacker  
Counsel  
United States Steel Corporation  
600 Grant Street, Suite 1500  
Pittsburgh, PA 15219

RE: United States Steel Corporation No Action Assurance Regarding Additional Reasonably Available Control Technology (RACT) Submittals

Dear Mr. Hacker:

As we discussed, the Allegheny County Health Department (“ACHD” or “Department”) has previously received U. S. Steel’s 2014 RACT evaluations for U. S. Steel’s Clairton, Edgar Thomson and Irvin plants that U. S. Steel provided in response to the Department’s December 2013 request.

Since the Department’s receipt of the 2014 RACT submittals, the Pennsylvania Department of Environmental Protection promulgated updated RACT requirements for major sources of NO<sub>x</sub> and VOCs (“Additional RACT Requirements for Major Sources of NO<sub>x</sub> and VOC”). (See April 23, 2016, *Pennsylvania Bulletin*, 46 PaB 2036.) While the Department has not yet determined that the Commonwealth’s updated requirements are applicable to sources within Allegheny County, if it were to determine that said requirements were applicable, U.S. Steel’s 2014 RACT submittals are acceptable as submissions in furtherance of ultimate departmental approval and satisfying U. S. Steel’s obligations to provide an alternate RACT compliance approach pursuant to 25 PA Code §129.99.

Because the Department has not completed its review of the submissions, the Department is not offering its final approval of the plan. Rather, the Department is merely issuing this no action assurance regarding the report submittal and RACT limits pursuant to the 2016 rule until the Department completes its review. The Department emphasizes that it is the submission that it



KAREN HACKER, MD, MPH, DIRECTOR  
**ALLEGHENY COUNTY HEALTH DEPARTMENT**  
**AIR QUALITY PROGRAM**

301 39<sup>TH</sup> STREET • CLACK HEALTH CENTER • BUILDING 7  
PITTSBURGH, PA 15201-1811  
PHONE (412) 578-8103 • FAX (412) 578-8144  
24-HR (412) 687-ACHD (2243) • [WWW.ACHD.NET](http://WWW.ACHD.NET)

now deems acceptable and not the plan which still requires approval. The Department also reserves the right to request additional information from U. S. Steel to evaluate RACT for the Clairton, Edgar Thomson, and Irvin plants.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jason K. Willis". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

Jason K. Willis  
Assistant Solicitor,  
Allegheny County Health Department

**BEFORE THE HEARING OFFICER FOR THE  
ALLEGHENY COUNTY HEALTH DEPARTMENT  
542 4TH AVENUE  
PITTSBURGH, PENNSYLVANIA 15219**

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UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Appellant,	)	
	)	
v.	)	Appeal of Title V Operating Permit &
ALLEGHENY COUNTY HEALTH	)	Federally Enforceable State
DEPARTMENT, Air Quality Program,	)	Operating Permit # 0050-OP-16b
	)	
Appellee.	)	

**CERTIFICATE OF SERVICE**

I hereby certify that on the 1<sup>st</sup> day of June 2020, a true and correct copy of the foregoing Notice of Appeal was served via electronically<sup>3</sup> to the following individuals:

Max Slater, Esq.  
Administrative Hearing Officer  
Allegheny County Health Department  
542 Fourth Avenue  
Pittsburgh, PA 15219  
[max.slater@alleghenycounty.us](mailto:max.slater@alleghenycounty.us)

Jason K. Willis, Esq.  
Assistant Solicitor  
Allegheny County Health Department  
301 39<sup>th</sup> Street, Bldg. No. 7  
Pittsburgh, PA 15201  
[jason.willis@alleghenycounty.us](mailto:jason.willis@alleghenycounty.us)

Respectfully submitted,



---

David W. Hacker, Esq.  
Counsel for United States Steel Corporation

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<sup>3</sup> Pursuant to the Hearing Officer's Emergency COVID-19 Order, dated May 8, 2020, filing of this notice of appeal, and service is being completed electronically.