ALLEGHENY COUNTY HEALTH DEPARTMENT

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

Major Source
Title V Operating Permit

Issued To: U. S. Steel Mon Valley Works - Irvin Plant
ACHD Permit #: 0050

Facility: U. S. Steel Irvin Plant
Camp Hollow Road
West Mifflin, PA 15222
Date of Issuance: February 18, 2005
Expiration Date: February 17, 2010
Renewal Date: August 18, 2009

Issued By: Sandra L. Etzel
Air Pollution Control Mgr.

Prepared By: Thomas M. Heron
Air Quality Engineer
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AMENDMENTS:

DATE:          SECTION:
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: Mark Whalen
Title: General Manager
Company: U. S. Steel Mon Valley Works
Address: P. O. Box 878
Dravosburg, PA 15122
Telephone Number: (412) 675-2600
Fax Number: (412) 675-7822

Facility Contact: Michael G. Dzurinko
Title: Environmental Engineer
Telephone Number: (412) 675-7381
Fax Number: (412) 675-7822
E-mail Address: mdzurinko@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: Thomas M. Heron
Title: Air Quality Engineer
Telephone Number: 412-578-7960
Fax Number: 412-578-8144
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EPA Contact: Enforcement Programs Section (3AP12)
USEPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029
II. FACILITY DESCRIPTION

[This section is provided for informational purposes only and is not intended to be an applicable requirement.]

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, galvanizing, and terne coating. 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

<table>
<thead>
<tr>
<th>I.D.</th>
<th>SOURCE DESCRIPTION</th>
<th>CONTROL DEVICE(S)</th>
<th>MAXIMUM CAPACITY</th>
<th>FUEL/RAW MATERIAL</th>
<th>STACK I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P001 to P005</td>
<td>80-Inch Hot Strip Mill Reheat Furnaces No. 1 to No. 5</td>
<td>None</td>
<td>140 MMBtu/Hr</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SP1 to SP6</td>
</tr>
<tr>
<td>P016</td>
<td>Scale Breaker Roughing Mill &amp; Finishing Mill</td>
<td>None</td>
<td>3,000,000 tons/yr</td>
<td>NA</td>
<td>Fugitive</td>
</tr>
<tr>
<td>P021</td>
<td>64-Inch Continuous Coil Hydrochloric Acid Pickle Line</td>
<td>Packed Tower Scrubber</td>
<td>1,047,174 tons/yr</td>
<td>Steel Coils, HCl Pickle Liquor</td>
<td>SP023</td>
</tr>
<tr>
<td>P007</td>
<td>84-Inch Continuous Coil Hydrochloric Acid Pickle Line</td>
<td>Packed Tower Scrubber</td>
<td>1,576,800 tons/yr</td>
<td>Steel Coils, HCl Pickle Liquor</td>
<td>SP7</td>
</tr>
<tr>
<td>P008</td>
<td>Cold Reduction Mill (Mill Stands No. 1 to No. 5)</td>
<td>Cyclone Mist Eliminator</td>
<td>3,767,676 tons/yr</td>
<td>Steel Coils and Rolling Oil Solution</td>
<td>SP9</td>
</tr>
<tr>
<td>P009</td>
<td>HPH Batch Annealing Furnaces (31 individual furnaces)</td>
<td>None</td>
<td>4.9 MMBtu/hr, each furnace</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SP10</td>
</tr>
<tr>
<td>P010</td>
<td>Open Coil Annealing Furnaces No. 1 to No. 9</td>
<td>None</td>
<td>7.2 MMBtu/hr, each furnace</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SP12</td>
</tr>
<tr>
<td>P010</td>
<td>Open Coil Annealing Furnaces No. 10 to No. 13</td>
<td>None</td>
<td>9.0 MMBtu/hr, each furnace</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SP12</td>
</tr>
<tr>
<td>P010</td>
<td>Open Coil Annealing Furnace No. 14</td>
<td>None</td>
<td>5.4 MMBtu/hr</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SP12</td>
</tr>
<tr>
<td>P011</td>
<td>Continuous Annealing</td>
<td>None</td>
<td>45 MMBtu/hr</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SP13</td>
</tr>
<tr>
<td>P012</td>
<td>No.1 Continuous Galvanizing Galvaneal Furnace</td>
<td>None</td>
<td>18 MMBtu/hr</td>
<td>Natural Gas</td>
<td>SP15</td>
</tr>
<tr>
<td>P012</td>
<td>No.1 Continuous Galvanizing Preheat Furnace</td>
<td>None</td>
<td>45 MMBtu/hr</td>
<td>Natural Gas</td>
<td>SP16</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Control Name</td>
<td>Coke Oven Gas</td>
<td>Nat Gas</td>
<td>Permit No.</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------</td>
<td>--------------</td>
<td>---------------</td>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>P013</td>
<td>No. 2 Continuous Galvanizing Galvalum Preheat Furnace</td>
<td>None</td>
<td>18 MMBtu/hr</td>
<td></td>
<td>SP18</td>
</tr>
<tr>
<td>P014</td>
<td>Continuous Terne Line HCl Bath</td>
<td>Sodium Hydroxide Packed Tower Scrubber</td>
<td>219,000 tons of Sheet Steel/yr</td>
<td>NA</td>
<td>SP19</td>
</tr>
<tr>
<td>P014</td>
<td>Lead Melt Pot</td>
<td>None</td>
<td>10 MMBtu/hr</td>
<td></td>
<td>SP19</td>
</tr>
<tr>
<td>P015</td>
<td>Coke Oven Gas Flares No. 1 to No. 4</td>
<td>None</td>
<td>46 MMBtu/hr, each</td>
<td>Coke Oven Gas</td>
<td>SP20</td>
</tr>
<tr>
<td>P015</td>
<td>Peachtree Coke Oven Gas Flare</td>
<td>None</td>
<td>46 MMBtu/hr, each</td>
<td>Coke Oven Gas</td>
<td>SP21</td>
</tr>
<tr>
<td>B001</td>
<td>Boiler No. 1</td>
<td>None</td>
<td>79.8 MMBtu/hr</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SB1</td>
</tr>
<tr>
<td>B001</td>
<td>Boiler No. 2</td>
<td>None</td>
<td>84.6 MMBtu/hr</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SB2</td>
</tr>
<tr>
<td>B003</td>
<td>Boiler No. 3</td>
<td>None</td>
<td>41.6 MMBtu/hr, each</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SB3</td>
</tr>
<tr>
<td>B004</td>
<td>Boiler No. 4</td>
<td>None</td>
<td>41.6 MMBtu/hr, each</td>
<td>Coke Oven Gas and Natural Gas</td>
<td>SB3</td>
</tr>
</tbody>
</table>
Figure II-1: 80-Inch Hot Strip mill Reheat Furnaces and Roughing & Finishing Mills

- Reheat Furnace No. 1 → SP-1 & SP-6
- Reheat Furnace No. 2 → SP-2 & SP-6
- Reheat Furnace No. 3 → SP-3 & SP-6
- Reheat Furnace No. 4 → SP-4
- Reheat Furnace No. 5

Roughing Mill → Descaling Operations → Finishing Mill → Fugitive-Inside
Figure II-2: 64-inch Continuous Coil HCl Pickle Line

Steel Coils

Tension leveler/ Scale Breaker

Exhausts inside the process building

Continuous collection system covers integral with the HCl tanks

Packed Tower Water Scrubber

SP023

Rinse Tank

Four (4) HCl Storage Tanks

Finished Coils

Air Emissions

Process Flow

HCl to Pickle Line

Wet Packed Tower Fume Scrubber

SP500
Figure II-3: 84-inch Continuous Coil Pickle Line

- Steel Coil
- 4 Continuous Hydrochloric Acid Tubs in series
- Rinse Tub
- Water Wash Scrubber
- SP-8

Continuous collection cover integral with the tubs
Figure II-4: Cold Reduction Mill

Steel coils

Mill Stand No. 1

Mill Stand No. 2

Mill Stand No. 3

Mill Stand No. 4

Mill Stand No. 5

Capture System with Mist Eliminators

SP9
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.
NOTES:

1. Annealing gases (hydrogen and nitrogen) are not regulated air pollutants.
2. Fourteen (14) 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

Diagram showing the continuous annealing line with the following components:

- **Steel Coils**
- **Scrap Steel**
- **Uncoiler/Welder/Tension Control/Shear**
- **Electro-Cleaner**
- **Brush Scrubber & Hot Rinse Dryer**
- **Annealing Furnace**
- **Entry Looping Tower/Pit**
- **1st & 2nd Cooling Zone**
- **Exiting Looping Tower/Pit**
- **Shear/Coiler**
- **Steel Coils [To # 7 Temper Mill & #17 Recoiler]**

**Fugitive Emissions**

- **Condenser**
- **Condenser Fumes/Filtered Water**
- **Wastewater Treatment**

**Steel Coils**

- **Caustic Storage**

**Controllable**

- **Water**
- **Non-Contact Steam**

**Wastewater Treatment**

**Combustion Emissions**

- **N.G. & C.O.G.**

**Scrap Steel**
Figure II-8: No. 1 Continuous Galvanizing Line
Figure II-9: Continuous Terne Line
Figure II-10: No. 2 Continuous Galvanizing Line

- Steel Coils
- Uncoiler
- Shear/Welder
- Caustic Cleaning
- Rinse
- Strip Dryers
- Steam Heat
- Preheat Furnace
- Annealing Furnace (Electric)
- Galvalume Pot
- Zinc Pot
- Scrap Steel
- Scrubber Water
- SWTP
- Fugitive Emissions
- Combustion Emissions
- Annealing Gases
- Annealing Gases Purge
- NG Water
- Steel Coils
- Coiler/Shear
- Strip Oil
- Air Dryer
- Chem Treat Tank
- NDS Unit
- Infrared Oven/Roll Coater
- 4 High Temper Mill
- Quench Tank
- Drying Tower
- Water
- Air
- Steam
- Fugitive Emissions
- Chemical Treatment
Figure II-11: No. 7 Temper Mill
Figure II-12: No. 11 Coil and Shear Line

Steel Coils → Uncoiler → Crop Shear/ Side Trimmers → Mill Stand → Uncoiler → Steel Coils

Scrap Steel

Figure II-13: No. 17 Recoiler

Steel Coils → Uncoiler → Side Trimmers → Oiler → Coiler → Steel Coils

Fugitive Emissions

Coating Oil

Scrap Steel for Recycle

Used Oil to Oil
Figure II-13: Coke Oven Gas Flares

Combustion Emissions

1  No. 1 Flare

2  No. 2 Flare

3

4  No. 3 Flare

5  Peachtree Flare

Coke Oven Gas Distribution
Excess Coke Oven Gas Regulator
Pilot Gas
A  B
Figure II-14: Boilers No. 1 through No. 4

- **Boiler No. 1**
  - Natural Gas
  - Coke Oven Gas

- **Boiler No. 2**
  - Natural Gas
  - Coke Oven Gas

- **Boiler No. 3**
  - Natural Gas
  - Coke Oven Gas

- **Boiler No. 4**
  - Natural Gas
  - Coke Oven Gas
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 PM10 (§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 PM10 but does not limit the emissions of any hazardous air pollutants, the mixture of hazardous air pollutants which are VOCs or PM10 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 Administrator as well as the Department by May 30 of each year for the time period beginning April 1 of the previous year and ending March 31 of the same year. The first report shall be due May 30, 2005 for the time period beginning on the issuance date of this permit through March 31, 2005.
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 first semiannual report shall be due January 31, 2005 for the time period beginning on the issuance date of this permit through December 31, 2004.

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 first quarterly report shall be due January 31, 2005 for the time period beginning on the issuance date of this permit through December 31, 2004.

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

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.


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 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 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.
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 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
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.

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.


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) 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;

   a) 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

   b) 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. **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.
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 sheet 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 operate, or allow to be operated reheat furnaces No. 1 through No. 5 in such a manner that emissions of sulfur oxides from each furnace exceed 30.1 pounds per hour or 131.9 tons per year.  [%2101.02.c.4]

e. 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 40 grains per hundred dry standard cubic feet of coke oven gas. [%2105.21.h.4]

f. 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 4%, at any time.  [RACT Order No. 258; §2105.06]
g. Emissions from the Hot Strip Mill Reheat Furnaces No. 1 through No. 5 shall not exceed the emission limitations in Table V-A-1.

### TABLE V-A-1

**Emission Limitations for each Hot Strip Mill Reheat Furnace**

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>Coke Oven Gas (lb/hr)</th>
<th>Natural Gas (lb/hr)</th>
<th>ANNUAL EMISSION LIMIT (tons/year)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-10</td>
<td>7.0</td>
<td>7.0</td>
<td>18.25</td>
</tr>
<tr>
<td>CO</td>
<td>5.15</td>
<td>13.52</td>
<td>59.24</td>
</tr>
<tr>
<td>SO₂</td>
<td>30.12</td>
<td>0.08</td>
<td>131.91</td>
</tr>
<tr>
<td>NOₓ</td>
<td>39.20</td>
<td>50.26</td>
<td>220.14</td>
</tr>
<tr>
<td>VOC</td>
<td>0.34</td>
<td>0.89</td>
<td>3.88</td>
</tr>
</tbody>
</table>

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

2. **Testing Requirements:**

a. The permittee shall perform NOₓ emissions testing on the stacks of reheat furnaces No. 1 through No. 5 at least once every two years to demonstrate compliance with the mass emission limits in Table V-A-1 above. NOₓ emission tests shall be conducted according to the methodology specified in 40 CFR 60, Appendix A, Methods 7, 7A, 7B, 7C, 7D or 7E. Documentation and testing shall meet the requirements of Site Level Condition 12 entitled “Emissions Testing.” [§2103.12.h.1]

b. 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 12 entitled “Emissions Testing.” (§2103.12.h.1)

3. **Monitoring Requirements (§2102.04.e):**

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 sulfur compounds concentrations in coke oven gas shall be conducted according to §2107.08. [§2103.12.h.5.B]

b. The permittee shall measure the weekly quantity of natural gas and coke oven gas combusted in each of the five reheat furnaces. [2102.04.e]
4. Record Keeping Requirements (§§2103.12.j & k):

   a. The permittee shall record and maintain records of the weekly quantity of natural gas and coke oven gas combusted in each of the five reheat furnaces and the weekly hours of operation of each furnace. [§2103.12.j]

   b. The permittee shall maintain the following records of the annual tune-up for the subject equipment: [RACT Order No. 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;
      4) the CO and NO\textsubscript{x} emission rate after the annual tune-up;

   c. The permittee shall maintain weekly and 12 month rolling totals of the fuel type, and fuel usage and daily sulfur concentration expressed as H\textsubscript{2}S in coke oven gas used for combustion, for each 80” Hot Strip Mill reheat furnace. [§2103.12.h.5.B]

   d. 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]

   e. The permittee shall maintain monthly records of the quantity of lubricating oil used and the quantity of water mixed with this oil to form a water emulsion. [§2103.12.h.5.B]

   f. 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 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 above.

   b. The permittee shall report to the Department every six months, in accordance with General Condition III.15 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]

   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 "tuneup" 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]

   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 NO₃, 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.
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 tanks.

Facility ID: SP023
Max. Design Rate: 1,047,174 tons of sheet per year
Capacity: 1,047,174 tons of sheet 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, treating all hydrochloric acid emissions from the pickle line, according to the following specifications while the line is in operation: [Installation Permit No. 0050-1001a 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.

3) The pressure drop across the scrubber shall be recorded at least once daily and during the initial and/or subsequent scrubber emission testing.

b. The permittee shall not cause or allow to be discharged into the atmosphere from the pickling line: [§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. [§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: [§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 flowrate at any time, to within 1% of actual flowrate. Calibrations shall be performed semiannually.

e. The permittee of a new or reconstructed steel pickling facility subject to Subpart CCC of 40 CFR Part 63, that commences construction or reconstruction after September 18, 1997, shall achieve compliance with the requirements of this subpart immediately upon startup of operations or by June 22, 1999, whichever is later. [§63.1160(a)(2)]

f. The permittee shall comply with the operation and maintenance requirements prescribed under §63.6(e) of 40 CFR Part 63, Subpart A. [§63.1160(b)(1)]

g. 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-I001a, 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.

h. Emissions from the Tension Leveler/Scale Breaker Dust Collector (SP023) shall not exceed the emission limitations in Table V-B-1 at any time. [§2102.04.b.6]:

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE MATTER</td>
<td>0.02</td>
<td>0.09</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.02</td>
<td>0.09</td>
</tr>
</tbody>
</table>

¹ A year is defined as any 12 consecutive months.

i. Emissions from the 64” continuous coil pickle line shall not exceed the emission limitations in Table V-B-2 at any time. [§63.1158(a); §2102.04.b.6]

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE MATTER</td>
<td>0.41</td>
<td>1.79</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.41</td>
<td>1.79</td>
</tr>
<tr>
<td>HCl</td>
<td>0.41</td>
<td>1.79</td>
</tr>
</tbody>
</table>

¹ A year is defined as any 12 consecutive months.
Compliance with the hydrochloric acid emission limitations for the 64” Continuous Coil HCl Pickle Line in Condition V.B.1.i 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-I001a, and §2105.03]

2. Testing Requirements
   a. The permittee shall conduct an initial 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. [§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. [§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 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. [§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: [§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 Cl2 shall be calculated for each run as follows:

\[ C_{HC\ell}(ppmv) = 0.659 \times C_{HC\ell}(mg/dscm), \]

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 [§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 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.

b. If the pressure drop exceeds the normal range as specified in V.B.1.g.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. [§2102.04.b.6]
c. The permittee shall inspect the tension leveler/scale breaker dust collector on a weekly basis to ensure compliance with Conditions V.B.1.g and V.B.3.a above. Any excursions from these conditions shall be corrected as soon as possible. [§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. [§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. [§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. [§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. [§63.1162(a)(5)]

h. The permittee may develop and implement alternative monitoring requirements subject to approval by the Department and the Administrator. [§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. [§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.g and V.B.3.a above and corrective action taken shall be recorded upon occurrence. All records shall be kept on a monthly basis. [§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. [§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. [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: [§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: [§63.1165(b)(1)]

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. [§2103.12.j]

g. 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)]

h. 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(c)]

b. The permittee shall report the results of any performance test required in paragraph V.B.2.a and V.B.2.d above. [§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. [§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.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. (§2103.12.k.1)

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

a. In addition to the requirements specified in paragraph V.B.1.f 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: [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. [§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. [§63.1164(c)(1)]

7. **Additional Requirements**

   *None except as provided elsewhere.*
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 Pickle Line in such a manner that the emissions of particulate matter from the line exceeds 7 pounds in any 60 minute period or 100 pounds in any 24-hour period. [§2104.02.b]

b. 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, treating all hydrochloric acid emissions from the pickle line. [§2102.04.b.5]

c. 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.

d. The pickle line wet scrubber exhaust is subject to the opacity requirements in Site Level Condition IV.2. [§2104.01.a]

e. The permittee shall achieve initial compliance with the requirements in 40 CFR Part 63, Subpart CCC no later than June 22, 2001. [§63.1160(a)(1)]

f. 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)]
g. Emissions from the 84” Continuous Coil HCl Pickle Line (P007) shall not exceed the following at any time. [§63.1157(a)(1) and §2102.04.b.5]:

Table V-C-1 - 84” Continuous Coil Pickle Line Scrubber Emission Limitations

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE MATTER</td>
<td>2.9</td>
<td>12.5</td>
</tr>
<tr>
<td>PM-10</td>
<td>2.9</td>
<td>12.5</td>
</tr>
<tr>
<td>HCl</td>
<td>2.9</td>
<td>12.5</td>
</tr>
</tbody>
</table>

¹ A year is defined as any 12 consecutive months.

h. Compliance with the hydrochloric acid emission limitations for the 84” Continuous Coil HCl Pickle Line in Condition V.C.1.g above shall be determined by initial and subsequent HCl emission testing annually as specified in Condition V.C.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. [§2105.03 and §2102.04.b.5]

2. Testing Requirements

a. The permittee shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the emission limitation in Condition V.C.1.c 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.c 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.c 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 Cl2 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 Cl2 shall be calculated for each
run as follows:

\[ C_{HCl}(\text{ppmv}) = 0.659 \times C_{HCl}(\text{mg/dscm}), \]

where \( C(\text{ppmv}) \) is concentration in ppmv and \( C(\text{mg/dscm}) \) 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.e above, subject to approval by the Administrator and the Department
[§63.1161(d)(2) and §63.1166(a)(2)]
EMISSION UNIT LEVEL
TERMS AND CONDITIONS

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

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 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)]

f. 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 paragraph 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 (§2102.04.b.6)

a. In addition to the requirements specified in paragraph V.C.1.f 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:

   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 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 paragraph V.C.1.c 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.c above. [§63.1164(c)(1)]

7. **Additional Requirements**

None except as provided elsewhere.
D. Process P008: No. 3 Five Stand Cold Reduction Mill

**Process Description:** Process P008 consists of steel roll uncoilers, cold reduction mill stands, steel roll hydraulic shear, and a roll coiler.

**Facility ID:** P008

**Max. Design Rate:** 3,767,676 tons of steel coils per year

**Capacity:** 2,500,000 tons of steel coils per year

**Raw Materials:** Steel Coils

**Control Device:** 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, treating all oil mist emissions from the cold reduction mill, according to the following specifications while the line is in operation: [Installation Permit No. 0050-I002a, and §2102.04.b.6]

   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 not operate the Cold Reduction Mill with a lubricating oil VOC content, by weight greater than 2% and a water-oil emulsion oil content, by volume greater than 7%, at any time. [RACT Order No. 258, §2105.06]
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>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/ton steel rolled</th>
<th>lbs/hour</th>
<th>tons/year ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE MATTER</td>
<td>0.025</td>
<td>13.12</td>
<td>31.25</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.025</td>
<td>13.12</td>
<td>31.25</td>
</tr>
<tr>
<td>VOLATILE ORGANIC COMPOUNDS</td>
<td>0.025</td>
<td>13.12</td>
<td>31.25</td>
</tr>
</tbody>
</table>

¹ 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. [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 and §2102.04.b.6]

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 and §2102.04.b.6]
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 §2102.04.b.6]

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 §2102.04.b.6]

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 §2102.04.b.6]

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 and §2102.04.b.6]

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 and §2102.04.b.6]

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. [§2102.04.b.6]

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. [§2102.04.b.6]

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. [§2102.04.b.6]

6. Work Practice Standard
   
a. The permittee shall maintain and operate the cold rolling mill in accordance with good air pollution control practices, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258]
7. Additional Requirements

None except as provided elsewhere.
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 sheet per year per furnace (31 individual furnaces)

**Capacity:** 38,000 tons of sheet 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 40 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>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr – each unit (natural gas)</th>
<th>lbs/hr – each unit (coke oven gas)</th>
<th>tons/yr (^1) (each unit)</th>
<th>tons/yr (^1) (combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>0.04</td>
<td>0.10</td>
<td>0.43</td>
<td>13.31</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.04</td>
<td>0.10</td>
<td>0.43</td>
<td>13.31</td>
</tr>
<tr>
<td>SO(_2)</td>
<td>0.003</td>
<td>1.05</td>
<td>4.62</td>
<td>142.60</td>
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<tr>
<td>NO(_x)</td>
<td>0.49</td>
<td>0.74</td>
<td>3.22</td>
<td>99.82</td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.21</td>
<td>2.07</td>
<td>64.17</td>
</tr>
<tr>
<td>VOC</td>
<td>0.03</td>
<td>0.01</td>
<td>0.14</td>
<td>4.21</td>
</tr>
</tbody>
</table>

\(^1\) 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 §2108.02. (§2103.12.h.1)

3. **MONITORING REQUIREMENTS**

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 sulfur compounds concentrations in coke oven gas shall be conducted according to §2107.08. [§2103.12.h.5.B]

4. **RECORD KEEPING REQUIREMENTS**

a. The permittee shall maintain daily, 12 month rolling totals of the fuel type, fuel usage, hours of operation and sulfur compound concentration expressed as H$_2$S in coke oven gas used for combustion, for the HPH Annealing Furnaces. [§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 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 all instances of non-compliance with Condition V.E.1.a andV.E.5.a 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]

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. [§2102.04.b.6]

6. **WORK PRACTICE STANDARDS**

a. The permittee shall maintain and operate the HPH Annealing Furnaces in accordance with good combustion and air pollution control practices, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258]

7. **ADDITIONAL REQUIREMENTS**

None except as provided elsewhere.
F. Process P010: Open Coil Annealing Furnaces No. 1 Through No. 14

Process Description: The Open Coil Annealing Process consists of 14 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; and furnace No. 14 has a maximum heat input rating of 5.4 MMBtu/hr.

Facility ID: P010
Max. Design Rate: 159,000 tons of sheet per year
Capacity: 159,000 tons of sheet 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. 14 Open Coil Annealing Furnaces. [§2102.04.b.5 and §2102.04.b.6]

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-NOx burners with maximum NOx 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-NOx 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 \quad \text{where } A = \text{allowable emissions in pounds per million BTUs of actual heat input,}

i = \text{fuel type (i.e. natural gas and coke oven gas),}

x_i = \text{fraction of total actual heat input in BTUs provided by fuel type i, and}

a_i = \text{allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where } a_i = 0.008 \text{ 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. 14, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21.h.4]

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

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr – each unit (natural gas)</th>
<th>lbs/hr – each unit (coke oven gas)</th>
<th>tons/yr (^1) (each unit)</th>
<th>tons/yr (^1) (combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.06</td>
<td>0.14</td>
<td>0.63</td>
<td>5.68</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.06</td>
<td>0.14</td>
<td>0.63</td>
<td>5.68</td>
</tr>
<tr>
<td>SO(_2)</td>
<td>0.004</td>
<td>1.55</td>
<td>6.78</td>
<td>61.06</td>
</tr>
<tr>
<td>NO(_x)</td>
<td>0.72</td>
<td>2.88</td>
<td>12.61</td>
<td>113.49</td>
</tr>
<tr>
<td>CO</td>
<td>0.70</td>
<td>0.30</td>
<td>3.05</td>
<td>27.42</td>
</tr>
<tr>
<td>VOC</td>
<td>0.05</td>
<td>0.02</td>
<td>0.20</td>
<td>1.80</td>
</tr>
</tbody>
</table>

\(^1\) 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>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr – each unit (natural gas)</th>
<th>lbs/hr – each unit (coke oven gas)</th>
<th>tons/yr ¹ (each unit)</th>
<th>tons/yr ¹ (combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.07</td>
<td>0.18</td>
<td>0.79</td>
<td>3.15</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.07</td>
<td>0.18</td>
<td>0.79</td>
<td>3.15</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.01</td>
<td>1.94</td>
<td>8.48</td>
<td>33.92</td>
</tr>
<tr>
<td>NOₓ</td>
<td>0.90</td>
<td>3.60</td>
<td>15.77</td>
<td>63.08</td>
</tr>
<tr>
<td>CO</td>
<td>0.87</td>
<td>0.38</td>
<td>3.81</td>
<td>15.24</td>
</tr>
<tr>
<td>VOC</td>
<td>0.06</td>
<td>0.02</td>
<td>0.25</td>
<td>1.00</td>
</tr>
</tbody>
</table>

¹ 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]

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr (natural gas)</th>
<th>lbs/hr (coke oven gas)</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.04</td>
<td>0.07</td>
<td>0.30</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.04</td>
<td>0.05</td>
<td>0.22</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.004</td>
<td>0.12</td>
<td>0.53</td>
</tr>
<tr>
<td>NOₓ</td>
<td>0.75</td>
<td>1.20</td>
<td>5.20</td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.21</td>
<td>2.10</td>
</tr>
<tr>
<td>VOC</td>
<td>0.03</td>
<td>0.02</td>
<td>0.13</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period

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 Requirement

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 sulfur compounds concentrations in coke oven gas shall be conducted according to §2107.08. [§2103.12.h.5.B]
4. Record Keeping Requirements

a. The permittee shall record, monthly, the type and total amount of fuel used and the total production of furnaces No. 1 through No. 14, combined. [§2103.12.j and Installation Permit No. 0050-I003, 6/29/00]

b. The permittee shall maintain daily and 12 month rolling totals of the hours of operation of furnaces No. 1 through No. 14, and daily average and monthly summaries of the sulfur compound concentration expressed as H₂S in coke oven gas used for combustion in furnaces No. 1 through No. 14, combined. [§2103.12.h.5.B, §2103.12.j and Installation Permit No. 0050-I003]

c. The permittee shall keep records of all maintenance, inspections, repair, replacement or corrective action. All such records shall be kept on a monthly basis. [§2102.04.b.6]

d. 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]

e. 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]

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 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]

6. Work Practice

a. The permittee shall maintain and operate Open Coil Annealing Furnaces No. 1 through No. 14 in accordance with good combustion and air pollution control practices, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258 and §2102.04.b.6]

7. Additional Requirements

None except as provided elsewhere.
G. Process P011: Continuous Annealing

Process Description: The Continuous Annealing Process consists of one furnace rated at 45 MMBTUs/hr along with associated coiling, uncoiling and cleaning equipment.

Facility ID: P011
Max. Design Rate: 348,000 tons of sheet per year
Capacity: 348,000 tons of sheet 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]

\[
A = \sum x_i a_i \quad \text{where} \quad A = \text{allowable emissions in pounds per million BTUs of actual heat input}, \\
i = \text{fuel type (i.e. natural gas and coke oven gas),} \\
x_i = \text{fraction of total actual heat input in BTUs provided by fuel type} \ i, \text{and} \\
a_i = \text{allowable emissions in pounds per million BTUs of actual heat input for fuel type} \ i, \text{where} \ a_i = 0.008 \text{ for natural gas and 0.02 for coke oven gas.}
\]

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 40 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>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr (natural gas)</th>
<th>lbs/hr (coke oven gas)</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.36</td>
<td>0.90</td>
<td>3.94</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.36</td>
<td>0.90</td>
<td>3.94</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.03</td>
<td>9.68</td>
<td>42.40</td>
</tr>
<tr>
<td>NOₓ</td>
<td>4.50</td>
<td>18.00</td>
<td>78.84</td>
</tr>
<tr>
<td>CO</td>
<td>4.35</td>
<td>1.66</td>
<td>19.04</td>
</tr>
<tr>
<td>VOC</td>
<td>0.28</td>
<td>0.12</td>
<td>1.25</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period

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 monthly the quantity of natural gas and coke oven gas combusted in the Annealing Furnace. [§2103.12.1]

b. 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 §2107.08. [§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 NOₓ emission rate after the annual tune-up.

b. The permittee shall maintain records of fuel type, fuel usage, hours of operation, and sulfur concentration expressed as H₂S in coke oven gas used for combustion. [§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]

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.G.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

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]

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 NOX, 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.
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, a 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 sheet per year
Capacity: 187,700 tons of sheet per year
Raw Materials: Steel Coils, Natural Gas, Zinc, Treatment Chemicals
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 or 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 preheat furnace and the galvanneal furnace shall not exceed the limitations specified in Table V-H-1 below, at any time:  [§2104.02.a.1.A and §2104.03.a.1]

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Preheat Furnace</th>
<th>Galvanneal Furnace</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr</td>
<td>ton/yr</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>0.40</td>
<td>1.75</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.40</td>
<td>1.75</td>
</tr>
<tr>
<td>CO</td>
<td>4.83</td>
<td>21.16</td>
</tr>
<tr>
<td>SO2</td>
<td>0.03</td>
<td>0.13</td>
</tr>
<tr>
<td>NOx</td>
<td>3.0</td>
<td>13.14</td>
</tr>
<tr>
<td>VOC</td>
<td>.32</td>
<td>1.39</td>
</tr>
</tbody>
</table>

1 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 §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 Furnace and Galvanneal Furnaces, combined. [§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]

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, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258]

7. **Additional Requirements**

   None except as provided elsewhere.
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 sheet per year
Capacity: 156,400 tons of sheet 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 as specified in Conditions V.I.2.b and V.I.2.c below [§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

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Lbs./Hr.</th>
<th>Tons/Yr. ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>0.14</td>
<td>0.63</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.14</td>
<td>0.63</td>
</tr>
<tr>
<td>CO</td>
<td>1.74</td>
<td>7.62</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>NOₓ</td>
<td>7.20</td>
<td>31.54</td>
</tr>
<tr>
<td>VOC</td>
<td>0.11</td>
<td>0.50</td>
</tr>
</tbody>
</table>

¹ 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. The initial compliance period for the organic HAP emission limit in Condition V.I.1.c above is June 10, 2005 through June 30, 2006. [§63.5130(d)]
   
c. 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 as specified in Condition V.I.2.b above is the end of a compliance period consisting of that month and the preceding 11 months. [§63.5130(e)]
   
d. 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:
      a) Organic HAP content data for the purpose of demonstrating compliance in accordance with §63.5160(b);
      b) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with §63.5160(c);
      c) 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]
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 that is subject to 40 CFR 63, Subpart SSSS (Subpart SSSS) must submit an initial notification as required in 40 CFR Part 63, §63.9(b) no later than June 10, 2004 to the Department and U.S. EPA Region III. [§63.5180(b)]

c. The permittee shall submit a Notification of Compliance Status with Subpart SSSS, as specified in 40 CFR Part 63, §63.9(h), no later than July 31, 2006. [§63.5180(d)]

d. The permittee shall submit semi-annual compliance reports containing the following information: [§63.5180(g)]

1) Compliance report dates.
   a) The first semiannual reporting period begins 1 day after the end of the initial compliance period (June 10, 2005 through June 30, 2006) and ends 6 months later.
   b) The first semiannual compliance report must cover the first semiannual reporting period and be postmarked or delivered no later than 30 days after the reporting period ends. Each subsequent compliance report must cover the semiannual reporting periods specified in General Condition III.15.d above.

2) The semi-annual compliance report shall contain the following information:
   a) Company name and address.
   b) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
   c) 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.
   d) 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.
   e) A statement that there were no deviations from the standards during the reporting period.

e. 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.d.2) 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).
f. 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

a. The permittee shall maintain and operate the No. 2 Continuous Galvanizing and Aluminum Coating Line in accordance with good combustion and air pollution control practices, at all times with the exception of emergency or planned outages, repairs or maintenance.  [RACT Order No. 258]

7. Additional Requirements

None except as provided elsewhere
J. Process P014: Continuous Terne Line

Process Description: The Continuous Terne Line consists of a lead melt pot rated at 10 MMBTUs/Hr along with cleaning, treating, nickel and zinc plating equipment and an HCl bath.

Facility ID: P014

Max. Design Rate: 219,000 tons of sheet per year

Capacity: 219,000 tons of sheet per year

Raw Materials: Steel Coils, Natural Gas, Acid, Lead, Flux, Nickel Solution Treatment Chemicals, Caustic Solution, Coating Oil

Control Device: Granet type packed bed scrubber

1. Restrictions

a. Only natural gas shall be combusted in the Continuous Terne Line lead melt pot. [§2102.04.b.5]

b. The Permittee shall not operate, or allow to be operated the Continuous Terne Line in such a manner that the emissions of particulate matter from the line exceed seven (7) pounds in any 60 minute period or 100 pounds in any 24-hour period. [§2104.02.b]

c. The permittee shall at all times properly maintain and operate the Acid Mist Capture System such that the device is properly maintained and operated with negative air flow at all times.

d. The permittee properly maintain and operate the Acid Mist Capture System such that the minimum scrubbing liquid flow rate established in Condition V.J.2.a below is maintained at all times.

e. Emissions from the Continuous Terne Line shall not exceed the limitations specified in Table V-J-1 below, at any time: [§2104.02.b and §2104.03]

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Lbs/Hr</th>
<th>Tons/Yr 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>7.0</td>
<td>18.25</td>
</tr>
<tr>
<td>PM-10</td>
<td>7.0</td>
<td>18.25</td>
</tr>
<tr>
<td>NOx</td>
<td>1.4</td>
<td>6.13</td>
</tr>
<tr>
<td>CO</td>
<td>1.12</td>
<td>4.23</td>
</tr>
<tr>
<td>VOC</td>
<td>0.06</td>
<td>0.28</td>
</tr>
<tr>
<td>LEAD</td>
<td>0.01</td>
<td>0.04</td>
</tr>
<tr>
<td>HYDROCHLORIC ACID</td>
<td>0.70</td>
<td>3.07</td>
</tr>
</tbody>
</table>

1 A year is defined as any consecutive 12-month period
2. **Testing Requirements**
   a. The permittee shall conduct emission testing for HCl and lead on the Continuous Terne Line HCl Acid Mist Capture System in order to establish emissions limitations for the Acid Mist Capture System. The mass flow of HCl shall be measured simultaneously at the inlet and outlet of the Acid Mist Capture System. Testing shall be conducted within one year of issuance of this permit and at least once every 5 years thereafter. Such testing shall be performed according to EPA approved test methods No. 1 through 5, No.12 or 29, and No. 26 or 26A as specified by the Department and in accordance with Section §2108.02 of Article XXI. The minimum scrubbing liquid flow rate shall be established during the emission testing. [§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**
   The permittee shall inspect the Acid Mist Capture System daily in order to determine compliance with Conditions V.J.1.c and V.J.1.d above when the control equipment is in operation. [§2103.12.h.5.B]

4. **Record Keeping Requirements**
   a. The permittee shall maintain monthly, 12 month rolling totals of the following data for the Continuous Terne Line: [§2103.12.h.5.B]
      1) Tonnage of steel processed and hours of operation;
      2) Natural gas usage;
      3) HCl and lead usage;
      4) Maintenance and repair/replacement activities.
   b. The permittee shall keep records of the inspections of the capture and scrubbing systems required in Condition V.J.3 above which shall include at a minimum monthly records of all operating parameters specified in Conditions V.J.1.c and V.J.1.d above. These records shall include all episodes of non-compliance with Conditions V.J.1.c and V.J.1.d above and any corrective action taken to restore the units to compliance. [§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]

5. **Reporting Requirements**
   a. The permittee shall report the monthly data required to be recorded by condition V.J.4.a and V.J.4.b above to the Department every six months. 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.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.1)
6. Work Practice Standards
   a. The permittee shall maintain and operate the Continuous Terne Line lead melt pot heater in accordance with good combustion and air pollution control practices, at all times with the exception of emergency or planned outages, repairs or maintenance. [RACT Order No. 258]

7. Additional Requirements

   None except as provided elsewhere.
K. 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: N/A

1. Restrictions

a. The Permittee shall not operate or, allow to be operated C.O.G. Flares No.1 to No. 3 and the Peachtree Flare in such a manner that the emissions of particulate matter from each flare exceeds 1.22 lb/hr or 5.36 tons per year. [§2101.02.c.4]

b. The permittee shall not operate or, or allow to be operated C.O.G. Flares No.1 to No. 3 and the Peachtree Flare in such a manner that emissions of sulfur oxides, expressed as sulfur dioxide, in the effluent gas from each flare exceeds 30.25 lbs/hr or 132.5 tons/year. [§2105.21.h.4]

c. 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 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21.h.4]

d. Emissions from each subject flare shall not exceed the limitations specified in Table V-K-1 below, at any time: [§2101.02.c.4, §2105.21.h.4]

Table V-K-1 - Coke Oven Gas Flares No. 1 through No. 3 and Peachtree A & B Flare
(Emissions from Each Flare)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Lbs/Hr</th>
<th>Tons/Yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE MATTER</td>
<td>1.22</td>
<td>5.36</td>
</tr>
<tr>
<td>PM-10</td>
<td>1.22</td>
<td>5.36</td>
</tr>
<tr>
<td>SO₂</td>
<td>30.25</td>
<td>132.50</td>
</tr>
<tr>
<td>NOₓ</td>
<td>9.56</td>
<td>41.88</td>
</tr>
<tr>
<td>CO</td>
<td>52.03</td>
<td>227.90</td>
</tr>
<tr>
<td>VOC</td>
<td>8.86</td>
<td>38.80</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period

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. [
   
4. Record Keeping Requirements
   a. The permittee shall maintain daily and 12 month rolling totals of the fuel usage, COG sulfur concentration (expressed as H₂S) and hours of operation for Flares No.1, No. 2 and No. 3 and the Peachtree Flare: [
   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. [
   
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. [
   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 Condition IV.7 above, if appropriate. [
   
6. Work Practice Standards
   None except as provided elsewhere.
   
7. Additional requirements
   None except as provided elsewhere.
L. 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]

\[
A = 3x_ia_i
\]

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, Boilers No. 1 in such manner that emissions of sulfur oxides from Boiler No. 1, expressed as sulfur dioxide, exceed the following rate determined by the formula below at any time: [§2104.03.a.2]

\[
A = 1.7E^{-0.14}
\]

where \( A = \) allowable emissions in pounds per million BTUs of actual heat input, and
\( E = \) actual heat input in millions of BTUs per hour.

f. 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 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21.h.4]
g. Emissions from Boiler No. 1, shall not exceed the limitations specified in Table V-L-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr (natural gas)</th>
<th>lbs/hr (coke oven gas)</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.64</td>
<td>1.60</td>
<td>6.99</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.64</td>
<td>1.60</td>
<td>6.99</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.05</td>
<td>17.17</td>
<td>45.90</td>
</tr>
<tr>
<td>NOₓ</td>
<td>7.98</td>
<td>12.77</td>
<td>55.92</td>
</tr>
<tr>
<td>CO</td>
<td>7.71</td>
<td>3.38</td>
<td>33.76</td>
</tr>
<tr>
<td>VOC</td>
<td>0.51</td>
<td>0.22</td>
<td>2.21</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period

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 §2107.08. [§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]

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 NOₓ emission rate after the annual tune-up; and
5) the excess oxygen rate after the annual tune-up.

b. The permittee shall maintain monthly, 12-month rolling totals of the following data for Boiler no. 1: [§2103.12.h.5.B]

1) Fuel type, fuel usage, hours of operation and sulfur concentration expressed as H₂S 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 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. 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 ConditionIV.7 above, if appropriate.  [§2103.12.k]

6. Work Practice Standards

a. The permittee shall perform an annual adjustment or "tuneup" on Boiler No. 1 once every twelve (12) months, (hereafter referred to as "annual tune-up"). Such annual tune-up shall include:  

   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\textsubscript{X}, 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
EMISSION UNIT LEVEL
TERMS AND CONDITIONS
U. S. Steel Mon Valley Works – Irvin Plant
Title V Operating Permit No. 0050

M. Boiler No. 2

Process Description: One 84.6 MMBTU/h 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 operate, or allow to be operated, Boilers No. 2 in such manner that emissions of sulfur oxides from Boiler No. 2, expressed as sulfur dioxide, exceed the following rate determined by the formula below at any time: [§2104.03.a.2]

\[ A = 1.7E^{-0.14} \]

where \( A \) = allowable emissions in pounds per million BTUs of actual heat input, and

\( E \) = actual heat input in millions of BTUs per hour.

f. 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 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21.h.4]
g. Emissions from Boiler No. 2, shall not exceed the limitations in Table V-M-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

Table V-M-1 - Boiler No. 2 Emissions

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr (natural gas)</th>
<th>lbs/hr (coke oven gas)</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.68</td>
<td>1.69</td>
<td>7.41</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.68</td>
<td>1.69</td>
<td>7.41</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.05</td>
<td>18.20</td>
<td>45.90</td>
</tr>
<tr>
<td>NOₓ</td>
<td>8.46</td>
<td>13.54</td>
<td>59.29</td>
</tr>
<tr>
<td>CO</td>
<td>8.17</td>
<td>3.58</td>
<td>35.80</td>
</tr>
<tr>
<td>VOC</td>
<td>0.54</td>
<td>0.23</td>
<td>2.37</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period

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 §2107.08. [§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]
      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 NOₓ emission rate after the annual tune-up; and
      5) the excess oxygen rate after the annual tune-up.
   b. The permittee shall maintain monthly and 12-month rolling totals of the following data for Boiler No. 2: [§2103.12.h.5.B]
      1) Fuel type, fuel usage, hours of operation and sulfur concentration expressed as H₂S 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 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. Reporting instances of non-compliance in accordance with V.L.4.b.1) 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 "tuneup" 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]

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\textsubscript{X}, 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. None except as provided elsewhere.

7. Additional Requirements

None except as provided elsewhere.
N. 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]

\[
A = \sum x_i a_i \quad \text{where } A = \text{allowable emissions in pounds per million BTUs of actual heat input,}
\]

\[
i = \text{fuel type (i.e. natural gas and coke oven gas)},
\]

\[
x_i = \text{fraction of total actual heat input in BTUs provided by fuel type i, and}
\]

\[
a_i = \text{allowable emissions in pounds per million BTUs of actual heat input for fuel type i, where } a_i = 0.008 \text{ for natural gas and } 0.02 \text{ for coke oven gas.}
\]

e. The permittee shall not operate, or allow to be operated, Boilers No. 3 in such manner that emissions of sulfur oxides from Boiler No. 3, expressed as sulfur dioxide, exceed the following rate determined by the formula below at any time: [§2104.03.a.2]

\[
A = 1.7E^{-0.14} \quad \text{where } A = \text{allowable emissions in pounds per million BTUs of actual heat input, and}
\]

\[
E = \text{actual heat input in millions of BTUs per hour.}
\]

f. 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 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21.h.4]
g. Emissions from Boiler No. 3, 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>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr (natural gas)</th>
<th>lbs/hr (coke oven gas)</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.33</td>
<td>0.83</td>
<td>3.64</td>
</tr>
<tr>
<td>PM-10</td>
<td>0.33</td>
<td>0.83</td>
<td>3.64</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.03</td>
<td>8.95</td>
<td>39.20</td>
</tr>
<tr>
<td>NOx</td>
<td>4.16</td>
<td>6.66</td>
<td>29.15</td>
</tr>
<tr>
<td>CO</td>
<td>4.02</td>
<td>1.76</td>
<td>17.60</td>
</tr>
<tr>
<td>VOC</td>
<td>0.26</td>
<td>0.11</td>
<td>1.15</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period

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 §2107.08. [§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]

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 NOₓ emission rate after the annual tune-up; and
5) the excess oxygen rate after the annual tune-up.

b. The permittee shall maintain monthly and 12-month rolling totals of the following data for Boiler No. 3: [§2103.12.h.5.B]

1) Fuel type, fuel usage, hours of operation and sulfur concentration expressed as H₂S 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 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. 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 "tuneup" 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 NOx, 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.
O. 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]

   \[
   A = \sum x_i a_i \quad \text{where} \quad A = \text{allowable emissions in pounds per million BTUs of actual heat input},
   \]

   \[
   i = \text{fuel type (i.e. natural gas and coke oven gas)},
   \]

   \[
   x_i = \text{fraction of total actual heat input in BTUs provided by fuel type } i, \text{ and}
   \]

   \[
   a_i = \text{allowable emissions in pounds per million BTUs of actual heat input for fuel type } i, \text{ where } a_i = 0.008 \text{ for natural gas and 0.02 for coke oven gas.}
   \]

   d. The permittee shall not operate, or allow to be operated, Boilers No. 4 in such manner that emissions of sulfur oxides from Boiler No. 4, expressed as sulfur dioxide, exceed the following rate determined by the formula below at any time: [§2104.03.a.2]

   \[
   A = 1.7E^{-0.14} \quad \text{where} \quad A = \text{allowable emissions in pounds per million BTUs of actual heat input, and}
   \]

   \[
   E = \text{actual heat input in millions of BTUs per hour.}
   \]

   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. 4, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21h.4]
f. Emissions from Boiler No. 4, shall not exceed the limitations specified in Table V-O-1 below, at any time: [§2104.03, §2104.02.b, §2105.21.h.4]

Table V-O-1 - Boiler No. 4 Emission Limitations

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>lbs/hr (natural gas)</th>
<th>lbs/hr (coke oven gas)</th>
<th>tons/yr ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Particulate</td>
<td>0.33</td>
<td>0.83</td>
<td>3.64</td>
</tr>
<tr>
<td>PM-10</td>
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</tr>
<tr>
<td>VOC</td>
<td>0.26</td>
<td>0.11</td>
<td>1.15</td>
</tr>
</tbody>
</table>

¹ A year is defined as any consecutive 12-month period.

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 §2107.08.I. [§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]

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 NOₓ emission rate after the annual tune-up; and
5) the excess oxygen rate after the annual tune-up.

b. The permittee shall maintain monthly and 12-month rolling totals of the following data for Boiler no. 4: [§2103.12.h.5.B]

1) Fuel type, fuel usage, hours of operation and sulfur concentration expressed as H₂S 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 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. Reporting instances of non-compliance in accordance with V.O.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 "tuneup" 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\textsubscript{X}, 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.
P. 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 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.24 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:

   1) Properly maintain, repair, patch and repave all paved roads and areas.
   2) Vacuum sweep, in their entirety, all paved roads and areas in use at least once per month unless rain, snow or ice prevents the proper operation of the vacuum equipment.

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]

b. The permittee shall record the odometer readings and the locations swept by the vacuum sweeper(s). [§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. 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]

c. Reporting instances of non-compliance in accordance with Conditions V.P.5.a and V.P.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**

None except as provided elsewhere.

7. **Additional Requirements**

None except as provided elsewhere.
Q. 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:

      1) There is in operation on such degreaser:
         a) A cover to prevent evaporation of solvent during periods of non-use;
         b) Equipment for draining cleaned parts; and
         c) A permanent conspicuous label summarizing the operating requirements set forth in Paragraph V.Q.1.d.2) below; and

      2) Such degreaser is operated at all times in such manner that:
         a) 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;
         b) Waste solvents are stored in covered containers;
         c) The degreaser cover is closed when parts are not being processed through the degreaser; and,
         d) 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

   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

   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 limitations by Condition V.Q.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. 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 Condition V.Q.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
VI. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this facility
VII. EMISSIONS LIMITATIONS SUMMARY

[This table is provided for informational purposes only and is not intended to be an applicable requirement.]

The following table summarizes the estimated annual maximum potential emissions 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.

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>tons/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE</td>
<td>227.66</td>
</tr>
<tr>
<td>PM-10</td>
<td>227.66</td>
</tr>
<tr>
<td>SO₂</td>
<td>1641.10</td>
</tr>
<tr>
<td>NOₓ</td>
<td>1,860.85</td>
</tr>
<tr>
<td>CO</td>
<td>1,481.19</td>
</tr>
<tr>
<td>VOC</td>
<td>253.92</td>
</tr>
<tr>
<td>LEAD</td>
<td>0.04</td>
</tr>
<tr>
<td>HYDROCHLORIC ACID</td>
<td>17.36</td>
</tr>
</tbody>
</table>

¹A year is defined as any consecutive 12-month period.