



**AIR QUALITY PROGRAM**  
**836 Fulton Street**  
**Pittsburgh, PA 15233-2124**

**Title V Operating Permit**  
**& Federally Enforceable State Operating Permit**

**Issued To:** Bellefield Boiler Plant

**ACHD Permit #:** 0047-OP25

**Facility:** Bellefield Boiler Plant  
654 South Neville Street  
Pittsburgh, PA 15213-4007

**Date of Issuance:** Month 00, 20XX

**Expiration Date:** Month 00, 20XX

**Renewal Date:** expiration date – 6mo.

**Issued By:** \_\_\_\_\_  
JoAnn Truchan, P.E.  
Program Manager, Engineering

**Prepared By:** \_\_\_\_\_  
Reihaneh Etemadi  
Air Quality Engineer

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### AMENDMENTS:

| DATE | SECTION(S) |
|------|------------|
|------|------------|

## I. CONTACT INFORMATION

**Facility Location:** **Bellefield Boiler Plant**  
654 South Neville Street  
Pittsburgh, PA 15213-4007

**Permittee/Owner:** **Bellefield Boiler Plant**  
4400 Forbes Ave  
Pittsburgh, PA 15213-4007

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

**Responsible Official:** **Kevin Hiles**  
**Title:** Chief Operating Officer  
**Company:** Bellefield Boiler Plant  
**Address:** 4400 Forbes Ave  
Pittsburgh, PA 15213-4007  
**Telephone Number:** 412-622-3351  
**E-mail Address :** [hilesk@carnegiemuseums.org](mailto:hilesk@carnegiemuseums.org)

**Facility Contact:** **Anthony Young**  
**Title:** Chairman, Operating Committee  
**Telephone Number:** 412-578-2495  
**E-mail Address:** [youngT@carnegiemuseums.org](mailto:youngT@carnegiemuseums.org)

**AGENCY ADDRESSES:**

**ACHD Engineer:** **Reihaneh Etemadi**  
**Title:** Air Quality Engineer  
**Telephone Number:** 412-578-8038  
**Fax Number:** 412-578-8144  
**E-mail Address:** [reihaneh.etemadi@alleghenycounty.us](mailto:reihaneh.etemadi@alleghenycounty.us)

**ACHD Contact:** **Program Manager, Engineering**  
**Allegheny County Health Department**  
Air Quality Program  
836 Fulton Street  
Pittsburgh, PA 15233-2124  
[aqpermits@alleghenycounty.us](mailto:aqpermits@alleghenycounty.us)

**EPA Contact:** **ECAD – Air Section**  
**Environmental Protection Agency**  
Four Penn Center  
1600 John F. Kennedy Boulevard  
Mail Code 3ED21  
Philadelphia, PA 19103-2029

## II. FACILITY DESCRIPTION

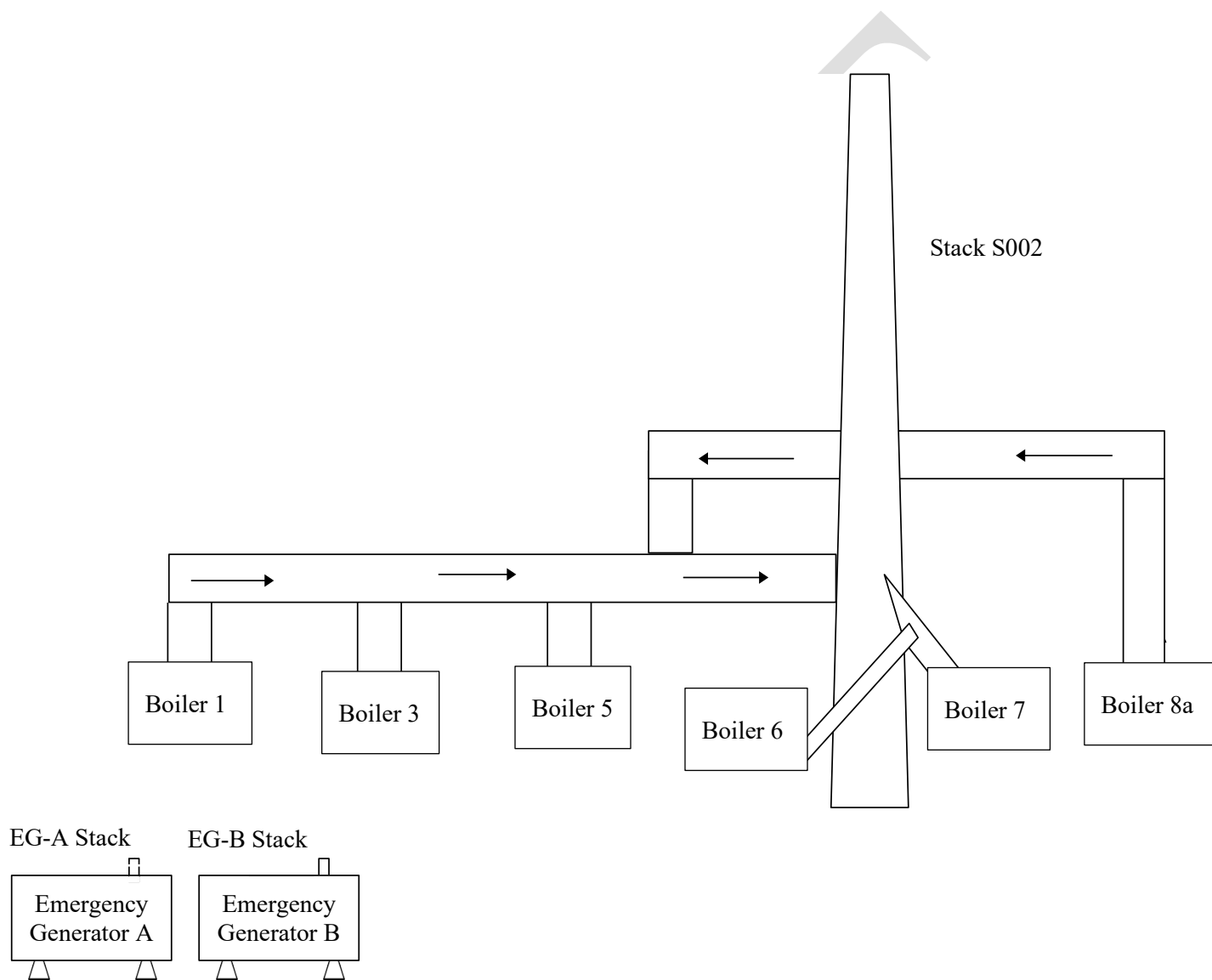
The Bellefield Boiler Plant (BBP) is a steam generation facility located at 654 S. Neville Street in the Oakland section of Pittsburgh, PA. BBP supplies steam for heating to Carnegie Mellon University, the Carnegie Museum of Art and Natural History, University of Pittsburgh, University of Pittsburgh Medical Center, Phipps Conservatory, Carnegie Library of Pittsburgh, and Pittsburgh Public Schools. The plant has six (6) boilers emitting to one stack and two (2) emergency generators, A and B, emitting through their corresponding stacks. These units are listed in Table 1 below.

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

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

| I.D.                                 | SOURCE DESCRIPTION                        | CONTROL DEVICE(S)                                                | MAXIMUM CAPACITY         | FUEL                          | STACK I.D. |
|--------------------------------------|-------------------------------------------|------------------------------------------------------------------|--------------------------|-------------------------------|------------|
| B001                                 | Boiler 1                                  | None                                                             | 74 MMBtu/hr              | Natural Gas                   | S002       |
| B003                                 | Boiler 3                                  | None                                                             | 128 MMBtu/hr             | Natural Gas                   |            |
|                                      |                                           |                                                                  | 119 MMBtu/hr             | No. 2 Fuel Oil                |            |
| B005                                 | Boiler 5                                  | None                                                             | 74 MMBtu/hr              | Natural Gas                   |            |
| B006                                 | Boiler 6, Package Boiler                  | Flue Gas Recirculation                                           | 179 MMBtu/hr             | Natural Gas<br>No. 2 Fuel Oil |            |
| B007                                 | Boiler 7, Package Boiler                  | Low NO <sub>x</sub> Burners                                      | 188 MMBtu/hr             | Natural Gas<br>No. 2 Fuel Oil |            |
| B008a                                | Boiler 8a, Rental Package Boiler          | Low NO <sub>x</sub> Burners with optional Flue Gas Recirculation | 87 MMBtu/hr              | Natural Gas                   |            |
| EG-A                                 | Emergency Generator A<br>Caterpillar 3412 | None                                                             | 5.2 MMBtu/hr<br>745 hp   | Diesel                        | EG-A       |
| EG-B                                 | Emergency Generator B<br>Caterpillar 3412 | None                                                             | 7.8 MMBtu/hr<br>1,118 hp | Diesel                        | EG-B       |
| <b>Sources of Minor Significance</b> |                                           |                                                                  |                          |                               |            |
| -                                    | Aboveground Storage Tank                  | None                                                             | 2,000 gal                | Diesel                        | -          |
| -                                    | Horizontal Underground Storage Tank       | None                                                             | 30,000 gal               | No. 2 Fuel Oil                | -          |
| -                                    | Paved Roads and Parking Lots              | None                                                             | -                        | -                             | -          |

*Bellefield Boiler Plant  
General Layout*



**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)**

- a. 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:
  - 1) Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
  - 2) Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
  - 3) May reasonably be anticipated to endanger the public health, safety, or welfare.
- b. It shall be a violation of this permit to operate, or allow to be operated, any source in such manner as to allow the release of air contaminants into the open air or to cause air pollution as defined in Article XXI, except as is explicitly permitted by this permit or Article XXI.

**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 or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.
- b. Unless specified otherwise in this permit or in the applicable regulation, the term “year” shall mean any twelve (12) consecutive months.

**3. Conditions (§2102.03.c)**

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

**4. Certification (§2102.01)**

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

**5. Transfers (§2102.03.e)**

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

**6. Term (§2103.12.e, §2103.13.a)**

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

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

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

**8. Property Rights (§2103.12.f.4)**

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

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

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

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

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

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

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

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

- a. Enter upon the permittee's premises where a permitted source is located or an emissions-related activity is conducted, or where records are or should be kept under the conditions of the permit;
- b. Have access to, copy and remove, at reasonable times, any records that must be kept under the conditions of the permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. As authorized by either Article XXI or the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of ensuring 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 III.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. Annual certification of compliance forms 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. Annual certifications of compliance should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at [aqreports@alleghenycounty.us](mailto:aqreports@alleghenycounty.us).

**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 III.4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
  - 1) One semiannual report is due by April 30 of each year for the time period beginning October 1 of the previous year through March 31 of that same year.
  - 2) One semiannual report is due by October 31 of each year for the time period beginning April 1 and ending September 30 of that same year.

- e. Reports should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at [aqreports@alleghenycounty.us](mailto:aqreports@alleghenycounty.us).

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

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

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

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

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

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

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

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

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

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

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

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

**22. Renewals (§2103.13.b.)**

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 (§2103.12.f.3, §2103.25.a)**

- 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 ensure 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 Maintenance Fee (§2103.40)**

In each year during the term of this permit, on or before December 31 of each year for the next calendar year, the permittee shall submit to the Department, in addition to any other applicable administration fees, an Annual Operating Permit Maintenance Fee in accordance with §2103.40 online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, payment may be sent 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. 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.

**30. 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.

**31. 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.

**32. 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.

**33. 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.

**34. 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.

**35. Operational Flexibility (§2103.14.a)**

- a. The owner or operator shall not make any changes at this source, including trades of increases and decreases in emissions within the permitted source, without first obtaining a permit revision for such changes, unless:
  - 1) The changes do not require an Installation Permit under §2102.04 of this Article or violate the terms of an Operating Permit or an Installation Permit;
  - 2) The permit specifically allows for changes that do not cause specific emissions increases greater than a *de minimis* emission increase, and the changes do not exceed such emissions increases allowed under the permit, in accordance with General Condition III.36 below;
  - 3) The changes do not violate major source applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements; and
  - 4) By no later than seven (7) days prior to the date on which the implementation of the proposed change is commenced, a written notification is submitted to the Department, for attachment to the Department's copy of the relevant permit, which includes:
    - a) A brief description of the change within the permitted source;
    - b) The date on which the change will occur;
    - c) The pollutants emitted; and
    - d) Any change in emissions.

**36. De Minimis Emission Increases (§2103.14.e)**

- a. The Department may allow, as a condition of an Operating Permit, *de minimis* emission increases from a new or existing source up to the amounts authorized in condition III.36.d below.
- b. A *de minimis* increase may not occur at a source if it either:
  - 1) Increases the emissions of a pollutant regulated under Section 112 of the Clean Air Act (42 U.S.C.A. §7412) except as authorized in conditions III.36.d.4) and 5) below;
  - 2) Subjects the source to the permit requirements of Article XXI, §§2102.05, 2102.06, or 2102.07 (relating to prevention of significant deterioration of air quality and major new source and major modification review); or
  - 3) Violates an applicable requirement of this Article, the state Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under the Air Pollution Control Act or the Clean Air Act.

- c. The permittee shall provide the Department with seven (7) days prior written notice of any *de minimis* emission increase. The notice shall identify and describe the pollutants that will be emitted as a result of the *de minimis* emissions increase and provide emission rates in tons/year and in terms necessary to establish compliance consistent with any applicable requirement. The Department may disapprove or condition the *de minimis* emission increase at any time.
- d. Except as provided in condition III.36.e below, the maximum *de minimis* emission rate increases, as measured in tons/year, that may be authorized in the permit during the term of the permit are:
  - 1) Four (4) tons of carbon monoxide from an emissions unit during the term of the permit and 20 tons of carbon monoxide at the source during the term of the permit;
  - 2) One (1) ton of NO<sub>x</sub> from an emissions unit during the term of the permit and five (5) tons of NO<sub>x</sub> at the source during the term of the permit;
  - 3) One and six-tenths tons of oxides of sulfur from an emissions unit during the term of the permit and 8.0 tons of oxides of sulfur at the source during the term of the permit;
  - 4) Six-tenths of a ton of PM<sub>10</sub> from an emissions unit during the term of the permit and 3.0 tons of PM<sub>10</sub> at the source during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder, or Article XXI; and
  - 5) One (1) ton of VOCs from an emissions unit during the term of the permit and five (5) tons of VOCs at the source during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder, or Article XXI.
- e. The Department may allow, as a condition of an operating permit, installation of the minor sources exempted under §2102.04.a.5 of Article XXI.
- f. *De minimis* emission threshold levels cannot be met by offsetting emission increases with emission decreases at the same emissions unit.

**37. 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.

**38. 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.

**39. Duty to Supplement and Correct Relevant Facts (§2103.11.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.

**40. Effect (§2102.03.g.)**

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.

**41. 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.

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#### 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 of such source. In addition, the Department may pursue the remedies provided by §2109.02 for any violation of this Section.

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

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

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

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

##### 6. Open Burning (§2105.50)

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

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

- a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment is shut down.
- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.
- c. The prior report required by Site Level Condition IV.7.a above shall include:
  - 1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
  - 2) The reasons for the shutdown;
  - 3) The expected length of time that the equipment will be out of service;
  - 4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
  - 5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
  - 6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
  - 7) Such other information as may be required by the Department.
- d. Written notice required by this condition should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at [aqreports@alleghenycounty.us](mailto:aqreports@alleghenycounty.us).

**8. Breakdowns (§2108.01.c)**

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.
- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
  - 1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.

- 2) The nature and probable cause of the breakdown.
  - 3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
  - 4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
  - 5) The estimated quantity of each material being or likely to be emitted.
  - 6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
  - 7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.
- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.
- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.
- g. Written notice required by this condition should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at [aqreports@alleghenycounty.us](mailto:aqreports@alleghenycounty.us).

**9. Cold Start (§2108.01.d)**

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

**10. 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.

**11. Orders (§2108.01.f)**

In addition to meeting the requirements of General Condition III.28 and Site Level Conditions IV.7 through IV.10 above, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

**12. 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.11 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**13. Emissions Testing (§2108.02)**

- a. **Orders:** 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.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms, and adequate utilities for the performance of such tests.
- c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment, and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted

and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory, and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.
- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

**14. 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.

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

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

**16. 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 disposing of small appliances, motor vehicle air conditioners (MVAC) and MVAC-like appliances, must comply with the record-keeping requirements pursuant to §82.166;
  - 5) Owners of commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
  - 6) 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. 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.

**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.17.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.18.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.18 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.18.

**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.19 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.19.

**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.20 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.20.

**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.22 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.22.

**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 (§2106.01 and Article XXI Part F)**

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 and Article XXI Part F.

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

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

**27. Fuel Specifications:**

- a. All fuel oil purchased by the permittee beginning September 1, 2020 shall meet ASTM standard specifications for No.2 fuel oil and have a maximum sulfur content at or less than 0.0015% by weight at all times. Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to September 1, 2020, which met the applicable maximum allowable sulfur content at the time it was stored, may be used by the ultimate consumer in this Commonwealth on and after September 1, 2020. (§2104.10.a.1; §2105.06.d; §2103.12.h; RACT IP 0047-I003, Condition V.B.1.k)
- b. When combusting natural gas, only utility grade natural gas shall be combusted. (§2103.12.h., §60.41b)

**28. Work Practice Tune-Up Requirements for Boilers 1, 3, 5, 6, 7:**

- a. The permittee shall conduct annual tune-up of the boilers to demonstrate continuous compliance as specified in conditions IV.22.a.1) through IV.22.a.6) below: (§2105.03; §2103.12.h.6; §2103.12.f.1)
  - 1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
  - 2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
  - 3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
  - 4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

- 5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- 6) Maintain on-site and submit, if requested, a report containing the information in conditions IV.22.a.6)a) through IV.22.a.6)c) below:
  - a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
  - b) A description of any corrective actions taken as a part of the tune-up of the boiler.
  - c) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit is physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- 7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

**29. Greenhouse Gas Reporting (40 CFR Part 98)**

If the facility emits 25,000 metric tons or more of carbon dioxide equivalent (CO<sub>2</sub>e) in any 12-month period, the facility shall submit reports to the US EPA in accordance with 40 CFR Part 98.

**V. EMISSION UNIT LEVEL TERMS AND CONDITIONS****A. Boiler No. 1**

**Process Description:** Natural Gas Boiler with Sidewall Burner  
**Facility ID:** Boiler No. 1  
**Capacity:** 74 MMBtu/hr  
**Fuel(s):** Natural Gas  
**Control Device:** None

**1. Restrictions:**

- a. Particulate matter emissions when combusting natural gas only in Boiler No. 1 shall not exceed 0.008 lb/MMBtu. [§2104.02.a.1.A]
- b. At no time shall the permittee allow emissions of nitrogen oxides from Boiler No. 1 to exceed 0.10 lb/MMBtu. [RACT IP #0047-I003a, Condition V.A.1.c; 25 Pa Code §129.112(g)(1)(i); §2105.06]
- c. Natural gas combustion in Boiler No.1 shall not exceed the maximum potential usage of 70,476 scf in any one-hour period and 617.37 MMscf in any consecutive 12-month period. [RACT IP #0047-I003a, Condition V.A.1.b; §2103.12.h.1]
- d. Emissions from Boiler No. 1 shall not exceed the following at any time: [RACT IP #0047-I003a, Condition V.A.1.c; 25 Pa Code §129.112(g)(1)(i); §2101.02.c.4; §2103.12.a.2.D; §2104.03.a.2; §2104.03.b]

**TABLE V-A-1: Boiler No.1 Emission Limitations**

| POLLUTANT                  | HOURLY<br>EMISSION LIMIT<br>(lb/hr) | ANNUAL<br>EMISSION LIMIT<br>(tons/year)* |
|----------------------------|-------------------------------------|------------------------------------------|
| Particulate Matter         | 0.59                                | 2.59                                     |
| PM <sub>10</sub>           | 0.59                                | 2.59                                     |
| Nitrogen Oxides            | 7.40                                | 32.4                                     |
| Carbon Monoxide            | 6.05                                | 26.48                                    |
| Sulfur Dioxide             | 0.04                                | 0.19                                     |
| Volatile Organic Compounds | 0.40                                | 1.75                                     |
| HAPs                       | 0.14                                | 0.60                                     |

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

- e. At no time shall the permittee operate the subject boiler using any fuel other than natural gas. [§2103.12.h.1]

**2. Testing Requirements:**

- a. The permittee shall perform nitrogen oxides emissions testing on Boiler No. 1 once every five (5)

years in order to demonstrate compliance with the emission limitations in conditions V.A.1.b and V.A.1.d above. Such testing shall be conducted in accordance with applicable U.S. EPA test methods 7 through 7E or other test methods approved by the Department, Article XXI §2108.02 and Site Level Condition IV.13. [§2103.12.h.1; §2108.02; RACT IP #0047-I003a, Condition V.A.2.a; 25 Pa Code §129.114(i); 25 Pa Code §129.115]

- b. The Department reserves the right to require additional emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h.1]

### 3. Monitoring Requirements:

- a. The permittee shall monitor and inspect Boiler No.1 weekly, to ensure the physical integrity of the boiler and associated equipment and to make sure the boiler is being operated and maintained properly. Steam load and natural gas usage are monitored and recorded to fulfill the recording requirements of V.A.4.a below. [§2103.12.i]
- b. The permittee shall provide Department approved instrumentation to monitor the oxygen content, CO and NO<sub>x</sub> of the boiler exhaust on a monthly basis during operation. The oxygen content of the flue gas shall be monitored to within 3% of the measured value and be recorded to the nearest 0.1%, to ensure that the subject boiler is being operated and maintained properly. The instrumentation shall be maintained in good working condition at all times and be easily accessible. [RACT IP #0047-I003a, Condition V.A.4.a; 25 Pa Code §129.115; §2103.12.i; §2105.06]

### 4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for Boiler No. 1: [§2103.12.h.1; RACT IP #0047-I003a, Condition V.A.4.a; 25 Pa Code §129.115; §2105.06; §2103.12.j]
  - 1) Amount of fuel combusted (MMscf of natural gas/day and monthly total natural gas combusted);
  - 2) Steam load (lb/hr, lb/day; average daily steam load for each month);
  - 3) Cold starts (date, time and duration of each occurrence);
  - 4) Total operating hours, (hours/day, monthly and 12-month);
  - 5) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment (e.g. burner replacement, flame pattern adjustments, and air-to-fuel ratios); and
  - 6) Stack test protocols and reports.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [RACT IP #0047-I003a, Condition V.A.4.b; §2103.12.h.1]
- c. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [RACT IP #0047-I003a, Condition V.A.4.c; 25 Pa Code §129.115; §2105.06; §2103.12.j.2; §2103.12.h.1]

### 5. Reporting Requirements:

- a. The permittee shall report the following information to the Department in accordance with General

Condition III.15 above. The reports shall contain all required information for the time period of the report: [§2103.12.k.1; RACT IP #0047-I003a, Condition V.A.5.a; 25 Pa Code §129.115]

1) Monthly and 12-month data summaries of:

- a) Type and amount of fuel combusted (Monthly and 12-month);
- b) Steam load (average daily steam load for each month);
- c) Cold starts (date, time and duration of each occurrence);
- d) Total operating hours.

2) Non-compliance information required to be recorded by V.A.4.b above.

- b. Reporting instances of non-compliance in accordance with condition V.A.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

#### 6. Work Practice Standard:

The permittee shall not, at any time, operate Boiler No. 1 unless the subject boiler is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance considering the manufacturer's or the permittee/operator's site specific maintenance procedures. [§2105.03; §2103.12.h.1; §2103.12.f.1]

#### 7. Aggregation

a. Particulate Matter – Aggregation (§2104.02.a)

- 1) If one or more fuel burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable particulate matter emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.

b. Sulfur Oxides – Aggregation (§2104.03.b)

- 1) For purpose of §2104.03.a only, if one or more fuel-burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
- 2) For any single boiler house having two or more boilers with a combined rated heat input no greater than 50 million Btus per hour, whose combined emissions would comply with the emission standards of §2104.03.a if they were vented into a common flue, the Department may, upon written application from the person responsible for such boiler house, determine compliance with the aggregation requirement on the basis of the total emissions from and total heat input to all such boilers, provided that the applicant demonstrates that such actions will not prevent the attainment or maintenance of any ambient air quality standard established by §2101.10 or interfere with reasonable further progress toward the attainment of the NAAQS.

#### B. Boiler No. 3

**Process Description:** Natural Gas Boiler with Sidewall Gas/Oil Burner

**Facility ID:** Boiler No. 3  
**Capacity:** 128 MMBtu/hr (natural gas), 119 MMBtu/hr (No. 2 fuel oil)  
**Fuel(s):** Natural gas and No. 2 fuel oil for emergencies (NG curtailment)  
**Control Device:** None

**1. Restrictions:**

- a. The particulate matter emissions when combusting natural gas only in Boiler No. 3 shall not exceed 0.008 lb/MMBtu. [§2104.02.a.1.A]
- b. The particulate matter emissions when combusting Fuel Oil only in Boiler No. 3 shall not exceed 0.015 lb/MMBtu. [§2104.02.a.1.B]
- c. At no time shall the permittee allow emissions of nitrogen oxides from Boiler No. 3 to exceed 0.20 pounds per MMBtu when firing natural gas. [RACT IP #0047-I003a, Condition V.B.1.g; 25 Pa Code §129.114(i); §2103.12.h.1]
- d. The annual capacity factor for Boiler No. 3 shall not exceed 50% during any consecutive 12-month period. The annual average heat input to the natural gas burner in Boiler No. 3 shall not exceed 64 MMBtu/hr or 560,640 MMBtu/yr, based on a natural gas heat content of 1,050 Btu/ft<sup>3</sup>. Bellefield Boiler shall determine compliance with this condition by maintaining records of natural gas use for the burner. [RACT IP #0047-I003a, Condition V.B.1.b; §2105.06.d; §2103.12.h.1; 25 Pa Code §129.114(i)]
- e. Natural gas combustion in Boiler No.3 shall not exceed the maximum potential usage of 121,905 scf in any one-hour period and/or 533.94 MMscf in any consecutive 12-month period. [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.1.g]
- f. Emissions from Boiler No. 3 shall not exceed the following at any time: [RACT IP #0047-I003a, Condition V.B.1.g; 25 Pa Code §129.114(i); §2101.02.c.4, §2103.12.a.2.D, §2104.03.a.2; §2104.03.b]

**TABLE V-B-1: Boiler No. 3 Emission Limitations**

| POLLUTANT                  | HOURLY<br>EMISSION LIMIT<br>(lb/hr)<br>(Natural Gas) | HOURLY<br>EMISSION LIMIT<br>(lb/hr)<br>(Fuel Oil) | ANNUAL<br>EMISSION<br>LIMIT<br>(tons/year)* |
|----------------------------|------------------------------------------------------|---------------------------------------------------|---------------------------------------------|
| Particulate Matter         | 1.02                                                 | 1.78                                              | 2.63                                        |
| PM <sub>10</sub>           | 1.02                                                 | 1.78                                              | 2.63                                        |
| Nitrogen Oxides            | 25.60                                                | 74.97                                             | 72.18                                       |
| Carbon Monoxide            | 10.46                                                | 4.25                                              | 23.82                                       |
| Sulfur Dioxide             | 0.08                                                 | 103.61                                            | 22.44                                       |
| Volatile Organic Compounds | 0.69                                                 | 0.29                                              | 1.58                                        |
| HAPs                       | 0.24                                                 | 0.12                                              | 0.54                                        |

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

- g. The maximum allowable fuel oil usage for Boiler No. 3 shall not exceed 850 gallons in any one-hour period and/or 365,500 gallons in any consecutive 12-month period [RACT IP #0047-I003a, Condition V.B.1.j & V.B.1.m ; 25 Pa Code §129.112; §2105.06.d; §2103.12.h.1]

- h. All fuel oil combusted shall meet current ASTM specifications for No. 2 fuel oil and have a maximum sulfur content of 0.0015% by weight at all times. [§2104.10; §2105.06.d; RACT IP #0047-I003a, Condition V.B.1.k]
- i. Boiler No. 3 annual capacity factor shall not exceed 4.91% during any consecutive 12-month period when firing No. 2 fuel oil. [RACT IP #0047-I003a, Condition V.B.1.l; 25 Pa Code §129.112(g)(1)(i); §2105.06.d]
- j. The permittee shall only use fuel oil during periods of emergency, including gas curtailment and gas supply interruption, and during maintenance, operator training, periodic testing and startups. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. The permittee shall notify the Department at least seven (7) workdays before combusting No. 2 fuel oil and provide the Department with a copy of the curtailment notice, except in an emergency including natural gas curtailment. [§2103.12.h.1; 40 CFR 63.11237: Definition of 'Gas-Fired Boiler']
- k. At no time shall the permittee operate the subject boiler using any fuel other than natural gas or No. 2 fuel oil or any combination of the two. [§2103.12.h.1]

**2. Testing Requirements:**

- a. The permittee shall perform nitrogen oxides emissions testing while combusting natural gas on Boiler No. 3 once every five (5) years in order to demonstrate compliance with the emission limitations in conditions V.B.1.c and V.B.1.f above. Such testing shall be conducted in accordance with applicable U.S. EPA test methods 7 through 7E or other test methods approved by the Department, §2108.02. and Site Level Condition IV.13. [§2103.12.h.1; §2108.02; RACT IP #0047-I003a, Condition V.B.2.a; 25 Pa Code §129.114(i); 25 Pa Code §129.115]
- b. The Department reserves the right to require additional emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. [§2103.12.h.1]

**3. Monitoring Requirements:**

- a. The permittee shall monitor and inspect Boiler No. 3 weekly, to ensure the physical integrity of the boiler, and associated equipment, and to confirm the boiler is being operated and maintained properly. Steam load and natural gas usage are monitored to fulfill the recording requirements of V.B.4.a below. [§2103.12.i; RACT IP #0047-I003a, Condition V.B.3.a]
- b. The permittee shall provide Department approved instrumentation to monitor the oxygen content, CO and NO<sub>x</sub> of the boiler exhaust on a monthly basis during operation. The oxygen content of the flue gas shall be monitored to within 3% of the measured value and be recorded to the nearest 0.1%, to ensure that the subject boiler is being operated and maintained properly. The instrumentation shall be maintained in good working condition at all times and be easily accessible. [§2103.12.i; RACT IP #0047-I003a, Condition V.B.3.b; 25 PA Code §129.115]

**4. Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for Boiler No. 3: [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.4.a; 25 Pa Code §129.115; §2105.06]

- 1) Type and amount of fuel combusted (MMscf of natural gas/day and monthly total natural gas combusted);
  - 2) Steam load (lb/hr, lb/day; average daily steam load for each month);
  - 3) Cold starts (date, time and duration of each occurrence);
  - 4) Total operating hours, (hours/day, monthly and 12-month);
  - 5) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment (e.g. burner replacement, flame pattern adjustments, and air-to-fuel ratios);
  - 6) Stack test protocols and reports; and
  - 7) Records to demonstrate compliance with Condition V.B.1.d above
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.4.b]
- c. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [§2105.06; §2103.12.j.2; §2103.12.h.1; RACT IP #0047-I003a, Condition V.B.4.c; 25 Pa Code §129.115]

**5. Reporting Requirements:**

- a. The permittee shall report the following information to the Department in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report: [§2103.12.k.1; RACT IP #0047-I003, Condition V.B.5.a]
- 1) Monthly and 12-month data summaries of:
    - a) Type and amount of fuel combusted;
    - b) Steam load (average daily steam load for each month);
    - c) Cold starts (date, time and duration of each occurrence); and
    - d) Total operating hours.
  - 2) Non-compliance information required to be recorded by V.B.4.b above.
- b. Reporting instances of non-compliance in accordance with condition V.B.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

**6. Work Practice Standard:**

The permittee shall not, at any time, operate Boiler No. 3 unless the subject boiler is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance considering the manufacturer's or the permittee/operator's site specific maintenance procedures. [§2105.03; §2103.12.h.1; §2103.12.f.1]

**7. Aggregation**

- a. Particulate Matter – Aggregation (§2104.02.a)

- 1) If one or more fuel burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable particulate matter emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
- b. Sulfur Oxides – Aggregation (§2104.03.b)
- 1) For the purpose of §2104.03.a only, if one or more fuel-burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable sulfur oxides emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
  - 2) For any single boiler house having two or more boilers with a combined rated heat input no greater than 50 million Btus per hour, whose combined emissions would comply with the emission standards of §2104.03a if they were vented into a common flue, the Department may, upon written application from the person responsible for such boiler house, determine compliance with the aggregation requirement on the basis of the total emissions from and total heat input to all such boilers, provided that the applicant demonstrates that such actions will not prevent the attainment or maintenance of any ambient air quality standard established by §2101.10 or interfere with reasonable further progress toward the attainment of the NAAQS.

**C. Boiler No. 5**

**Process Description:** Natural Gas-Fired Boiler with Sidewall Gas Burner  
**Facility ID:** Boiler No. 5  
**Capacity:** 74 MMBtu/hr  
**Fuel(s):** Natural gas  
**Control Device:** None

**1. Restrictions:**

- a. Particulate matter emissions when combusting natural gas only in Boiler No. 5 shall not exceed 0.008 lb/MMBtu. [§2104.02.a.1.A]
- b. At no time shall the permittee allow emissions of nitrogen oxides from Boiler No. 5 to exceed 0.10 lb/MMBtu. [RACT IP #0047-I003a, Condition V.A.1.c; §129.112(g)(1)(i); §2105.06]
- c. Natural gas combustion in Boiler No. 5 shall not exceed the maximum potential usage of 70,476 scf in any one-hour period and 617.37 MMscf in any consecutive 12-month period. [RACT IP #0047-I003a, Condition V.A.1.b; §2103.12.h.1; §2105.06]
- d. At no time shall the permittee operate the subject boiler using any fuel other than natural gas. [§2103.12.h.1]
- e. Emissions from Boiler No.5 shall not exceed the limitations in Table V.C.1 below: [§2101.02.c.4, §2103.12.a.2.D; §2104.03.a.2; §2104.03.b; RACT IP #0047-I003a, Condition V.A.1.c; §129.112(g)(1)(i)]

**TABLE V-C-1 - Emission Limitations for Boiler No. 5**

| <b>POLLUTANT</b>           | <b>HOURLY<br/>EMISSION<br/>LIMIT<br/>(lb/hr)</b> | <b>ANNUAL<br/>EMISSION<br/>LIMIT<br/>(tons/year)*</b> |
|----------------------------|--------------------------------------------------|-------------------------------------------------------|
| Particulate Matter         | 0.59                                             | 2.59                                                  |
| PM <sub>10</sub>           | 0.59                                             | 2.59                                                  |
| Nitrogen Oxides            | 7.40                                             | 32.41                                                 |
| Carbon Monoxide            | 6.05                                             | 26.48                                                 |
| Sulfur Dioxide             | 0.04                                             | 0.19                                                  |
| Volatile Organic Compounds | 0.40                                             | 1.75                                                  |
| HAPs                       | 0.14                                             | 0.60                                                  |

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

**2. Testing Requirements:**

- a. The permittee shall perform nitrogen oxides emissions testing on Boiler No. 5 once every five (5) years in order to demonstrate compliance with the emission limitations in conditions V.C.1.b and

V.C.1.e. Such testing shall be conducted in accordance with applicable U.S. EPA test methods 7 through 7E or other test methods approved by the Department, §2108.02 and Site Level Condition IV.13. [RACT IP #0047-I003a, Condition V.A.2.a; 25 Pa Code §129.114(i); 25 Pa Code §129.115; §2105.06.d; §2103.12.h.1; §2108.02]

- b. The Department reserves the right to require additional emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h.1]

### 3. Monitoring Requirements:

- a. The permittee shall inspect Boiler No. 5 weekly, to ensure the physical integrity of the boiler and associated equipment and confirm the boiler is being operated and maintained properly. Steam load and natural gas usage are monitored to fulfill the recording requirements of V.C.4.a below. [§2103.12.i; RACT IP #0047-I003a, Condition V.A.3.a]
- b. The permittee shall provide Department approved instrumentation to monitor the oxygen content, CO and NO<sub>x</sub> of the boiler exhaust on a monthly basis during operation. The oxygen content of the flue gas shall be monitored to within 3% of the measured value and be recorded to the nearest 0.1%, to ensure that the subject boiler is being operated and maintained properly. The instrumentation shall be maintained in good working condition at all times and be easily accessible. [§2103.12.i; RACT IP #0047-I003a, Condition V.A.3.b; 25 Pa Code §129.115]

### 4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for Boiler No. 5: [§2103.12.h.1; RACT IP #0047-I003a, Condition V.A.4.a; 25 Pa Code §129.115; §2105.06]
  - 1) Type and amount of fuel used (tons of coal/day and MMscf of natural gas/day);
  - 2) Steam load (lb/hr, lb/day; average daily steam load for each month);
  - 3) Cold starts (date, time and duration of each occurrence);
  - 4) Total operating hours, (hours/day, monthly and 12-month);
  - 5) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment; and
  - 6) Stack test protocols and reports.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence, along with corrective action taken to restore compliance. [§2103.12.j; §2103.12.h.1; RACT IP #0047-I003a, Condition V.A.4.b]
- c. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [§2105.06; §2103.12.j.2; §2103.12.h.1; RACT IP #0047-I003a, Condition V.A.4.c; 25 Pa Code §129.115]

### 5. Reporting Requirements:

- a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: [§2103.12.k.1; §2105.06; RACT IP #0047-I003a, Condition V.A.5.a; 25 Pa Code §129.115]

- 1) Monthly and 12-month data summaries of:
  - a) Type and amount of fuel combusted;
  - b) Steam load (average daily steam load for each month);
  - c) Cold starts (date, time and duration of each occurrence); and
  - d) Total operating hours.
- 2) Non-compliance information required to be recorded by V.C.4.b above.
- b. Reporting instances of non-compliance in accordance with condition V.C.5.a.2) above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

**6. Work Practice Standards:**

The permittee shall not, at any time, operate Boiler No. 5 unless the subject boiler is properly operated and maintained according to good engineering and air pollution control practices by performing regular maintenance considering the manufacturer's or the permittee/operator's site specific maintenance procedures. [§2105.03; §2103.12.h.1; §2103.12.f.1]

**7. Aggregation:**

- a. Particulate Matter – Aggregation (§2104.02.a)
  - 1) If one or more fuel burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable particulate matter emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
- b. Sulfur Oxides – Aggregation (§2104.03.b)
  - 1) For purpose of §2104.03.a only, if one or more fuel-burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable sulfur oxides emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
  - 2) For any single boiler house having two or more boilers with a combined rated heat input no greater than 50 million Btus per hour, whose combined emissions would comply with the emission standards of §2104.03a if they were vented into a common flue, the Department may, upon written application from the person responsible for such boiler house, determine compliance with the aggregation requirement on the basis of the total emissions from and total heat input to all such boilers, provided that the applicant demonstrates that such actions will not prevent the attainment or maintenance of any ambient air quality standard established by §2101.10 or interfere with reasonable further progress toward the attainment of the NAAQS.

**D. Boiler No. 6**

**Process Description:** Natural gas package boiler with FGR  
**Facility ID:** Boiler No. 6  
**Capacity:** Natural Gas/No.2 fuel oil - 179 MMBtu/hr  
**Fuel(s):** Natural gas and No. 2 fuel oil for emergencies (NG curtailment)  
**Control Device:** Flue Gas Recirculation

**1. Restrictions:**

- a. The particulate matter emissions when combusting natural gas only in Boiler No. 6 shall not exceed 0.008 lb/MMBtu. [§2104.02.a.1.A]
- b. The particulate matter emissions when combusting fuel oil only in Boiler No. 6 shall not exceed 0.015 lb/MMBtu. [§2104.02.a.1.B]
- c. At no time shall the permittee allow emissions of nitrogen oxides from Boiler No. 6 to exceed 0.10 lb/MMBtu when firing natural gas. [RACT IP #0047-I003a, Condition V.B.1.i; 25 Pa code §129.112(g)(1)(i)]
- d. Natural gas usage in Boiler No. 6 shall not exceed the maximum potential usage of 170,476 scf in any one-hour period and 1,494 MMscf in any consecutive 12-month period. [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.1.h]
- e. Emissions from Boiler No. 6 shall not exceed the limitations in Table V.D.1. below: [§2101.02.c.4, §2103.12.a.2.D, §2104.03.a.2; §2104.03.b; RACT IP #0047-I003a, Conditions V.B.1.i & m; 25 Pa code §129.112(g)(1)(i); 25 Pa code §129.112]

**TABLE V-D-1 – Boiler No. 6 Emission Limitations**

| <b>POLLUTANT</b>           | <b>HOURLY<br/>EMISSION<br/>LIMIT<br/>(lb/hr)<br/>(Natural Gas)</b> | <b>HOURLY<br/>EMISSION<br/>LIMIT<br/>(lb/hr)<br/>(Fuel Oil)</b> | <b>ANNUAL<br/>EMISSION<br/>LIMIT<br/>(tons/year)*</b> |
|----------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------|
| Particulate Matter         | 1.43                                                               | 2.69                                                            | 6.54                                                  |
| PM <sub>10</sub>           | 1.43                                                               | 2.69                                                            | 6.54                                                  |
| Nitrogen Oxides**          | 17.90                                                              | 50.12                                                           | 85.33                                                 |
| Carbon Monoxide            | 14.62                                                              | 6.39                                                            | 64.05                                                 |
| Sulfur Dioxide             | 0.11                                                               | 147.20                                                          | 32.10                                                 |
| Volatile Organic Compounds | 0.97                                                               | 14.68                                                           | 7.18                                                  |
| HAPs                       | 0.33                                                               | 0.18                                                            | 1.42                                                  |

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

\*\* NO<sub>x</sub> is based on the PADEP presumptive RACT limit in 25 PA. Code, Chapter §129.112(g)(1)(i).

- f. Boiler No. 6 annual capacity factor shall not exceed 4.91% during any consecutive 12-month period when firing No. 2 fuel oil. [§2105.06.d; RACT IP #0047-I003a, Condition V.B.1.i; 25 Pa Code §129.112]
- g. The maximum allowable fuel oil usage for Boilers No. 6 during any consecutive 12-month period shall not exceed 1,280 gallons in any one-hour period and 550,400 gallons in any consecutive 12-month period. [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.1.j & m; 25 Pa Code §129.112]
- h. All fuel oil combusted shall meet current ASTM specifications for No. 2 fuel oil and have a maximum sulfur content of 0.0015% by weight at all times. [§60.42b(j)(2); §2105.06.d; RACT IP #0047-I003a, Condition V.B.1.k]
- i. The permittee shall only use fuel oil during periods of emergency, including gas curtailment and gas supply interruption, and during maintenance, operator training, periodic testing and startups. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. The permittee shall notify the Department at least seven (7) workdays before combusting No. 2 fuel oil and provide the Department with a copy of the curtailment notice, except in an emergency including natural gas curtailment. [§2103.12.h.1; 40 CFR 63.11237: Definition of 'Gas-Fired Boiler']
- j. At no time shall the permittee operate Boiler No. 6 using any fuel other than natural gas or No. 2 fuel oil. [§2103.12.h.1]

## 2. Testing Requirements:

- a. The permittee shall perform nitrogen oxides emissions testing while combusting natural gas on Boiler No. 6 once every five (5) years in order to demonstrate compliance with the emission limitations in conditions V.D.1.c and V.D.1.e. Such testing shall be conducted in accordance with applicable U.S. EPA test methods 7 through 7E or other test methods approved by the Department, §2108.02 and Site Level Condition IV.13. [§2103.12.h.1; §2108.02; RACT IP #0047-I003a, Condition V.B.2.a; 25 Pa Code §129.114(i); 25 Pa Code §129.115]
- b. The Department reserves the right to require additional emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 and Article XXI §2108.02. [§2103.12.h.1]

## 3. Monitoring Requirements:

- a. The permittee shall inspect Boiler No.6 weekly, to ensure the physical integrity of the boiler and associated equipment, and make sure the boiler is being operated and maintained properly and is operating under the conditions demonstrated during the most recent compliance test. Steam load and natural gas usage are monitored to fulfill the recording requirements of V.D.4.a below. [§2103.12.i; §2102.04.e; RACT IP #0047-I003a, Condition V.B.3.a]
- b. The permittee shall provide Department approved instrumentation to monitor the oxygen content, CO and NO<sub>x</sub> of the boiler exhaust on a monthly basis during operation. The oxygen content of the flue gas shall be monitored to within 3% of the measured value and be recorded to the nearest 0.1%, to ensure that the subject boiler is being operated and maintained properly. The instrumentation shall be maintained in good working condition at all times and be easily accessible. [§2103.12.i; RACT IP #0047-I003a, Condition V.B.3.b; 25 PA Code §129.115]

**4. Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for Boiler No. 6: [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.4.a; 25 PA Code §129.115; §2105.06; §2103.12.j]
  - 1) Type and amount of fuel used (gallons fuel oil/day and MMscf of natural gas/day);
  - 2) Records of fuel oil suppliers' certification of sulfur content, and heating value (each shipment);
  - 3) Steam load (lb/hr, lb/day; average daily steam load for each month);
  - 4) Cold starts (date, time and duration of each occurrence);
  - 5) Total operating hours, (hours/day, monthly and 12-month);
  - 6) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment; and
  - 7) Stack test protocols and reports.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.h.1; §2103.12.j]
- c. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [§2105.06; §2103.12.j.2; §2103.12.h.1; RACT IP #0047-I003a, Condition V.B.4.c; 25 Pa Code §129.115]

**5. Reporting Requirements:**

- a. The permittee shall report the following information to the Department in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report: [§2103.12.k.1; RACT IP #0047-I003a, Condition V.B.5.a]
  - 1) Monthly and 12-month data summaries of:
    - a) Type and amount of fuel combusted;
    - b) Steam load (average daily steam load for each month);
    - c) Cold starts (date, time and duration of each occurrence); and
    - d) Total operating hours.
  - 2) Non-compliance information required to be recorded by V.D.4.b above.
- b. Reporting instances of non-compliance in accordance with condition V.D.5.a.2) above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

**6. Work Practice Standards**

- a. Boiler No. 6 shall be operated with a properly maintained and operated flue gas recirculation system at all times during boiler operation. [§2103.12.h.1]
- b. The permittee shall not, at any time, operate Boiler No. 6 unless the subject boiler is properly operated and maintained according to good engineering and air pollution control practices, by performing regular maintenance considering the manufacturer's or the permittee/operator's site specific maintenance procedures. [§2105.03; §2103.12.h.1; §2103.12.f.1]

**7. Additional Requirements**

**Aggregation**

- a. Particulate Matter – Aggregation (§2104.02.a)
  - 1) If one or more fuel burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable particulate matter emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
- b. Sulfur Oxides – Aggregation (§2104.03.b)
  - 1) For purpose of §2104.03.a only, if one or more fuel-burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable sulfur oxides emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
  - 2) For any single boiler house having two (2) or more boilers with a combined rated heat input no greater than 50 million Btus per hour, whose combined emissions would comply with the emission standards of §2104.03a if they were vented into a common flue, the Department may, upon written application from the person responsible for such boiler house, determine compliance with the aggregation requirement on the basis of the total emissions from and total heat input to all such boilers, provided that the applicant demonstrates that such actions will not prevent the attainment or maintenance of any ambient air quality standard established by §2101.10 or interfere with reasonable further progress toward the attainment of the NAAQS.

**E. Boiler No. 7**

**Process Description:** Natural gas package boiler with low NO<sub>x</sub> burners  
**Facility ID:** Boiler No. 7  
**Capacity:** Natural gas / No. 2 fuel oil - 188 MMBtu/hr  
**Fuel(s):** Natural gas and No. 2 fuel oil for emergencies (NG curtailment)  
**Control Device:** Low NO<sub>x</sub> burners

**1. Restrictions:**

- a. The particulate matter emissions when combusting natural gas only in Boiler No. 7 shall not exceed 0.008 lb/MMBtu. [§2104.02.a.1.A]
- b. The particulate matter emissions when combusting fuel oil only in Boiler No. 7 shall not exceed 0.015 lb/MMBtu. [§2104.02.a.1.A]
- c. Boiler No. 7 capacity factor shall not exceed 39% as averaged over the hours the unit is in operation during any consecutive 12-month period. [RACT IP #0047-I003a, Condition V.B.1.d; 25 Pa Code §129.114(i)]
- d. At no time shall the permittee operate, or allow to be operated, Boiler No.7 unless it is exclusively fueled by utility-supplied natural gas, with the conditional usage of No.2 fuel oil used during an emergency, including natural gas curtailment and gas supply interruption, and during maintenance, operator training, periodic testing and startups. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. The permittee shall notify the Department at least seven (7) work days prior to combusting No.2 fuel oil in Boiler No. 7, except in an emergency including natural gas curtailment. [§2103.12.a.2.B, Permit No. 91-I-0056-C, condition 2; 40 CFR 63.11237: Definition of 'Gas-Fired Boiler']
- e. Boiler No. 7 shall be equipped with low NO<sub>x</sub> burners that meet the emission limitation in condition V.E.1.g below. [RACT IP #0047-I003a, Condition V.B.1.e; 25 Pa Code §129.114(i); Permit No. 91-I-0056-C, condition 3]
- f. The permittee shall not operate Boiler No. 7 unless a NO<sub>x</sub> Continuous Emission Monitoring (CEM) system is present at all times and properly operated and maintained according to 40 CFR 60, Subpart Db. [§2105.06.d; §2103.12.a.2.D; 25 Pa Code §123.51; 25 Pa Code §129.114(i); RACT IP #0047-I003a, Condition V.B.1.f]
- g. At no time shall the permittee allow emissions of nitrogen oxides from Boiler No. 7 to exceed 0.14 lb/MMBtu based on a 30-day rolling average, when firing natural gas. [RACT IP #0047-I003a, Condition V.B.1.g; 25 Pa Code §129.114(i); §60.44b(a)(1); §2105.06]
- h. The natural gas usage in Boiler No. 7 shall not exceed the maximum potential usage of 179,048 scf in any one-hour period and 609 MMscf in any consecutive 12-month period based on a natural gas heat content of 1,050 Btu/scf. [§2103.12.h.1; RACT IP #0047-I003a, Condition V.B.1.g]
- i. The nitrogen oxide emission standards in condition V.E.1.g above apply at all times including periods of startup, shutdown, or malfunction. [§60.44b(h)]

- j. Emissions from Boiler No. 7 shall not exceed the limitations in Table V.E.1 below: [Permit No. 91-I-0056-C, condition 5, §2101.02.c.4, §2103.12.a.2.D, §2104.03.a.2; §2104.03.b; RACT IP #0047-I003a, Condition V.B.1.g]

**TABLE V-E-1 – Boiler No. 7 Emission Limitations**

| <b>POLLUTANT</b>           | <b>HOURLY<br/>EMISSION<br/>LIMIT<br/>(lb/hr)<br/>(Natural Gas)</b> | <b>HOURLY<br/>EMISSION<br/>LIMIT<br/>(lb/hr)<br/>(Fuel Oil)</b> | <b>ANNUAL<br/>EMISSION<br/>LIMIT<br/>(tons/year)*</b> |
|----------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------|
| Particulate Matter         | 1.50                                                               | 2.82                                                            | 3.16                                                  |
| PM <sub>10</sub>           | 1.50                                                               | 2.82                                                            | 3.16                                                  |
| Nitrogen Oxides            | 26.32                                                              | 37.60                                                           | 52.83                                                 |
| Carbon Monoxide            | 15.36                                                              | 7.24                                                            | 27.67                                                 |
| Sulfur Dioxide             | 0.11                                                               | 153.54                                                          | 32.20                                                 |
| Volatile Organic Compounds | 1.02                                                               | 0.46                                                            | 1.82                                                  |
| HAPs                       | 0.34                                                               | 0.19                                                            | 0.61                                                  |

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

- k. Boiler No. 7 annual capacity factor shall not exceed 4.91% during any consecutive 12-month period when firing No. 2 fuel oil. [25 Pa Code §129.112; §2105.06.d; RACT IP #0047-I003a, Condition V.B.1.1]
- l. The maximum allowable fuel oil usage for Boiler No. 7 during any consecutive 12-month period shall not exceed 1,340 gallons in any one-hour period and 576,200 gallons in any consecutive 12-month period. [RACT IP #0047-I003a, Condition V.B.1.j & m; 25 Pa Code §129.112; §2105.06.d]
- m. All fuel oil combusted shall meet current ASTM specifications for No. 2 fuel oil and have a maximum sulfur content of 0.0015% by weight at all times. [§2104.10; §2105.06.d; RACT IP #0047-I003a, Condition V.B.1.k]
- n. At no time shall the permittee operate the subject boiler using any fuel other than natural gas or No. 2 fuel oil exclusive of each other with the exception of the transition period between the two fuels. [§2103.12.h.1]
- o. The permittee shall demonstrate that fuel oil meets the sulfur content requirement of condition V.E.1.m above by maintaining fuel receipts as described in condition V.E.4.d below. [§60.49b(r)]
- p. When combusting No. 2 fuel oil in Boiler No.7 the permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20% opacity (six-minute average), except for one six-minute period per hour of not more than 27% opacity. The opacity standard applies at all times, except during periods of startup, shutdown or malfunction. Method 9 is used for determining the opacity of stack emissions. [§60.43b(f) & (g)]

- q. Visible emissions resulting solely from the cold start of the boiler are excluded from the opacity requirements of condition V.E.1.p, if such a cold start has been reported as required by §2108.01.d of Article XXI. [§2104.01.b.3]

## **2. Testing Requirements:**

- a. To determine compliance with the emission limits for nitrogen oxides required in conditions V.E.1.g and V.E.1.j, the permittee shall conduct the performance test as required under §60.8 using the continuous system for monitoring nitrogen oxides in paragraph V.E.3.a below. [§60.46b(e)]
- b. Compliance with the nitrogen oxides emission standards under condition V.E.1.g shall be determined through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. [RACT IP #0047-I003a, Condition V.B.2.c; §60.46b (e)(4); §2108.03; §2105.06.d; 25 Pa Code §129.114(i); 25 Pa Code §129.115]
- c. The permittee shall perform Relative Accuracy Test Audits (RATA) of the Boiler No. 7 NO<sub>x</sub> CEMS as specified in 25 PA Code §§139.101 - 139.111 to determine compliance with the Boiler 7 emission limitations in condition V.E.1.j. [§2108.03; §2105.06.d; RACT IP #0047-I003a, Condition V.B.2.b; 25 Pa Code §129.114(i); 25 Pa Code §129.115]
- d. When firing No. 2 fuel oil in Boiler No. 7, where the permittee seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as specified in condition V.E.4.d below. [§60.45b(j)]
- e. The Department reserves the right to require emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 and Article XXI §2108.02. [§2103.12.h.1]

## **3. Monitoring Requirements:**

- a. The permittee shall continue to calibrate, maintain, and operate a continuous monitoring system (CEMS) for the subject boiler, and record the output of the system, for measuring nitrogen oxide emissions discharged to the atmosphere. The CEMS data recorder shall convert the data to the required reporting units in compliance with 25 PA Code §§139.101-139.111 relating to requirements for continuous in-stack monitoring for stationary sources. The CEMS shall be approved by the Department prior to purchasing the system. [§60.48b(b)(1), §2108.02.a and 2108.03.b, & c; §2102.04.e]
- b. When combusting No. 2 fuel oil in the boiler, the permittee shall monitor opacity according to the following procedures: [60.13(i); §2103.12.i]
  - 1) Contact the Department by telephone within 24 hours in the event of temporary, emergency conversion to No. 2 fuel oil in accordance with the provisions specified in condition V.E.1.d above. Written notification shall be provided to the Department within five (5) days of the emergency conversion to No. 2 fuel oil;

- 2) At least once during each daylight shift when the boiler(s) are combusting No. 2 fuel oil, an observer certified in accordance with U. S. Environmental Protection Agency (EPA) Method 9 shall perform a six-minute visible emission observation consisting of 24 consecutive opacity readings. In order to obtain representative results, the oil consumption during the observation must be the maximum rate during the shift.
  - 3) An observer certified in accordance with EPA Method 9 shall perform a 6-minute visible emission observation whenever the boiler reaches the operating load after a cold startup with No. 2 fuel oil.
  - 4) If the average opacity for a 6-minute set of opacity readings collected in accordance with Condition V.E.3.b.2) or V.E.3.b.3) above exceeds 10%, the observer shall collect two additional six-minute sets of visible emission readings for a total of three (3) data sets.
  - 5) Records of the date and time of visible emission observations, along with the results of each observation, must be maintained.
- c. The continuous monitoring systems required in condition V.E.3.a above shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [§60.48b(c)]
  - d. The permittee shall provide Department approved instrumentation to monitor the oxygen content, CO and NO<sub>x</sub> of the boilers exhaust on a monthly basis during operation. The oxygen content of the flue gas shall be monitored to within 3% of the measured value and be recorded to the nearest 0.1%, to ensure that the subject boilers are being operated and maintained properly. The instrumentation shall be maintained in good working condition at all times and be easily accessible. [§2103.12.i; §2105.06; RACT IP #0047-I003a, Condition V.B.3.b; 25 PA Code §129.115]
  - e. The permittee shall inspect Boiler No. 7 weekly, to ensure the physical integrity of the boiler and associated equipment, proper operation, maintenance and calibration of the oxygen flue gas monitor specified in condition V.E.3.d above and steam load and natural gas usage instrumentation used to fulfill the recording requirements of V.E.4.a.1) and V.E.4.a.4) below. [§2103.12.i; RACT IP #0047-I003a, Condition V.B.3.a]
  - f. The subject boiler shall have a properly installed and operating NO<sub>x</sub> continuous emission monitor in the exhaust stack of the unit in accordance with 40 CFR 60, Subpart Db at all times, along with the appropriate recordkeeping, reporting and quality assurance procedures. The continuous monitoring system shall be operated and data recorded during all periods of operation of Boiler No. 7 except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. The monitor shall be operated and maintained in accordance with the requirements of 25 Pa Code Chapter 139 and Article XXI, §2108.03. [Permit No. 91-I-0056-C, condition 6; §60.48b(b)(1)(c), §2103.12.i]
  - g. The one-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by condition V.E.3.f above and required under NSPS General Provisions 40 CFR 60.13(h) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rate under condition V.E.1.g above. The one-hour averages shall be calculated using the data points required under 40 CFR 60.13(b). At least two (2) data points must be used to calculate each one-hour average. [§60.48b(d)]

- h. The procedures under NSPS general Provisions 40 CFR 60.13 shall be followed for evaluation, and operation of the continuous monitoring system. The span value for nitrogen oxides shall be 500 ppm. [§60.48b(e)]
- i. When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75% of the operating hours of Boiler No. 7, in at least 22 out of 30 successive boiler operating days. [§60.48b(f)]
- j. The permittee shall submit the results of the continuous nitrogen oxides monitoring systems on a regular schedule and in a format acceptable to the Department and in compliance with 25 Pa. Code 139.101 – 139.111. [§2108.03.b.3]
- k. Continuous nitrogen oxides monitoring systems shall meet the minimum data availability requirements in 25 Pa. Code 139, Subchapter C. [§2108.03.b.4]
- l. The permittee shall retain the data collected by the nitrogen oxides monitoring system(s) for a period of five (5) years and shall, upon request, make such data available to the Department for inspection and copying. In addition, the permittee shall submit to the Department a written report of such data at three-month intervals. The report shall include at a minimum: [§60.49b(o) and §2108.03.d]
  - 1) An identification of each instance during the reporting period during which emissions exceeded the applicable emission limitations rates in condition V.E.1.g and an identification of the reasons, if known, for such exceedance. The averaging period used for making such identification shall correspond to the averaging period specified in condition V.E.3.n below.
  - 2) An identification of each period during which the continuous emission monitoring system was inoperative, except for zero and span drift checks, the reasons therefore, and the nature of repairs or adjustments performed or to be performed.
  - 3) An identification of calibrations, zero and span drift checks, and other quality assurance procedures.
- m. No nitrogen oxides continuous emission monitoring system shall be considered to meet the requirements of §2108.02 and §2108.03 unless such system has been approved by the Department in writing. At least 45 days prior to installing any such system, the permittee shall make written application to the Department for the approval of such system, which application shall include a thorough description of the system, the location where such system will be installed, a program for periodic calibration, zero and span drift checks and other quality assurance procedures and all other information needed by the Department to evaluate such system. The Department shall make its evaluation in accordance with all relevant guidelines, including the performance specifications and other requirements of Appendix P of 40 CFR Part 51 and Appendix B of 40 CFR Part 60, including all modifications to such appendices as may hereafter be made by the EPA. [§2108.03.e]

- n. For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission standards in condition V.E.1.g above. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. [§60.46b(e)(1)]

**4. Record Keeping Requirement:**

- a. The permittee shall keep and maintain the following data for Boiler No. 7: [§60.49b(d); RACT IP #0047-I003a, Condition V.B.4.a; §2103.12.j; 25 Pa Code §129.115; §2105.06]
- 1) Type and amount of fuel combusted (MMscf of natural gas/day; gallons of fuel oil/day and monthly total natural gas combusted);
  - 2) Calculate the annual capacity factor individually for No. 2 fuel oil and natural gas for the reporting period. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month;
  - 3) Flue gas oxygen concentration (hourly average; maximum hourly concentration observed each month; monthly average concentration)
  - 4) Steam load (lb/hr, lb/day; average daily steam load for each month);
  - 5) Cold starts (date, time and duration of each occurrence);
  - 6) Total operating hours (hours/day, monthly and 12-month);
  - 7) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment (e.g. burner replacement, flame pattern adjustments, and air-to-fuel ratios)
- b. The permittee shall maintain records of the following information for Boiler No. 7 for each steam generating unit operating day: [§60.49b(g); §2103.12.j]
- 1) Calendar date.
  - 2) The average hourly measured nitrogen oxides emission rate, expressed as lb-NO<sub>2</sub>/million Btu heat input.
  - 3) The 30-day average nitrogen oxides emission rates (lb-NO<sub>2</sub>/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
  - 4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standard in condition V.E.1.g above, with the reasons for such excess emissions as well as a description of corrective actions taken.
  - 5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - 6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
  - 7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
  - 8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
  - 9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
  - 10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

- c. The permittee shall maintain records of the opacity monitoring specified in paragraph V.E.3.b above. [§60.49b(f); §2103.12.j]
- d. The permittee shall obtain and maintain records of No. 2 fuel oil receipts from the fuel oil supplier, which certify that the oil meets the specification for No. 2 fuel oil as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils and that the sulfur content of the No. 2 fuel oil is not more than 0.3% by weight. [§60.42b(j)(2); §60.49b(r) and §2103.12.j]
- e. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.h.1; §2103.12.j]
- f. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [§2105.06; §2103.12.j.2; §2103.12.h.1; RACT IP #0047-I003, Condition V.B.4.c; 25 Pa Code §129.115]

**5. Reporting Requirements:**

- a. The permittee shall submit excess emission reports semiannually for any excess emissions that occurred during the reporting period. Excess opacity emissions are defined as any period or periods that exceed the opacity standards in conditions V.E.1.p above. Excess nitrogen oxide emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate which exceeds the emission limit in condition V.E.1.g above. [§60.49b(h)(2)(ii), (h)(3) & (h)(4)]
- b. The permittee shall submit semiannual reports to the Department certifying that only very low sulfur No. 2 fuel oil (0.0015% by weight) was combusted in the boiler during the reporting period. [§60.49b(r)]
- c. The permittee shall submit semiannual reports containing the information required in conditions V.E.4.a and V.E.4.b above. [§60.49b(i)]
- d. The permittee may submit electronic quarterly reports for NO<sub>x</sub> and/or opacity in lieu of submitting the written reports required under paragraphs V.E.5.a and V.E.5.c above. The format of each quarterly electronic report shall be coordinated with the Department. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the permittee, indicating whether compliance with the applicable emission standards and minimum data requirements were achieved during the reporting period. Before submitting reports in the electronic format, the permittee shall coordinate with the Department to obtain their agreement to submit reports in this alternative format. [§60.49b(v)]
- e. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: [§2103.12.k.1; RACT IP #0047-I003a, Condition V.B.5.a]
  - 1) Monthly and 12-month data summaries of:
    - a) Type and amount of fuel combusted;
    - b) Steam load (average daily steam load for each month);
    - c) Cold starts (date, time and duration of each occurrence); and
    - d) Total operating hours.

- f. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with §2108.01.d is waived and the permittee may report all cold starts in accordance with condition V.E.5.h below. [§2108.01.d]
- g. The permittee shall report all instances of non-compliance with the conditions of this permit to the Department in accordance with General Condition III.15. [§2103.12.h.1]
- h. The semiannual reports required by this permit shall be submitted in accordance with the requirements of General Condition III.15. [§60.49b(w)]
- i. Reporting instances of non-compliance in accordance with conditions V.E.5.a through V.E.5.g above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition 7, if appropriate. [§2103.12.k.1]

**6. Work Practice Standards:**

- a. Boiler No.7 shall be: [§2103.12.h.1, §2105.03]
  - 1) Operated and maintained in a manner consistent with good air pollution control practices;
  - 2) Operated and maintained in a manner consistent with good operating and maintenance practices.
  - 3) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.

**7. Additional Requirements**

- a. Particulate Matter – Aggregation (§2104.02.a)
  - 1) If one or more fuel burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable particulate matter emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
- b. Sulfur Oxides – Aggregation (§2104.03.b)
  - 1) For purpose of §2104.03.a only, if one or more fuel-burning or combustion emissions units are vented into a common flue, such emissions units shall be considered one emissions unit and allowable sulfur oxides emissions shall be determined on the basis of total heat input to all emissions units vented to such common flue.
  - 2) For any single boiler house having two (2) or more boilers with a combined rated heat input no greater than 50 million Btus per hour, whose combined emissions would comply with the emission standards of §2104.03a if they were vented into a common flue, the Department may, upon written application from the person responsible for such boiler house, determine compliance with the aggregation requirement on the basis of the total emissions from and total heat input to all such boilers, provided that the applicant demonstrates that such actions will not prevent the attainment or maintenance of any ambient air quality standard established by §2101.10 or interfere with reasonable further progress toward the attainment of the NAAQS.

- c. The failure to install and operate any continuous emissions monitoring system required by §2108.03 or §2108.02 within the time specified, the failure to retain any data or submit any report so required, or the knowing retention or reporting of false data shall be a violation of this permit giving rise to the remedies provided by §2109.02. [§2108.03.f]

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**F. Boiler No. 8a**

**Process Description:** Rental Package boiler  
**Facility ID:** Boiler No. 8a  
**Max. Design Rate:** 87 MMBtu/hr  
**Fuel:** Natural gas only  
**Control Device:** Low NO<sub>x</sub> burners with optional Flue Gas Recirculation

**1. Restrictions:**

- a. At no time shall the permittee operate, or allow to be operated, Boiler No. 8a unless it is exclusively fueled by utility-supplied natural gas. [Permit No. 0047-I001f, condition V.A.1.a, §2103.12.a.2.D]
- b. The heat input shall be limited to 87 MMBtu/hr based on the higher heating value of the fuel being combusted. [Permit No. 0047-I001f, condition V.A.1.b; §2103.12.a.2.D]
- c. Emissions of particulate matter shall not exceed 0.008 lb/MMBtu while combusting natural gas. [Permit No. 0047-I001f, condition V.A.1.c; §2104.02.a.1.A]
- d. Emissions of sulfur oxides shall not exceed 0.0006 lb/MMBtu while combusting natural gas. [Permit No. 0047-I001f, condition V.A.1.d; §2103.12.a.2.D]
- e. The permittee shall not operate Boiler No. 8a unless a NO<sub>x</sub> Continuous Emission Monitoring (CEM) system is present at all times and properly operated and maintained. [§2105.06.d; §2103.12.a.2.D; RACT IP #0047-I003a, Condition V.A.1.d; 25 Pa Code §123.51; 25 Pa Code §129.114(i)]
- f. Emissions of nitrogen oxides shall not exceed 0.055 lb/MMBtu (53 ppmvd), based on a 30-day rolling average at 3% O<sub>2</sub>. [Permit No. 0047-I001f, condition V.A.1.e; RACT IP #0047-I003a, Condition V.A.1.e; §2103.12.a.2.D]
- g. Emissions of carbon monoxide shall not exceed 0.082 lb/MMBtu (130 ppmvd ) at 3% O<sub>2</sub>. [Permit No. 0047-I001f, condition V.A.1.f; §2103.12.a.2.D]
- h. Emissions of volatile organic compounds shall not exceed 0.0054 lb/MMBtu (15 ppmvd as methane) at 3% O<sub>2</sub>. [Permit No. 0047-I001f, condition V.A.1.g; §2103.12.a.2.D]
- i. Emissions from Boiler No. 8a shall not exceed the following limitations: [Permit No. 0047-I001f, condition V.A.1.h; RACT IP #0047-I003a, Condition V.A.1.d; §2103.12.a.2.D]

**TABLE V-F-1 – Boiler No. 8a Emission Limitations**

| POLLUTANT                  | HOURLY EMISSION<br>LIMIT (lb/hr) | ANNUAL EMISSION<br>LIMIT (tons/year)* |
|----------------------------|----------------------------------|---------------------------------------|
| Particulate Matter         | 0.70                             | 3.05                                  |
| PM <sub>10</sub>           | 0.70                             | 3.05                                  |
| Nitrogen Oxides            | 4.8                              | 20.9                                  |
| Carbon Monoxide            | 7.1                              | 24.5                                  |
| Sulfur Dioxide             | 0.05                             | 0.23                                  |
| Volatile Organic Compounds | 0.47                             | 2.1                                   |
| HAPs                       | 0.16                             | 0.68                                  |

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

**2. Testing Requirements:**

- a. Testing shall be conducted in accordance with Article XXI for nitrogen oxides. [Permit No. 0047-I001f, condition 2.a; §2103.12(h)(1)]
- b. Testing shall be conducted to confirm with the accuracies of NO<sub>x</sub>, CO and O<sub>2</sub> continuous emission monitors (CEMs). [Permit No. 0047-I001f, condition V.A.2.b; §2103.12(h)(1)]
- c. The permittee shall perform Relative Accuracy Test Audits (RATA) of the Boiler No. 8a NO<sub>x</sub> CEMS as specified in 25 PA Code §139.101 - 139.111 to determine compliance with the Boiler 8a emission limitations in condition V.F.1.i. [§2108.03; §2105.06.d; RACT IP #0047-I003a, Condition V.A.2.b; 25 Pa Code §129.114(i); 25 Pa Code §129.115]
- d. Compliance with the NO<sub>x</sub> emission limit in condition V.F.1.i shall be on a continuous basis through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate is calculated each operating day as the average of all of the hourly NO<sub>x</sub> emission data for the preceding 30 steam generating operating days. [§2108.03; §2105.06.d; RACT IP #0047-I003a, Condition V.A.2.c; 25 Pa Code §129.114(i); 25 Pa Code §129.115]
- e. The Department reserves the right to require additional emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 and §2108.02. [§2103.12.h.1]

**3. Monitoring Requirements:**

- a. The permittee shall install, operate and maintain continuous monitors for fuel flow measurement, nitrogen oxides and carbon monoxide. [§2103.12(i); Permit No. 0047-I001f, condition V.A.3.a]
- b. The monitors required by V.F.3.a. above shall be approved by the Department and installed, operated and maintained in accordance with the requirements of 25 Pa Code Chapter 139 and Article XXI, §2108.03. Proposals containing information as listed in Phase I section of the PA DEP Continuous Source Monitoring Manual must be submitted to the PADEP and the Department at least three (3) months prior to start-up. [§2103.12(i); Permit No. 0047-I001f, condition V.A.3.b]
- c. The permittee shall operate and maintain control equipment and monitoring instrumentation in accordance with the manufacturers' specifications and good air pollution control practice. [Permit No. 0047-I001f, condition V.A.3.c; §2105.03]
- d. Monitoring shall also be performed for nitrogen oxides in accordance with Article XXI. [§2103.12.i; Permit No. 0047-I001f, condition V.A.3.d]

- e. The permittee shall provide Department approved instrumentation to monitor the oxygen content, CO and NO<sub>x</sub> of the boiler exhaust on a monthly basis during operation. The oxygen content of the flue gas shall be monitored to within 3% of the measured value and be recorded to the nearest 0.1%, to ensure that the subject boiler is being operated and maintained properly. The instrumentation shall be maintained in good working condition at all times and be easily accessible. [§2103.12.i; §2105.06; RACT IP #0047-I003a, Condition V.A.3.b; 25 Pa Code §129.115]
- f. The permittee shall monitor and inspect the boilers weekly to ensure the physical integrity of the boilers and associated equipment and to make sure the boilers are being operated and maintained properly. Steam load and natural gas usage shall be monitored and recorded to fulfill the recording requirements of V.F.4.b below. [§2105.06; §2103.12.i; RACT IP #0047-I003a, Condition V.A.3.a]

**4. Record Keeping Requirements:**

- a. The permittee shall maintain all records of calibration checks, adjustments and maintenance performed on all equipment which is subject to this permit. [Permit No. 0047-I001f, condition V.A.4.a; §2103.12(j)]
- b. The permittee shall keep and maintain the following data for the boiler: [Permit No. 0047-I001f, condition V.A.4.a; RACT IP #0047-I003a, Condition V.A.4.a; §2105.06; §2103.12.j; §2103.12.h.1; 25 Pa Code §129.115]
  - 1) Amount of fuel combusted (MMscf of natural gas/day and monthly total natural gas combusted);
  - 2) Steam load (lb/hr, lb/day; average daily steam load for each month);
  - 3) Cold starts (date, time and duration of each occurrence);
  - 4) Total operating hours, (hours/day, monthly and 12-month); and
  - 5) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment (e.g. burner replacement, flame pattern adjustments, and air-to-fuel ratios).
- c. The permittee shall maintain onsite a copy of the manufacturer's specifications for all CEMs that are required by this permit. [Permit No. 0047-I001f, condition V.A.4.b; §2103.12.j]
- d. Start-up and shutdown of Boiler No. 8a shall be recorded, including date, time and duration of each event. [Permit No. 0047-I001f, condition V.A.4.c; §2103.12(j)]
- e. Records shall be kept of the data from the continuous emission monitor sufficient to demonstrate compliance with the conditions of this permit and Article XXI. [Permit No. 0047-I001f, condition V.A.4.d; §2103.12(j)]
- f. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [§2105.06; §2103.12.j.2; §2103.12.h.1; RACT IP #0047-I003, Condition V.A.4.c; 25 Pa Code §129.115]

**5. Reporting Requirements:**

- a. The following shall be reported to the Department on a semi-annual basis: [Permit No. 0047-I001f, condition V.A 5.a; §2103.12(k)]
  - 1) Monthly fuel usage and monthly hours of operation;
  - 2) Rolling 12-month total emissions of nitrogen oxides and carbon monoxide for each month of the reporting period, including emissions due to startup and shutdown.
- b. Reports shall be submitted to the Department within 30 days of the end of the calendar half or quarter as appropriate. [Permit No. 0047-I001f, condition V.A.5.b; §2103.12(k)]
- c. Reporting instances of non-compliance or malfunction does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8. [Permit No. 0047-I001f, condition V.A.5.c; §2103.12(k); §2108.01(c)]
- d. The permittee shall comply with all the notification and reporting requirements of 40 CFR Part 60 Subpart A and 40 CFR 60.48c. [Permit No. 0047-I001f, condition V.A.5.d; §2103.12(k)]

**6. Work Practice Standards:**

- a. Boiler No.8a shall be: [Permit No. 0047-I001f, condition V.A.6.a; §2105.03]
  - 1) Operated and maintained in a manner consistent with good air pollution control practices;
  - 2) Operated and maintained in a manner consistent with good operating and maintenance practices;
  - 3) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.

**7. Additional Requirements**

None unless provided elsewhere.

**G. Emergency Generators A & B**

| <b>EMISSION I.D.</b> | <b>SOURCE DESCRIPTION</b> | <b>CAPACITY</b> | <b>FUEL</b> | <b>STACK I.D.</b> |
|----------------------|---------------------------|-----------------|-------------|-------------------|
| EG-A                 | Emergency Generator A     | 745 hp          | Diesel      | EG-A Stack        |
| EG-B                 | Emergency Generator B     | 1,118 hp        | Diesel      | EG-B Stack        |

**1. Restrictions:**

- a. The permittee shall not operate, or allow to be operated, the subject generators unless the generators are properly operated and maintained according to the following specifications, at all times: [§2103.12.h.1, §2105.03; RACT IP #0047-I003a, Condition V.C.1.b & c & 25 PA Code §129.112]
  - 1) The generators shall be properly operated and maintained according to manufacturer's specifications. The manufacturer's operation and maintenance manuals shall be kept on site at all times.
  - 2) The generators shall combust only diesel fuel. All diesel fuel combusted shall have a maximum allowable sulfur content of 0.0015% by weight and a minimum cetane index of 40, or a maximum aromatic content of 35 volume percent.
- b. The two (2) generators shall not be operated for more than 500 hours each in any 12 consecutive months, including operation for maintenance checks and readiness testing. [§2103.12.f; 25 Pa Code 129.112; RACT IP #0047-I003a, Condition V.C.1.d]
- c. The emergency generators may be operated for the purpose of maintenance check and readiness testing, provided that the tests are recommended by the Department, the manufacturer, the vendor, or the insurance company associated with the generators. Maintenance checks and readiness testing is limited to 100 hours per year. [§2103.12.a.2.B]
- d. The permittee may operate each emergency generator up to 50 hours per year in non-emergency situations. The 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. [§2103.12.a.2.B]

**2. Testing Requirements:**

The Department reserves the right to require emissions testing sufficient to ensure compliance with the terms and conditions of this permit. [§2103.12.h.1]

**3. Monitoring Requirements:**

The permittee shall install a non-resettable hour meter to monitor the emergency generators hours of operation. [§2103.12(i); RACT IP #0047-I003a, Condition V.C.2 & 25 Pa Code §129.115]

**4. Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for the subject generators: [§2103.12.j; §2103.12.h.1]
  - 1) Fuel consumption (daily, monthly, and 12-month), type of fuel consumed and supplier's certification of sulfur content, and heating value; and
  - 2) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
- b. Records of diesel fuel certifications from fuel suppliers shall be maintained per shipment. Certifications shall include the name of the supplier and a statement from the supplier that the fuel complies with ASTM D975 "Standard Specifications for Diesel Fuel Oils." [§2103.12.h.1]
- c. The permittee shall keep and maintain the total operating hours (hours/day, monthly and 12-month) that is recorded through the non-resettable hour meter as required in condition V.G.3. The permittee must document how many hours are spent for emergency operations, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [RACT IP #0047-I003a, Condition V.C.3.a; §2103.12(j); 25 Pa Code §129.115]
- 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. [§2103.12.h.1]
- e. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record. These records shall be made available to the Department upon request for inspection and/or copying. [§2105.06; §2103.12.j.2; §2103.12.h.1; RACT IP #0047-I003a, Condition V.C.3.b; 25 Pa Code §129.115]

**5. Reporting Requirements:**

- a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: [RACT IP #0047-I003a, Condition V.C.4; 25 Pa Code §129.115; §2103.12.k.1]
  - 1) Monthly and 12-month data required to be recorded by conditions V.G.4.a & V.G.4.c above;
  - 2) Cold start information;
  - 3) Non-compliance information required to be recorded by V.G.4.d above; and
  - 4) Diesel fuel certifications and a statement from the permittee that the record of fuel supplier certifications represent all the diesel fuel used during the reporting period.
- b. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with §2108.01.d is waived and the permittee may report all cold starts in accordance with Condition V.G.5.a above. [§2103.12.k.1]
- c. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

**6. Work Practice Standards:**

None except as provided elsewhere.

**VI. MISCELLANEOUS****A. Sources of Minor Significance**

| <b>I.D.</b> | <b>SOURCE DESCRIPTION</b> | <b>CONTROL DEVICE(S)</b> | <b>MAXIMUM CAPACITY</b> | <b>FUEL/RAW MATERIAL</b> | <b>STACK I.D.</b> |
|-------------|---------------------------|--------------------------|-------------------------|--------------------------|-------------------|
| -           | Aboveground Storage Tank  | None                     | 2,000 gal               | Diesel                   | NA                |
| -           | Underground Storage Tank  | None                     | 30,000 gal              | Fuel Oil No.2            | NA                |

**1. Restrictions:**

- a. The permittee shall store only diesel fuel or No. 2 fuel oil in the storage tanks. [§2103.12.a.2.B]
- b. Permittee shall purchase No. 2 fuel oil with a sulfur content no greater than 0.0015% by weight. [§2103.12.a.2.B]
- c. Each underground storage tank shall have a submerged fill pipe. [§2103.12.a.2.B]
- d. The permittee shall operate and maintain the storage tanks in accordance with the manufacturers' specification and good engineering practices. [§2103.12.a.2.B; §2105.03]

## VII. ALTERNATIVE OPERATING SCENARIOS

*No alternative operating scenarios exist for this facility.*

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**VIII. EMISSIONS LIMITATIONS SUMMARY**

The annual emission limitations for the Bellefield Boiler facility are summarized in the following table:

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

| <b>POLLUTANT</b>                              | <b>ANNUAL<br/>EMISSION LIMIT<br/>(tons/year)*</b> |
|-----------------------------------------------|---------------------------------------------------|
| Particulate Matter                            | 20.9                                              |
| Particulate Matter <10 µm (PM <sub>10</sub> ) | 20.9                                              |
| Nitrogen Oxides (NO <sub>x</sub> )            | 307.24                                            |
| Sulfur Oxides (SO <sub>x</sub> )              | 88.37                                             |
| Carbon Monoxide (CO)                          | 195.56                                            |
| Volatile Organic Compounds (VOC)              | 16.51                                             |
| Total Hazardous Air Pollutants (HAP)          | 4.46                                              |

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