Minor Source/Minor Modification
INSTALLATION PERMIT

Issued To: GenOn Cheswick Generating Station  ACHD Permit#: 0054-1005a
Pittsburgh & Porter Streets  Date of Issuance: February 28, 2020
Springdale, PA 15144

Amended Date: ----
Expiration Date: (See Section III.12)

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

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Air Quality Engineer
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AMENDMENTS:

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<th>SECTION(S)</th>
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<td>11/16/21</td>
<td>Section IV, Removed NOx Emissions Averaging Plan; Section V, Conditions V.A.1.b.1 – 3 &amp; V.A.1.d: Revised the NOx emissions limits; Revised the NOx monitoring requirements; Section VII: Revised the facility's emissions summary.</td>
</tr>
</tbody>
</table>
I. CONTACT INFORMATION

Facility Location: Cheswick Generating Station
Pittsburgh & Porter Street
Springdale, PA 15144

Permittee/Owner: GenOn Power Midwest LP
Cheswick Generating Station
P.O. Box 65
Cheswick, PA 15024

Responsible Official: Kevin P. Panzino
Title: Plant Manager
Company: GenOn Power Midwest LP
Address: Cheswick Generating Station
P.O. Box 65
Cheswick, PA 15024

Telephone Number: 724-275-1401
E-Mail Address: Kevin.Panzino@genon.com

Facility Contact: William McGraw
Title: Environmental and Safety Manager
Telephone Number: 724-275-1595
E-mail Address: William.McGraw@genon.com

Alternate Responsible Official: Mark Gouveia
Title: Senior Vice President, Plant Operations
Company: GenOn Energy, Inc.
Address: Cheswick Generating Station
P.O. Box 65
Cheswick, PA 15024

Telephone Number: 301-843-4555

AGENCY ADDRESSES:

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

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

FACILITY DESCRIPTION

The Cheswick Generating Station is an electric generating facility located on Pittsburgh and Porter Streets in Springdale, PA. The plant is composed of one main boiler exhausting to one stack, which fires coal (including synfuel) as the primary fuel and natural gas as an auxiliary fuel for startup, shutdown, and during upset conditions. Pollution control equipment for the main boiler includes low NOx burners, electrostatic precipitation with flue gas conditioning, selective catalytic reduction, and flue gas desulfurization (FGD). The plant also has a No. 2 oil-fired auxiliary boiler which exhausts to a separate stack. The facility is a major source of sulfur dioxide (SO2), nitrogen oxides (NOx), particulate matter (PM), particulate matter < 10 microns in diameter (PM10), particulate matter < 2.5 microns in diameter (PM2.5), carbon monoxide emissions (CO), hazardous air pollutants (HAPs), and volatile organic compounds (VOCs), as defined in section 2101.20 of Article XXI.

INSTALLATION DESCRIPTION

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

This installation permit modification revises the case-by-case RACT II analysis for the Main Boiler No. 1 by eliminating the averaging plan with the Brunot Island Generating Station (#0056) and removing the alternate limit for operation of the SCR at <600 °F.

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

<table>
<thead>
<tr>
<th>I.D.</th>
<th>SOURCE DESCRIPTION</th>
<th>CONTROL DEVICE(S)</th>
<th>MAXIMUM CAPACITY</th>
<th>FUEL/RAW MATERIAL</th>
<th>STACK I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-001</td>
<td>Main Boiler No.1, Tangentially</td>
<td>Low NOx Burners;</td>
<td>6,000 MMBtu/HR Maximum;</td>
<td>Bituminous and Sub-Bituminous Coal; Synfuel; Natural</td>
<td>S-001</td>
</tr>
<tr>
<td></td>
<td>Fired</td>
<td>ESP with Flue Gas Conditioning;</td>
<td>5,500 MMBtu/HR Rated</td>
<td>Gas (Auxiliary Fuel)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-002</td>
<td>Auxiliary Boiler, No. 2 Fuel</td>
<td>None</td>
<td>160 MMBtu/HR</td>
<td>No. 2 Fuel Oil</td>
<td>S-002</td>
</tr>
<tr>
<td></td>
<td>Oil Stoker Fired</td>
<td></td>
<td></td>
<td></td>
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</tr>
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</table>
DECLARATION OF POLICY

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

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

III. GENERAL CONDITIONS

1. Prohibition of Air Pollution (§2101.11)

   It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:
   a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
   b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
   c. May reasonably be anticipated to endanger the public health, safety, or welfare.

2. Nuisances (§2101.13)

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

3. Definitions (§2101.20)

   a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.
   b. Unless specified otherwise in this permit or in the applicable regulation, the term “year” shall mean any twelve (12) consecutive months.
4. **Certification (§2102.01)**

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

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

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

6. **Conditions (§2102.03.c)**

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

7. **Transfers (§2102.03.e)**

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

8. **Effect (§2102.03.g)**

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

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

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

a. The Department has first issued an Installation Permit for such source or equipment; or

b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

10. **Conditions (§2102.04.e)**

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this
Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

11. Revocation (§2102.04.f)

a. The Department may, at any time, revoke this Installation Permit if it finds that:
   1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
   2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
   3) Air contaminants will not be controlled to the degree indicated by this permit;
   4) Any term or condition of this permit has not been complied with;
   5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or

b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

12. Term (§2102.04.g)

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

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

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


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

15. Reporting Requirements (§2103.12.k)

a. The permittee shall submit reports of any required monitoring at least every six (6) months. All
instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.

d. Semiannual reports required by this permit shall be submitted to the Department within 30 days of the end of the calendar half.

e. Quarterly reports required by this permit shall be submitted to the Department within 30 days of the end of the calendar quarter.

f. Reports may be emailed to the Department at aqreports@achd.net in lieu of mailing a hard copy.

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

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

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

17. **Violations (§2104.06)**

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

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

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

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

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

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

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

21. Appeals (§2109.10)

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

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

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

2. Visible Emissions (§2104.01.a)

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

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

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

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

4. Materials Handling (§2104.05)

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

5. Operation and Maintenance (§2105.03)

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

6. Open Burning (§2105.50)

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

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

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

b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.

c. The prior report required by Site Level Condition IV.7.a above shall include:

1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
2) The reasons for the shutdown;
3) The expected length of time that the equipment will be out of service;
4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
7) Such other information as may be required by the Department.

8. Breakdowns (§2108.01.c)

a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.

b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:

1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
2) The nature and probable cause of the breakdown.
3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
5) The estimated quantity of each material being or likely to be emitted.
6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.
c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.

d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.

e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.

f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

9. Cold Start (§2108.01.d)

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

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

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

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

a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.

b. The failure to submit any report or update within the time specified, the knowing submission of
false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

12. **Orders (§2108.01.f)**

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

13. **Violations (§2108.01.g)**

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

14. **Emissions Testing (§2108.02)**

a. **Orders:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.

b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

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

15. **Abrasive Blasting (§2105.51)**

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

b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

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

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

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

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

18. **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.
19. **Episode Plans (§2106.02)**

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

20. **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.

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

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Main Boiler No. 1, Stack No. 001a

- **Process Description:** Tangentially-Fired Boiler
- **Facility ID:** Main Boiler No.1
- **Max. Design Rate:** 6,000 MMBtu/hr (maximum hourly rating); 5,500 MMBtu/hr (maximum continuous rating) coal and synfuel; 1,028 MMBtu/hr natural gas
- **Fuel(s):** Coal (primary) or synfuel; Natural gas (auxiliary)
- **Control Device:** Low NOx burners, electrostatic precipitator (ESP) with flue gas conditioning, selective catalytic reduction (SCR) & flue gas desulfurization (FGD)
- **CEM:** NOX, SO2, CO2 and opacity (COM)

1. Restrictions:

   a. The permittee shall continue to meet the conditions of Operating Permit No. 0054, in addition to the revisions in this permit. [§2102.04.b.5]

   b. Nitrogen oxide (NOX) emissions from the Main Boiler shall not exceed the following: [25 Pa. Code §129.99(b)]
   
      1) CEMS 24-hour block total, a maximum 0.090 lb/MMBtu with SCR;
      2) CEMS 24-hour block total, a maximum 0.27 lb/MMBtu with SCR under all operating conditions;
      3) CEMS rolling average emissions rate of 540 lb NOX/hr averaged over 30 valid boiler operating days. (includes all operating scenarios and all valid operating hours); and
      4) 2,365 tons/year.

   c. Volatile organic compound (VOC) emissions from the Main Boiler shall not exceed 0.0034 lb/MMBtu. [25 Pa. Code §129.99]

   d. Emissions from the Main Boiler Stack-001a shall not exceed the following: [25 Pa. Code §129.99(b)]

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>HOURLY EMISSION LIMIT (lb/hr)</th>
<th>ANNUAL EMISSION LIMIT (tons/year)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen Oxides</td>
<td>540²)</td>
<td>2,365</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>20.4</td>
<td>82.0</td>
</tr>
</tbody>
</table>

1) A year is defined as any consecutive 12-month period.
2) CEMS rolling average emissions rate.
2. Testing Requirements:

The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. [§2103.12.h.125 Pa. Code §129.100]

3. Monitoring Requirements:


   1) catalytic bed inlet gas temperature continuously,
   2) ammonia solution injection rate continuously, and
   3) ammonia solution concentration (receipt of certification from vendor).

b. The permittee shall operate and maintain the SCR equipment and monitoring instrumentation in accordance with the manufacturer’s specifications and good air pollution control practice. [§2105.03, §2102.04.b.6, IP No. 0054-I002, Condition V.A.3.b, issued June 13, 2001, 25 Pa. Code §129.100]

c. The permittee shall certify, operate, and maintain continuous emission monitors in accordance with 40 CFR Part 75 or approved alternative for SO\textsubscript{2}, volumetric gas flowrate, NO\textsubscript{x}, and CO\textsubscript{2} emissions from the new main boiler stack. [40 CFR 75, Article XXI §2103.22.j, §2103.50, IP No. 0054-I004b Condition V.A.3.b, 25 Pa. Code §129.100]

   1) Continuous monitoring systems shall comply with the Installation and Performance Specifications of appendix A of Part 75. [40 CFR 75.10(b)]

   2) The permittee shall determine and record the heat input for every hour or part of an hour of any fuel that is combusted per Appendix F of Part 75. [40 CFR 75.10(b)]

   3) Continuous monitoring systems shall meet the minimum data availability requirements in 40 CFR part 75. [40 CFR 75]

   4) The NO\textsubscript{x} and SO\textsubscript{2} CEMs shall record emissions in terms of lb/MMBtu and lb/hr for each pollutant. [§2108.03.b.4, §2102.04.b.6]

4. Record Keeping Requirements:

a. The permittee shall maintain all appropriate records to demonstrate compliance with the requirements of §2105.06 and RACT Order No. 217. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06 and RACT Order No. 217 are met. The permittee shall record and maintain such data and information required to determine compliance for the facility in a time frame consistent with the averaging period of the requirements of both §2105.06 and RACT Order No. 217. Such information shall include, but not be limited to, the following minimum information which shall be submitted to the Department as a written report at three month intervals: [§2108.03.d, §2105.06, RACT Order No. 217, Condition 1.4, 25 Pa. Code §129.100]
1) All recording and reporting required by Section 2108.03 of Article XXI and entitled “Continuous Emission Monitoring.”

2) An identification of each instance during the reporting period during which emissions exceeded the applicable emission limitations rates in condition V.A.1.b above and an identification of the reasons, if known, for such exceedance. The averaging period used for making such identification shall correspond to the averaging period specified in condition V.A.1.b above.

3) An identification of each period during which the continuous emission monitoring system was inoperative, except for zero and span drift checks, the reasons therefore, and the nature of repairs or adjustments performed or to be performed.

4) An identification of calibrations, zero and span drift checks, and other quality assurance procedures.

b. The permittee shall keep and maintain the following data for Main Boiler No. 1: [§2102.04.b.6, §2103.12.j, IP No. 0054-I004b Condition V.A.4.a, 25 Pa. Code §129.100]

1) Type and amount of fuel used (tons of coal/day, MMscf of natural gas/day);
2) Amount of synfuel used each month (tons);
3) Records of the type of synfuel binder used each month and the material safety data sheets for each binder used;
4) Steam load (lbs/hr, lbs/day; average daily steam load for each month);
5) Total operating hours, (hours/day, monthly and 12-month);
6) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment;
7) Stack test protocols and reports;
8) Data specified to be monitored in Condition V.A.3 above; and

c. The permittee shall maintain records of all air pollution control system performance evaluations and all records of calibration checks, adjustments, and maintenance performed on all equipment which is subject to this permit. [IP No.0054-I002, Condition V.A.4.b, issued June 13, 2001, §2103.05, 25 Pa. Code §129.100]

d. The permittee shall maintain a copy of the manufacturer’s specifications for the SCR air pollution control equipment on-site. [IP No.0054-I002, Condition V.A.4.c, issued June 13, 2001, 25 Pa. Code §129.100]

e. The permittee shall keep a record of the date, time, and cause of the malfunction of all air pollution control systems, and the action taken to correct the malfunction. [IP No.0054-I002, Condition V.A.4.d, issued June 13, 2001, §2108.01.b & §2108.01.c, 25 Pa. Code §129.100]

f. The permittee shall record at a minimum the following SCR control system information: [IP No. 0054-I002, Condition V.A.4.e, issued June 13, 2001, 25 Pa. Code §129.100]

1) Catalytic bed inlet temperature, ammonia solution injection rate, and ammonia solution concentration (once each shift).
2) All instances or episodes when the catalyst was bypassed due to boiler upset conditions and low boiler load conditions when the boiler exhaust temperature is outside of the operating range of the SCR catalyst (each occurrence).
3) All instances when the catalyst is bypassed (each occurrence).
g. 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, IP No.0054-I002, Condition V.A.4.a, issued June 13, 2001, §2108.01.b & §2108.01.c, 25 Pa. Code §129.100]

h. The permittee shall prepare and maintain on-site a QA/QC Plan as described in 40 CFR Part 75 Appendix B. (40 CFR §75.50(a)(4)) The permittee shall also maintain a file of all measurements, data, reports, and other required information for at least five years. [40 CFR §75.54, 25 Pa. Code §129.100]

i. All records of all required monitoring data and support information shall be retained by the facility for at least five (5) years. 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 the permit. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2, 25 Pa. Code §129.100]

j. All records required under this section shall be maintained by the permittee for a period of five years following the date of such record. [§2103.12.j.2, 25 Pa. Code §129.100]

5. Reporting Requirements:

a. The permittee shall report non-compliance information required to be recorded by V.A.4.g above 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, 25 Pa. Code §129.100]

b. 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 the USEPA Clean Air Markets Division Part 75 requirements. [§2108.03.b.3, 25 Pa. Code §129.100]

c. Within 30 days of the end of each calendar quarter, the following shall be reported to the Department: [Permit No. 1065009-003-00100, issued December 8, 1981; IP No. 0054-I002, Condition V.A.5.a, issued June 13, 2001; §2103.12.k.1, IP No. 0054-I004b Condition V.A.5.c, 25 Pa. Code §129.100]

1) Amount of coal fired each month (tons);
2) Daily average and rolling 30-day average NOx emissions and cumulative 12-month total NOx emissions (lb/MMBtu and lb/hr; tons/year); and
3) Cumulative 12-month synfuel usage for each month during the compliance period.

d. The permittee shall provide the Department written notice 21 days prior to dates of periodic relative accuracy testing audits per 40 CFR 75.61(a)(5). [40 CFR §75.21(d), Article XXI §2103.22.j, §2103.50, 25 Pa. Code §129.100]

e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k]
6. Work Practice Standard:

a. The permittee shall not, at any time, operate Main Boiler No. 1 unless the subject boiler, including the low NOx concentric firing system II, is properly operated and maintained according to good engineering and air pollution control practices. [RACT Order No. 217, Conditions 1.1 and 1.6, issued March 8, 1996; §2105.06; §2105.03, 25 Pa. Code §129.99]

b. All air pollution control equipment required by this Article or any permit or order under this Article, and all equivalent compliance techniques which have been approved by the Department pursuant to this Article, shall be properly installed, calibrated maintained, and operated consistent with good air pollution control practice. [§2105.03, IP No. 0054-I004b Condition V.A.6.a, 25 Pa. Code §129.99]

c. The permittee shall take corrective action if an out of control period occurs to a monitoring system (e.g., continuous emission monitor). [40 CFR §75.24, Article XXI §2103.22.j, §2103.50, IP No. 0054-I004b Condition V.A.6.b, 25 Pa. Code §129.100]

d. The failure to install and operate any continuous emissions monitoring system required by §2108.03 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, IP No. 0054-I004b Condition V.A.6.c, 25 Pa. Code §129.100]

e. The facility shall tune the boiler to minimize NOx emissions within six (6) months of the effective date of this permit and annually thereafter, or as specified in condition V.A.6.k below. [§2105.03]

f. The permittee shall set the SCR at a target NOx emission rate of 0.06 lb NOx/MMBtu within the timeframe specified in condition V.A.6.k below. [§2103.12.a.2.B]

g. After operating the SCR with an outlet NOx emission rate set-point set in Condition V.A.6.f for twelve consecutive months, the facility shall submit an engineering study within the timeframe specified in condition V.A.6.k below that analyzes the overall environmental performance of the system at that set-point. [§2103.12.a.2.B]

h. During the first 60 days of each calendar year, the facility shall perform a catalyst activity test. [25 Pa. Code §129.99]

i. Within 60 days of receiving the results of catalyst activity test, the facility shall consult with the SCR catalyst vendor to monitor SCR performance in accordance the catalyst management plans (CMPs) developed for the SCR systems. [25 Pa. Code §129.99]

j. The permittee shall provide a full and complete technical and, if applicable, economic evaluation to the Department on the possibility of heating the flue gas prior to the SCR inlet to allow the SCR to operate at low load levels. The Department shall have sole discretion to determine when the evaluation is full and complete, and this must occur within the timeframe specified in condition V.A.6.k below unless an extension is granted by the Department. [25 Pa. Code §129.99]

k. If the permittee ceases burning coal on or before December 31, 2022, then Conditions
V.A.6.e through V.A.6.g above and V.A.6.j above are not required. If the permittee does not cease burning coal by December 31, 2022 then Conditions V.A.6.e, V.A.6.g, and V.A.6.j above will apply with a deadline of 180 days after December 31, 2022 and condition V.A.6.f will apply with a deadline of 90 days after December 31, 2022. [25 Pa. Code §129.99]
B. Auxiliary Boiler, Stack No. 2

**Process Description:** Oil-fired external combustion boiler  
**Facility ID:** Auxiliary Boiler  
**Max. Design Rate:** 160 MMBtu/hr  
**Raw Materials:** No. 2 Fuel Oil, 0.05% (wt.) sulfur content  
**Control Device:** None

1. **Restrictions:**
   
a. The permittee shall continue to meet the conditions of Operating Permit No. 0054, in addition to the revisions in this permit. [§2102.04.b.5]

b. The permittee shall limit the heat input rate to the Auxiliary Boiler to less than 140,160 MMBtu per twelve (12) consecutive month period (10 percent annual capacity factor). [§2103.12.a.2.B, §2105.06.b, §63.7575, 25 Pa. Code §129.99]


d. All fuel oil purchased by the permittee beginning July 1, 2016 for the Auxiliary Boiler shall meet ASTM specifications for No.2 fuel oil and have a maximum sulfur content at or less than 0.05% by weight at all times. Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to July 1, 2016, 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 July 1, 2016. [§2103.12.h.1, Permit No. 106509-003-00600, issued May 2, 1995; PA Code 25 123.22(d)(2)(ii), PA Code 25 123.22(d)(2)(iii), 25 Pa. Code §129.100]

e. Emissions from The Auxiliary Boiler shall not exceed the following at any time: [25 Pa. Code §129.97(g)(1)(ii), 25 Pa. Code §129.99]

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>HOURLY EMISSION LIMIT (lb/hr)</th>
<th>ANNUAL EMISSION LIMIT (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen Oxides</td>
<td>19.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>0.3</td>
<td>0.13</td>
</tr>
</tbody>
</table>

(1) A year is defined as any 12 consecutive months.

2. **Testing Requirements:**

a. The permittee shall perform nitrogen oxides emissions testing on the Auxiliary Boiler at least once every five years in order to demonstrate compliance with the emission limitations of this permit. Such testing shall be conducted in accordance with U.S. EPA test method 7E or an alternative method approved by the Department and Article XXI §2108.02. [§2103.12.h.1; §2108.02.b, §2108.02.e, 25 Pa. Code §129.100]
b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. [§2103.12.h.1, 25 Pa. Code §129.100]

3. Monitoring Requirements:

The permittee shall operate and maintain a fuel flow meter to monitor the amount of fuel oil combusted in the Auxiliary Boiler. [§2103.12.i, 25 Pa. Code §129.100]

4. Record Keeping Requirements:

a. The permittee shall maintain all appropriate records to demonstrate compliance with the requirements of both Section 2105.06 Article XXI, and conditions V.B.1.b and V.B.6.b below. Such records shall provide sufficient data to clearly demonstrate that all requirements of Section 2105.06 of Article XXI, and conditions V.B.1.b and V.B.6.b below, are being met. [§2105.06.g, 25 Pa. Code §129.100]

b. The permittee shall keep and maintain the following data for the Auxiliary Boiler: [§2103.12.h.1, §63.7525(k), 25 Pa. Code §129.100]

1) Amount of fuel oil used (daily and 12-month, gallons);  
2) Records of fuel oil supplier’s certification of sulfur content, and fuel oil heating value (each shipment received);  
3) Total operating hours, (hours/day, monthly and 12-month);  
4) Total heat input rate (12-month, MMBtu)  
5) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.  
6) Stack test protocols and reports.  
7) Records of the annual adjustment required by V.B.6.b below.

c. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.h.1, 25 Pa. Code §129.100]

d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2, 25 Pa. Code §129.100]

5. Reporting Requirements:

a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above on a semi-annual basis. The reports shall contain all required information for the time period of the report: [§2103.12.k.1, 25 Pa. Code §129.100]

b. Monthly and 12-month data required to be recorded by condition V.B.4.b above [25 Pa. Code §129.100];

1) A statement from the permittee that the record of fuel supplier certifications required by condition V.B.4.b above represents all the fuel oil received during the reporting period; and

2) Non-compliance information required to be recorded by V.B.4.c above.
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, if appropriate. [§2103.12.k]

6. Work Practice Standard:

a. The permittee shall not, at any time, operate the Auxiliary Boiler unless the subject boiler is properly operated and maintained according to good engineering and air pollution control practices. [§2105.03, 25 Pa. Code §129.99]

b. The permittee shall conduct a tune-up of the Auxiliary Boiler at least once every 5 years from the date of the last tune-up. [§63.7500(a)(1): Subpart 5D Table 3, Item #1, 25 Pa. Code §129.99]
VI. ALTERNATIVE OPERATING SCENARIOS

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

The following table summarizes the estimated annual maximum potential emissions (which may not include fugitive) from the GenOn Cheswick Main Boiler No. 1 and the Auxiliary Boiler. These annual (consecutive 12 month) potential emission estimates assume that all sources operate continuously.

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>ANNUAL EMISSION LIMIT (tons/year)*</th>
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</thead>
<tbody>
<tr>
<td>Nitrogen Oxides (NOₓ)</td>
<td>2,365</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>82.1</td>
</tr>
</tbody>
</table>

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