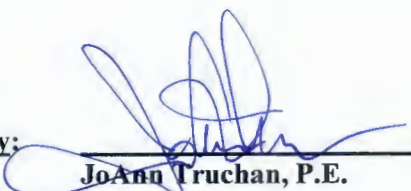




**AIR QUALITY PROGRAM
301 39th Street, Bldg. #7
Pittsburgh, PA 15201-1811**

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

<u>Issued To:</u>	NRG Energy Center Pittsburgh, LLC	<u>ACHD Permit #:</u>	0022
<u>Facility:</u>	111 South Commons Avenue Pittsburgh, PA 15212	<u>Date of Issuance:</u>	August 25, 2017
		<u>Expiration Date:</u>	August 24, 2022
		<u>Renewal Date:</u>	February 25, 2022.

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

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

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AMENDMENTS:

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

Facility Location: **NRG Energy Center Pittsburgh, LLC**
111 South Commons Avenue
Pittsburgh, PA 15212

Permittee/Owner: **NRG Energy Center Pittsburgh, LLC**
111 South Commons Avenue
Pittsburgh, PA 15212

Permittee/Operator: **Same as Above.**

Responsible Official: **Clifford Blashford**
Title: General Manager
Company: NRG Energy Center Pittsburgh, LLC
Address: 111 South Commons Avenue
Pittsburgh, PA 15212
Telephone Number: 412-231-0409
Fax Number: 412-231-0408
E-mail Address: clifford.blashford@nrg.com

Facility Contact: **Brian Goss**
Title: Plant Manager
Telephone Number: 412-231-0409
Fax Number: 412-231-0408
E-mail Address: brian.goss@nrg.com

AGENCY ADDRESSES:

ACHD Engineer: **Hafeez Ajenifuja.**
Title: Air Quality Engineer
Telephone Number: 412-578-8132
Fax Number: 412-578-8144
E-mail Address: hafeez.ajenifuja@alleghenycounty.us

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

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

II. FACILITY DESCRIPTION

The NRG Energy Center Pittsburgh, LLC facility is a commercial district heating and cooling plant located at 111 South Commons Avenue in the North Shore section of Pittsburgh, PA. The plant supplies steam for space heating and hospital sterilization and chilled water for refrigeration and summer air conditioning to commercial and institutional sites in that area. The plant is composed of five (5) boilers, which fire natural gas as their primary fuel and have the capacity to fire no. 2 fuel oil, in lieu of natural gas at times of emergency or natural gas curtailment with the exception boilers 4 & 5. Additional equipment used for chilled water production includes various turbines, chillers and compressors, a two 3-cell 33,000 gpm cooling tower (sharing a common basin) and a 2-cell 7,200 gpm cooling tower. The facility is a major source of nitrogen oxides (NO_x) and carbon monoxide (CO) and minor source of particulate matter (PM), particulate matter < 10 microns in dia. (PM-10), sulfur dioxide (SO₂), volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) as defined in section 2101.20 of Article XXI.

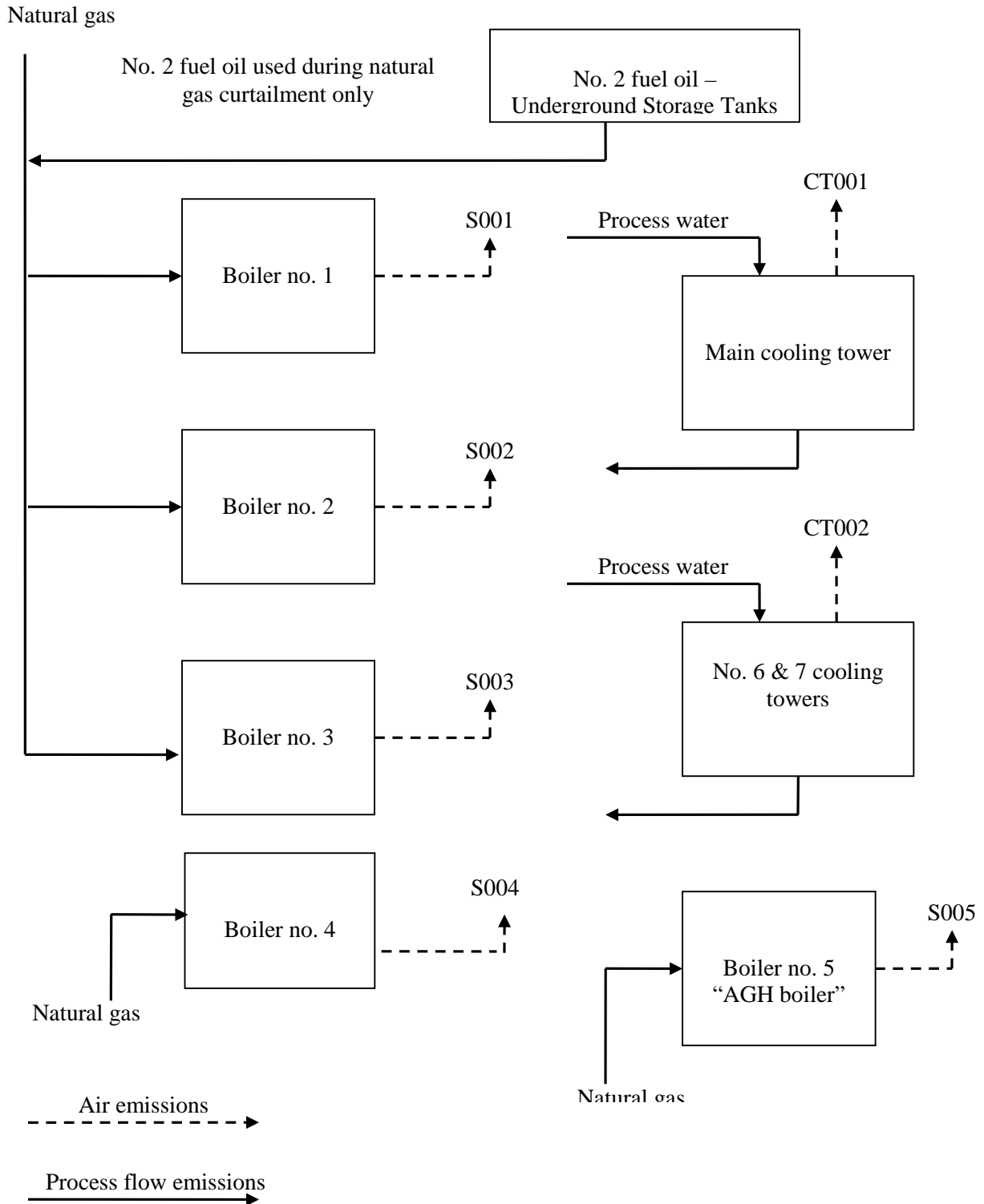
The emission units regulated by this permit are summarized in Table II-1:

TABLE II-1 - Emission Unit Identification

I.D	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL
P001	Three (3) Emergency Generators	None	350 kW; 250 kW & 250 kW	No. 2 fuel oil & natural gas
B001	Babcock & Wilcox forced draft, water tube boiler	None	92.0 MMBtu/hr	Natural gas, No. 2 fuel oil (emergency backup)
B002	Babcock & Wilcox forced draft, water tube boiler	None	92.0 MMBtu/hr	Natural gas, No. 2 fuel oil (emergency backup)
B003	Babcock & Wilcox forced draft, water tube boiler	None	131.1 MMBtu/hr	Natural gas, No. 2 fuel oil (emergency backup)
B004	Unilux forced draft, water tube boiler	Low-NOx Burners	24.0 MMBtu/hr	Natural gas
B005	Nebraska Boiler	None	46.08 MMBtu/hr	Natural Gas
CT001	Cooling Towers – two- 3 cell, induced draft	Drift eliminator	33,000 gallons/minute	n/a
CT002	Cooling Towers No. 6 & No.7 - induced draft	Drift eliminator	7,200 gallons/minute	n/a

Process Flow Diagram

Natural Gas Fired, with No. 2 Fuel Oil during Emergency Condition or Natural Gas Curtailment



DECLARATION OF POLICY

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

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

III. GENERAL CONDITIONS – Major Source

1. Prohibition of Air Pollution (§2101.11)

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

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

2. Definitions (§2101.20)

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI 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 PM₁₀ (§2103.12.f.7)

Except where precluded under the Clean Air Act or federal regulations promulgated under the Clean Air Act, if this permit limits the emissions of VOCs or PM₁₀ but does not limit the emissions of any hazardous air pollutants, the mixture of hazardous air pollutants which are VOCs or PM₁₀ can be modified so long as no permit emission limitations are violated. A log of all mixtures and changes shall be kept and reported to the Department with the next report required after each change.

11. Right to Access (§2103.12.h.2)

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

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

12. Certification of Compliance (§2103.12.h.5.)

- a. The permittee shall submit on an annual basis, certification of compliance with all terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification of compliance shall be made consistent with General Condition 4 above and shall include the following information at a minimum:
 - 1) The identification of each term or condition of the permit that is the basis of the certification;
 - 2) The compliance status;
 - 3) Whether any noncompliance was continuous or intermittent;
 - 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the provisions of this permit; and
 - 5) Such other facts as the Department may require to determine the compliance status of the source.
- b. All certifications of compliance must be submitted to the Administrator as well as the Department by May 30 of each year for the time period beginning April 1 of the previous year and ending March 31 of the same year.
- c. Reports may be emailed to the Department at aqreports@alleghenycounty.us in lieu of mailing a hard copy.

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

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

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

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

15. Reporting Requirements (§2103.12.k)

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

16. Severability Requirement (§2103.12.l)

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

17. Existing Source Reactivations (§2103.13.d)

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

18. Administrative Permit Amendment Procedures (§2103.14.b)

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)

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)

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 (§2103.15, §2103.12.f.3)

- a. This permit shall be reopened and reissued under any of the following circumstances:
- 1) Additional requirements under the Clean Air Act become applicable to a major source with a remaining permit term of three (3) or more years. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended solely due to the failure of the Department to act on a permit renewal application in a timely fashion.
 - 2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.
 - 3) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
 - 4) The Administrator or the Department determines that this permit must be reissued or revoked to assure compliance with the applicable requirements.
- b. This permit may be modified; revoked, reopened, and reissued; or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in this permit.

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

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

25. Annual Operating Permit Administration Fee (§2103.40)

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

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

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

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

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty

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

28. Termination of Operation (§2108.01.a)

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

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

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

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

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

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

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

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

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

- c. Failure to comply with an Enforcement Order or immediately comply with an Emergency Order shall be a violation of this permit thus giving rise to the remedies provided by Article XXI §2109.02.

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

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

34. Appeals (§2109.10)

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

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

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

36. Permit Shield (§2103.22)

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

administrative amendments, minor and significant permit modifications, and operational flexibility changes shall be covered by the permit shield provided such amendments, modifications and changes meet the relevant requirements of Article XXI.

- d. The permit shield authorized under Article XXI §2103.22 is in effect for the permit terms and conditions as identified in this permit.

37. Circumvention (§2101.14)

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

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

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

39. Effect (§2102.03.g.)

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

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

It shall be a violation of this permit giving rise to the remedies set forth in Article XXI Part I for any person

to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment which would require an installation permit or permit modification in accordance with Article XXI Part B or Part C.

IV. SITE LEVEL TERMS AND CONDITIONS

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

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

2. Visible Emissions (§2104.01.a)

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

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

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

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

4. Materials Handling (§2104.05)

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

5. Operation and Maintenance (§2105.03)

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

6. Open Burning (§2105.50)

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

7. 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)

- 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 of General Condition III.28 and Site Level Conditions IV.7 through IV.11 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.

13. 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.

14. 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.

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. Protection of Stratospheric Ozone (40 CFR Part 82)

- a. Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - 1) All containers in which a Class I or Class II substance is stored or transported, all products containing a Class I substance, and all products directly manufactured with a process that uses a Class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106;
 - 2) The placement of the required warning statement must comply with the requirements pursuant to §82.108;
 - 3) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110; and
 - 4) No person may modify, remove or interfere with the required warning statement except as described in §82.112.
- b. Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F:
 - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156;
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
 - 3) Persons maintaining, servicing, repairing or disposing of appliances, must be certified by an approved technician certification program pursuant to §82.161;
 - 4) Persons maintaining, servicing, repairing or disposing of appliances must certify to the Administrator of the U.S. Environmental Protection Agency pursuant to §82.162;
 - 5) Persons disposing of small appliances, motor vehicle air conditioners (MVAC) and MVAC-

- like appliances, must comply with the record keeping requirements pursuant to §82.166;
- 6) Owners of commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
 - 7) Owners or operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- c. If the permittee manufactures, transforms, destroys, imports or exports a Class I or Class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A (Production and Consumption Controls).
 - d. If the permittee performs a service on a motor vehicle that involves an ozone-depleting substance, refrigerant or regulated substitute substance in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B (Servicing of Motor Vehicle Air Conditioners).
 - e. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. Major Source NOx Reasonably Available Control Technology (RACT) Plan Approval Order and Agreement No. 217 (§2105.06)

Pursuant to Plan Approval Order and Agreement No. 220, issued on March 4, 1996, and Article XXI, §2105.06, the permittee shall comply with all provisions including all applicable definitions, emission limitations, restrictions, testing, monitoring, record keeping and reporting for this major source of NOx. In effect.

23. Wet Weather Event Plan for the Main Cooling Tower and No. 6 & 7 induced Draft Colling Towers [ALCOSAN Wet Weather Plan April 13, 2013; §2103.12]

- a. The permittee shall use the ALCOSAN-supplied rain gauge to determine when a wet weather event is in effect.
- b. When local rainfall reaches 0.25 inch on the rain gauge, either the permittee shall:
 - 1) Manually shut off the RO system to prevent RO wastewater from discharging into the sewer. The rain event shut off switch will be located in the NRG plant "Control Room.
 - 2) Manually shut off the cooling tower blowdown activated via Walchem WMD80000-2N4BNN conductivity controller. The "rain event" shut off switch will be located in the NRG plant "Control Room.
 - 3) Manually shut off the boiler blowdown activated via Walchem WMB71110-43ADNN conductivity controller. The rain event" shut off switch will be located in the NRG plant "Control Room."
- c. The permittee shall monitor and record the date (system shut-off time) of the wet weather event.
- d. The permittee shall monitor and record the total rainfall measured by the rain gauge, when the rain ceases to demonstrate compliance with condition IV.23.b above.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Process P001: Emergency Generators No. 1, No. 2 & No.3

Process Description: Emergency generators
Facility ID: P001
Max. Design Rate: 350 kW (fuel oil), 250 kW (fuel oil) & 250 kW (NG)
Fuel: No. 2 fuel oil & natural gas
Control Device(s): None

1. Restrictions:

- a. The generators No.1 & 2 shall combust only No. 2 fuel oil with a maximum allowable sulfur content of 0.05%, by weight [§2103.12.f].
- b. Fuel oil consumption for generator No. 1 shall be limited to 25 gallons/hour and 12,500 gallons/yr each [§2013.12.a.2.B; §2105.03].
- c. Fuel oil consumption for generator No. 2 shall be limited to 19.3 gallons/hour and 9,650 gallons/yr each [§2105.03].
- d. The No. 3 generators shall only combust natural gas fuel [§2103.12.f].
- e. Natural gas consumption for generator No. 3 shall be limited to 2,840 cubic feet per hour and 1.42 million cubic feet per year [§2105.03].
- f. The three (3) generators shall not be operated for more than 500 hours each in any 12 consecutive months. [§2103.12.f].
- g. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [§63.6625(h)]
- h. Emissions from the generators No. 1-3 shall not exceed the limits in Table V-A-1 at any time.[§2103.12]

TABLE V-A-1 – Emergency Generators No 1 - 3 Emission Limitations

Pollutant	350 KW Emergency Generator No. 1 (Oil Fired) Emissions		250 KW Emergency Generator No. 2 (Oil Fired) Emissions		250 KW Emergency Generator No. 3 (NG Fired) Emissions	
	(lb/hr)	(tons/year) ¹	(lb/hr)	(tons/year) ¹	(lb/hr)	(tons/year) ¹
Particulate Matter (PM/PM ₁₀)	0.18	0.05	0.84	0.21	0.03	0.01
Nitrogen Oxides (NO _x)	9.63	2.41	11.91	2.98	11.83	2.96
Carbon Monoxide (CO)	2.35	0.59	2.57	0.64	10.79	2.70
Sulfur Oxides (SO _x)	0.63	0.16	0.78	0.20	0.002	0.0005
Volatile Organic Compounds (VOCs)	0.32	0.08	0.97	0.24	0.35	0.09

¹ A year is defined as any 12 consecutive months.

2. Testing Requirements:

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

3. Monitoring Requirements:

The permittee shall install a non-resettable hour meter to monitor the emergency generators hours of operation. [§63.6625(f)]

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for the generators: [§2103.12(j); §63.6655a(2); §63.6655(e & f)]
 - 1) Fuel shipment records (date and amount received), supplier's certification of sulfur content, and heating value;
 - 2) Cold starts (date, time and duration of each occurrence);
 - 3) Total operating hours (hours/day, monthly and 12-month) that is recorded through the non-resettable hour meter as required in condition V.A.3. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation [§63.6655(f)];
 - 4) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment. [§63.6655(a)(2); §63.6655(e)]
- b. Records of diesel fuel certifications from fuel suppliers shall be maintained per shipment. The 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(j)]
- 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(j); §63.6655(a)(5)]
- 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); §6660]

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); §63.6640(b); §63.6650(f)]
 - 1) Monthly and 12-month data required to be recorded by condition V.A.4.a above;
 - 2) Cold start information;
 - 3) Non-compliance information required to be recorded by condition V.A.4.c above [§63.6640(b)]; and
 - 4) Fuel oil certifications and a statement from the permittee that the record of fuel supplier certifications represents all the fuel oil used during the reporting period.

- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12(k); §63.6650(f)]
- c. The permittee shall submit copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department

6. Work Practice Standard:

- a. The permittee shall comply with the following requirement for the emergency compression ignition (RICE) engine, except during periods of startup [§63.6603(a) & Table 2d(4)]:
 - 1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - 2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - 3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary
 - 4) The permittee have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in condition V.A.6.a.1) above or Table 2c of §63, Subpart ZZZZ.
- b. The permittee shall comply with the following requirement for the emergency spark ignition (RICE) engine, except during periods of startup[§63.6603(a) & Table 2d(5)]:
 - 1) Change oil and filter every 500 hours of operation or annually, whichever comes first¹;
 - 2) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - 3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary
 - 4) The permittee have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in condition V.A.6.b.1) above or Table 2c of §63, Subpart ZZZZ.
- c. The permittee must operate the emergency stationary RICE according to the requirements in conditions V.A.6.a.1) through V.A.6.a.3). In order for the engine to be considered an emergency stationary RICE under 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in conditions V.A.6.a.1) through V.A.6.a.3), is prohibited. If the permittee does not operate the engine according to the requirements in conditions V.A.6.a.1) through V.A.6.a.3), the engine will not be considered an emergency engine under §63, Subpart ZZZZ and must meet all requirements for non-emergency engines [§63.6640 (f)(4)]
 - 1) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - 2) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in conditions V.A.6.a.2)i though V.A.6.a.2)iii for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by condition V.A.6.a.3) counts as part of the 100 hours per calendar year allowed by condition V.A.6.a.2)
- i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the

manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- ii. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - iii. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- 3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in condition V.A.6.a.2). Except as provided in conditions V.A.6.a.3)i and V.A.6.a.3)ii, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- i. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
 - ii. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - D. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

- d. The permittee shall demonstrate continuous compliance with work and management practices by: [§2105.03; §63.6640(a) & Table 9; §63.6625(c)]:
- 1) Operating and maintaining the emergency generators in accordance with the manufacturer's emission-related operation and maintenance manuals. The manufacturer's operation and maintenance manuals shall be kept on site at all times; OR
 - 2) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- e. The permittee shall at all times operate and maintain the emergency generators in a manner consistent with safety and good air pollution control practices for minimizing emissions. [§63.6605(a); §63.6625(e); §2105.03]
- f. The permittee shall have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in condition V.A.6.a above. The oil analysis must be performed at the same frequency specified for changing the oil in V.A.6.a above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [§2105.03; §63.6625(i)]:
- g. The permittee shall have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in condition V.A.6.b above. The oil analysis must be performed at the same frequency specified for changing the oil in V.A.6.b above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [§2105.03; §§63.6625(j)]:

B. Boilers No. 1 & No. 2

Process Description:	Two identical Babcock & Wilcox, forced draft water tube boilers
Facility ID:	B001, B002
Maximum Design Rate:	92.0 MMBtu/hr each
Fuel(s):	Natural gas and no. 2 fuel oil as an emergency fuel
Control Device(s):	None

1. Restrictions:

- a. The permittee shall not operate or allow to be operated boiler no. 1 or no. 2 fueled entirely by natural gas in such a manner that the emissions of particulate matter from each boiler exceeds 0.008 lbs/MMBtu of actual heat input at any time. (§2104.02.a.1)
- b. The permittee shall not operate or allow to be operated boiler no. 1 or no. 2 fueled entirely by no.2 fuel oil in such a manner that the emissions of particulate matter from each boiler exceeds 0.015 lbs/MMBtu of actual heat input, at any time. (§2104.02.a.1)
- c. At no time shall the permittee allow emissions of nitrogen oxides from each boiler to exceed 0.145 pounds per MMBtus at any time and 54.2 tons during any 12 consecutive months (RACT Order #220, Condition 1.1; §2105.06).
- d. At no time shall the permittee operate boilers no. 1 or no. 2 unless all process equipment and O₂ trim equipment are properly operated and maintained according to condition V.B.3.a (RACT Order #220, Condition 1.2; §2105.06).
- e. At no time shall the permittee operate boilers 1 & 2 using any fuel other than natural gas or No.2 fuel oil (RACT Order #220, Condition 1.3; §2105.06).
- f. The permittee shall only combust No. 2 fuel oil in Boilers 1 & 2 as a backup fuel in emergency situations, including where natural gas is not available or during periods of natural gas curtailment. During periods of curtailment, the permittee shall use their natural gas allotment as specified by the curtailment notice before combusting No. 2 fuel oil in Boilers 1 & 2. The permittee shall notify the Department, before combusting No. 2 fuel oil and provide the Department with a copy of the curtailment notice. §2103.12.a.2.B)
- g. Natural gas usage in each boiler shall not exceed the maximum potential usage of 90,200 scf/hr and 790 million scf/yr. (§2103.12.h.1; §2103.12.a.2.C)
- h. No. 2 fuel oil combusted in each boiler shall not exceed 660 gal/hr and 330,000 gallons in any consecutive twelve-month period, at any time. All fuel oil combusted shall meet current ASTM specifications for no.2 fuel oil and contain 0.05% sulfur (wt. percent) or less. (§2103.12.h.1)
- i. The subject boilers may only combust natural gas and no. 2 fuel oil, exclusive of each other, at all times. (§2103.12.h.1)

- j. Emissions from each boiler, shall not exceed the following limitations in Table V-B-1 at any time: (§2104.02.a.1, §2105.06, §2101.02.c.4, §2103.12.a.2.B)

TABLE V.B-1: Emission Limitations

Pollutant	Natural Gas [lb/hr] (per boiler)	No.2 Fuel Oil [lb/hr] (per boiler) ²	Tons/yr ¹ (both boilers)
Particulate Matter	0.74	1.38	6.80
PM-10	0.74	1.38	6.80
Sulfur Oxides	0.06	4.67	2.83
Nitrogen Oxides	13.34	13.25	116.80
Carbon Monoxide	7.58	3.31	64.30
Volatile Organic Compounds	0.50	0.22	4.24

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

²Fuel oil usage is based on 500 hours per year.

2. Testing Requirements:

- a. While combusting natural gas, the permittee shall perform NO_x emission testing on boilers no.1 & no.2, at least once every two (2) years from the most recent stack test. Such testing shall consist of methods no. 1 through no. 5 and no. 7E of appendix A of 40 CFR 60 and be conducted in accordance with such test methods and §2108.02 of Article XXI. (RACT Order #220, Condition 1.4; §2105.06; §2103.12.h.1; §2108.02 and §2103.12.i)
- b. The permittee shall perform NO_x and particulate matter testing after accruing 40 or more operating hours in any consecutive 12-month period while firing fuel oil resulting from periods of gas curtailment or gas supply interruption in order to demonstrate compliance with the fuel oil NO_x, and particulate emission limitations in conditions in conditions V.B.1.j. Such testing shall be conducted in accordance with Article XXI §2108.02 and as part of the next regularly-scheduled test program required in condition V.B.2.a above. The permittee shall not be required to repeat the fuel oil testing more often than once in any five year period, unless requested to do so by the Department. (§2108.02 and §2103.12.i)
- c. The fuel oil periodic testing required in condition V.B.2.b shall not exceed 48 hours per year. (§63.11237)
- d. 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. [§2108.02; §2103.12.i]

3. Monitoring Requirements:

- a. The permittee shall continuously monitor the oxygen content of the flue gas of each boiler to within 2% of actual and record the oxygen content to the nearest 0.2%, to ensure the boilers are being operated and maintained properly and are operating under the conditions demonstrated during the most recent compliance test. (§2103.12.i; §2108.03)

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for boilers no. 1 and no.2 (RACT Order #220, Condition 1.5; §2105.06; §2103.12.h.1 and §2103.12.j):
 - 1) Fuel consumption (daily, monthly, and 12-month), type of fuel consumed and suppliers' certification of sulfur content, and heating value;
 - 2) Steam load, (mlbs/day, monthly average);
 - 3) Flue gas oxygen (continuously, monthly average)
 - 4) Cold starts (date, time and duration of each occurrence);
 - 5) Total operating hours, (hours/day, monthly and 12-month); and
 - 6) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
 - 7) Stack test protocols and reports.
- b. Records of no.2 fuel certifications from fuel suppliers shall be maintained per shipment. The Certifications shall include the name of the supplier and a statement from the supplier that the fuel complies with ASTM D396-78 "Standard Specifications for Fuel Oils" (§2103.12.h.1).
- 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. (§2103.12.5.B)
- 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. (RACT Order #220, Condition 1.6; §2103.12.j.2)

5. Reporting Requirements:

- a. The permittee shall report the following information to the Department within thirty days of the end of each calendar half. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)
 - 1) Monthly and 12-month data required to be recorded by conditions V.B.4.a and V.B.4.b above;
 - 2) Cold start information;
 - 3) Non-compliance information required to be recorded by V.B.4.c above.
 - 4) A statement from the permittee that the record of fuel supplier certifications represent all the fuel oil used during the reporting period, to the Department every six consecutive months.
- 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.B.5.a above. (§2108.01.d; §2103.12.k.1)
- c. 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:

None except as provided elsewhere.

C. Boiler No. 3

Process Description: One Babcock & Wilcox, forced draft water tube, natural gas-fired boiler
Facility ID: B003
Capacity: 131.1 MMBtu/hr
Fuel(s) Natural gas and no. 2 fuel oil as an emergency fuel
Control Device: None

1. Restrictions:

- a. The permittee shall not operate or allow to be operated boiler no. 3 fueled entirely by natural gas in such a manner that the emissions of particulate matter exceeds 0.008 lbs/MMBtu of actual heat input at any time. (§2104.02.a.1)
- b. The permittee shall not operate or allow to be operated boiler no. 3 fueled entirely by no.2 fuel oil in such a manner that the emissions of particulate matter 0.015 lbs/MMBtu of actual heat input, at any time. (§2104.02.a.1)
- c. At no time shall the permittee allow emissions of nitrogen oxides from boiler 3 to exceed 0.145 pounds per MMBtu at any time and 77.3 tons during any 12 consecutive months (RACT Order #220, Condition 1.1; §2105.06).
- d. At no time shall the permittee operate boiler no. 3 unless all process equipment and O₂ trim equipment are properly operated and maintained according to condition V.C.3.a (RACT Order #220, Condition 1.2; §2105.06).
- e. At no time shall the permittee operate boiler no. 3 using any fuel other than natural gas with the exception of no.2 fuel oil which may be combusted only during emergency conditions and/or natural gas curtailment (RACT Order #220, Condition 1.3; §2105.06).
- f. The permittee shall only combust No. 2 fuel oil in Boiler 3 as a backup fuel in emergency situations, including where natural gas is not available or during periods of natural gas curtailment. During periods of curtailment, the permittee shall use their natural gas allotment as specified by the curtailment notice before combusting No. 2 fuel oil in Boiler 3. The permittee shall notify the Department, before combusting No. 2 fuel oil and provide the Department with a copy of the curtailment notice. (§2103.12.k.1)
- g. Natural gas usage in boiler no.3 shall not exceed the maximum potential usage of 128,430 scf/hr and 1,125 million scf/yr. (§2103.12.h.1)
- h. No. 2 fuel oil combustion in boiler no.3 shall not exceed 940 gal/hr and 470,000 gallons in any consecutive twelve-month period, at any time. All fuel oil combusted shall meet current ASTM specifications for no.2 fuel oil and shall contain 0.05% sulfur (wt. percent) or less. (§2103.12.h.1)
- i. The subject boiler may only combust natural gas and no. 2 fuel oil, exclusive of each other, at all times. (§2103.12.h.1)

- j. Emissions from boiler no. 3 shall not exceed the emission limitations in Table V.C.1 at any time: (§2104.02.a.1, §2105.06, §2101.02.c.4, §2103.12.a.2.B)

TABLE V.C.1 Emission Limitations

Pollutant	Natural Gas lb/hr	No.2 Fuel Oil lb/hr	Tons/yr ¹
Particulate Matter	1.05	1.97	4.83
PM-10	1.05	1.97	4.83
Sulfur Oxides	0.08	7.4	2.18
Nitrogen Oxides	19.01	22.65	84.17
Carbon Monoxide	10.8	4.72	45.78
Volatile Organic Compounds	0.7	0.19	2.94

¹A year is defined as any consecutive 12-months

²Fuel oil usage/emissions is based on 500 hours per year.

2. Testing Requirements:

- a. While combusting natural gas, the permittee shall perform NO_x emission testing on boilers no.1 & no.2, at least once every two (2) years from the most recent stack test. Such testing shall consist of methods no. 1 through no. 5 and no. 7E of appendix A of 40 CFR 60 and be conducted in accordance with such test methods and §2108.02 of Article XXI. (RACT Order #220, Condition 1.4; §2105.06; §2103.12.h.1; §2108.02 and §2103.12.i)
- b. The permittee shall perform NO_x and particulate matter testing on boiler No 3 after accruing 40 or more operating hours in any consecutive 12-month period while firing fuel oil resulting from periods of gas curtailment or gas supply interruption to demonstrate compliance with conditions V.C.1.c and V.C.1.j. Such testing shall be conducted in accordance with Article XXI §2108.02, and as part of the next regularly scheduled test required in condition V.C.2.a above. The permittee shall not be required to repeat the fuel oil testing more often than once in any five year period, unless requested to do so by the Department. (§2108.02 and §2103.12.i)
- c. The fuel oil periodic testing required in condition V.C.2.b shall not exceed 48 hours per year. (§63.11237)
- d. 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. [§2108.02]

3. Monitoring Requirements:

- a. The permittee shall continuously monitor the oxygen content of the flue gas of the boiler to within 2% of actual and shall record the percent oxygen content to the nearest 0.2%, to ensure the boiler is being operated and maintained properly and is operating under the conditions demonstrated

during the most recent compliance test to meet the lb/MMBtu requirements of the NO_x RACT. (§2103.12.i; §2108.03; §2102.04.e)

- b. The permittee shall inspect boiler no.3 weekly, to insure compliance with condition V.C.1.d above. (§2103.12.i; §2102.04.e)

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for Boiler No. 3 (RACT Order #220, Condition 1.5; §2105.06; §2103.12.h.1 and §2103.12.j):
 - 1) Fuel consumption (daily, monthly, and 12-month), type of fuel consumed and suppliers' certification of sulfur content and heating value;
 - 2) Steam load, (mlbs/day, monthly average);
 - 3) Flue gas oxygen (continuously, monthly average);
 - 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. Records of no.2 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 D396-78 "Standard Specifications for Fuel Oils"(§2103.12.h.1; §2103.12.j).
- 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; §2103.12.j)
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2)

5. Reporting Requirements:

- a. The permittee shall report the following information to the Department within thirty days of the end of each calendar half. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)
 - 1) Monthly and 12-month data required to be recorded by condition V.C.4.a above;
 - 2) Cold start information;
 - 3) Non-compliance information required to be recorded by V.C.4.b above;
 - 4) A statement from the permittee that the record of fuel supplier certifications represent all the fuel oil used during the reporting period, to the Department every six consecutive months.
- 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.C.5.a above. (§2108.01.d, §2103.12.k.1)
- c. Reporting instances of non-compliance in accordance with condition V.C.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)

- d. The permittee shall immediately report to the Department when a natural gas emergency or curtailment plan requires the combustion of fuel oil. (§2103.12.k.1)

6. Work Practice Standards

None except as provided elsewhere.

D. Boiler No. 4:

Description: Unilux, forced draft water tube, natural gas fired boiler
Facility ID: B004
Max Capacity: 24.0 MMBtu/hr
Fuel: Natural gas
Control Device: Low-NOx burners

1. Restrictions:

- a. The permittee shall not operate or, allow to be operated Boiler no. 4 unless the boiler is properly operated and maintained according to the following specifications, at all times: (IP 0022-I001, Condition VI.1.a.1; §2103.12.a.2.D; §210.312.f.1)
 - 1) All boiler burners shall be low NOx burners for natural gas combustion with maximum NOx emissions of 0.038 lbs/MMBtu for natural gas at 3% O₂.
 - 2) Boiler no. 4 shall combust natural gas only.
- b. The permittee shall not operate or allow to be operated boiler no. 4 fueled entirely by natural gas in such a manner that the emissions of particulate matter from each boiler exceeds 0.008 lbs/MMBtu of actual heat input at any time. (§2104.02.a.1; §2103.12.a.2.B; §210.312.f.1)
- c. At no time shall the permittee operate boiler no. 4 unless all process equipment and O₂ trim equipment are properly operated and maintained according to conditions V.D.3.b and V.D.3.c. (§2103.12.h.1; §210.312.f.1)
- d. Natural gas usage in boiler no.4 shall not exceed the maximum potential usage of 23,530 scf/hr and 206.12 million scf/yr. (IP 0022-I001, Condition VI.1.c; §2103.12.h.1)
- e. Emissions from Boiler no.4 shall not exceed the following at any time: (IP 0022-I001, Condition VI.1.e; §2103.12.a.2.D; §210.312.f.1)

TABLE V.D-1: Emission Limitations

Pollutant	Hourly Emissions lb/hr	Yearly Emission Tons/yr ¹
Total Particulate (PM/PM ₁₀)	0.18	0.79
Sulfur Oxides	0.014	0.06
Nitrogen Oxides	0.91	4.00
Carbon Monoxide	3.60	15.77
Volatile Organic Compounds	0.19	0.84

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

- f. Compliance with the terms of conditions V.D.1.a, V.D.1.d, V.D.1.e and conditions V.D.3.a through V.D.3.c below, shall constitute compliance with the emission limitations of condition V.D.1.f

above. (IP 0022-I001, §2103.12.f.1)

2. Testing Requirements:

The Department reserves the right to require any additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above entitled “Emissions Testing.” (§2103.12.h.1)

3. Monitoring Requirements:

- a. The permittee shall inspect boiler no.4 weekly, to insure compliance with conditions V.D.1.a and V.D.1.c above(IP 0022-I001, Condition VI.3.a; §2103.12.h.1; §2103.12.i)
- b. The permittee shall perform an annual adjustment on the combustion process of boiler no.4. Such annual adjustment, shall include, but not be limited to: (IP 0022-I001, Condition VI.3.b; §2103.12.i)
 - 1) Inspection, adjustment, cleaning, or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
 - 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and to the extent practicable minimize emissions of carbon monoxide, and;
 - 3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- c. The permittee shall continuously monitor the oxygen content of the flue gas of the boiler to within 2% of actual and record in percent oxygen to the nearest 0.2%, to ensure the boilers are being operated and maintained properly. (IP 0022-I001; §2103.12.h.1; §2103.12.i)

4. Record Keeping Requirements:

- a. The permittee shall record the following information for each annual adjustment required by condition V.D.3.b above: (IP 0022-I001, Condition VI.4.d; §2103.12.j)
 - 1) The date of the adjustment procedure;
 - 2) The name of the service company and technicians;
 - 3) The operating rate or load after adjustment;
 - 4) The CO and NO_x emission rate after adjustment; and
 - 5) The excess oxygen rate after adjustment.
- b. The permittee shall keep and maintain the following data for boiler No. 4: [IP 0022-I001; §2103.12.h.1, Conditions VI.4.a & b; §60.48c.(f)]
 - 1) Fuel consumption (daily, monthly, and 12-month), and heating value;
 - 2) Heat input (daily, monthly, and 12 month average);
 - 3) Flue gas oxygen, (continuously, monthly average)
 - 4) Cold starts (date, time and duration of each occurrence);
 - 5) Total operating hours, (hours/day), monthly and 12-month); and

- 6) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (IP 0022-I001, Condition VI.4.f; §2102.04.b.6)

5. Reporting Requirements:

- a. The permittee shall report the following information to the Department within thirty days of the end of each calendar half. The reports shall contain all required information for the time period of the report: [IP 0022-I001, Condition VI.5.a; §60.48c.(f); §2103.12.k]
 - 1) Monthly and 12-month data required to be recorded by condition V.D.4.a above;
 - 2) Cold start information;
 - 3) Non-compliance information required to be recorded by above.
 - 4) The permittee shall provide natural gas usage
- 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.D.5.a above. (§2108.01.d., §2103.12.k.1)
- c. Reporting instances of non-compliance in accordance with Condition V.D.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, IP 0022-I001, Condition VI.5.b)

6. Work Practice Standards (§2105.03)

None except as provided elsewhere

E. Boiler No. 5:

Description: Nebraska, natural gas fired boiler
Facility ID: B005
Max Capacity: 46.08 MMBtu/hr
Fuel: Natural gas
Control Device: None

1. Restrictions:

- a. The permittee shall only operate the boiler during an emergency situation. (§2103.12.a.2.B)
- b. The boiler shall be physically located on the Allegheny General Hospital property at all times. (§2103.12.a.2.B)
- c. The boiler shall only be fired with natural gas. (§2103.12.a.2.B)
- d. The boiler hours of operation shall not exceed 500 hours in any 12 consecutive months. (§2103.12.a.2.B)
- e. Natural gas usage in boiler no.5 shall not exceed the maximum potential usage of 45,176 scf/hr and 22.59 million scf/yr. (§2103.12.h.1; §2103.12.a.2.B)
- f. Emissions from Boiler no.5 shall not exceed the following at any time: (§2103.12.a.2.B)

TABLE V-E-1: Emission Limits

Pollutant	Hourly Emissions lb/hr	Yearly Emission Tons/yr ¹
Particulate Matter	0.34	0.09
PM-10	0.34	0.09
Sulfur Oxides	0.03	0.01
Nitrogen Oxides	4.61	1.15
Carbon Monoxide	3.80	0.95
Volatile Organic Compounds	0.25	0.06

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

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above entitled “Emissions Testing.” (§2103.12.h.1)

3. Monitoring Requirements:

None except as provided elsewhere

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for the boiler: [§2103.12.j]
 - 1) Cold starts (date, time and duration of each occurrence);
 - 2) Total operating hours (hours/day, monthly and 12-month) during the emergency period;
 - 3) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

5. Reporting Requirements:

- a. The permittee shall report the following information to the Department within thirty days of the end of each calendar half. The reports shall contain all required information for the time period of the report: [§2103.12.k]
 - 1) Monthly and 12-month data required to be recorded by Condition V.E.4.a above;
 - 2) Cold start information;
 - 3) Non-compliance information required to be recorded by Condition V.E.4.b above
- b. The permittee shall provide natural gas usage.
- 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]

6. Work Practice Standards:

The boiler shall be properly operated and maintained in accordance with the manufacturer's specifications. The manufacturer's operation and maintenance manuals shall be kept on site at all times. [§2105.03].

F. Main Cooling Tower:

Description: Main Cooling Tower - 8 cells, induced draft
Facility ID: CT001
Max. Capacity: 33,000 gallons/minute
Control Device: None

1. Restrictions:

- a. The permittee shall only use municipal water, or water of equivalent quality, in the main cooling tower and the conductivity of the water shall not exceed 5,313 micromhos any time except during wet weather plan events, which if triggered prohibits the station from discharging process water (including cooling tower blow-down) to ALCOSAN. (§2103.12.a.2.B, ALCOSAN Wet Weather Plan, April 9, 2013)
- b. The permittee shall comply with the wet weather requirements in condition.IV.23. (§2103.12.f, ALCOSAN Wet Weather Plan, April 9, 2013)
- c. Emissions from the main cooling tower shall not exceed the following limitations: (§2103.12.a.2.B)

TABLE V.F-1: Emission Limitations

Pollutant	Tons/year ¹
Total Particulate	12.30
PM-10	12.30

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

- d. Compliance with the above emission limitations may be determined by calculations based on cooling tower TDS and manufacturer’s specified drift. Cooling tower TDS may be estimated by the ratio of cooling water tower conductivity to make-up water conductivity multiplied by the average TDS of the make-up water. The averaging interval shall correspond to the emission limit interval. (§2103.12.h.1)

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above entitled “Emissions Testing.” (§2103.12.h.1)

3. Monitoring Requirements:

The permittee shall determine the conductivity of the make-up water and cooling tower water, weekly. (§2103.12.h.1)

4. Record Keeping Requirements:

- a. The permittee shall record the monthly make-up water used in each cooling tower and the weekly

conductivity measurements in condition V.F.3 above. (§2103.12.h.1; §2103.12.j)

- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j)

5. Reporting Requirements:

- a. The permittee shall report all instances of non-compliance with conditions V.F.1.a., V.F.1.b, V.F.3, V.F.4.a and V.F.4.b above along with all corrective action taken to restore compliance, to the Department within thirty days of the end of each calendar half. (§2103.12.h.1; §2103.12.k)
- b. Reporting instances of non-compliance in accordance with condition V.F.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.h.1; §2103.12.k)

6. Work Practice Standards

The permittee shall properly maintain and operate the main cooling tower (§2105.03)

G. No.6 & No. 7 Cooling Tower:

Description: No. 6 & No. 7 Induced Draft Cooling Towers Cooling Tower
Facility ID: CT002
Max. Capacity: 7,200 gallons/minute Combined
Control Device: None

1. Restrictions:

- a. The permittee shall only use municipal water, or water of equivalent quality, in the No. 6 & No. 7 cooling towers and the conductivity of the water shall not exceed 2,500 micromhos all times except during wet weather plan events, which if triggered prohibits the station from discharging process water (including cooling tower blow-down) to ALCOSAN. (§2103.12.a.2.B, ALCOSAN Wet Weather Plan, April 9, 2013)
- b. The permittee shall comply with the wet weather requirements in condition.IV.23. (§2103.12.f, ALCOSAN Wet Weather Plan, April 9, 2013)
- c. The permittee shall not operate or, allow to be operated cooling towers no.6 and no.7 unless the towers are properly operated and maintained according to the following specifications, at all times:(§2102.04.b.6; IP 0022-I001, Condition VI.1.b)
 - 1) Both cooling towers shall be equipped with drift eliminators for particulate emission control;
 - 2) The drift eliminators shall be comprised of baffles and have a manufacturer’s specified maximum drift of 0.005%;
 - 3) The maximum total dissolved solids in the cooling tower water shall not exceed 3,400 ppm, by weight, except during wet weather plan events, which if triggered prohibits the station from discharging process water (including cooling tower blow-down) to ALCOSAN. (§2103.12.a.2.B, ALCOSAN Wet Weather Plan, April 9, 2013); and
 - 4) The drift eliminators shall be installed and operated according to the manufacturer’s specifications and recommendations, at all times.
- d. Combined emissions from cooling towers no. 6 & no. 7 shall not exceed the following limitations at any time except during wet weather plan events, which if triggered prohibits the station from discharging process water (including cooling tower blow-down) to ALCOSAN: (IP 0022-I001, Condition VI.1.f; §2102.04.b.6; §2103.12.a.2.B; ALCOSAN Wet Weather Plan, April 9, 2013)

TABLE V.G-1: Emission Limitations

POLLUTANT	Lbs/hr	Tons/year ¹
Total Particulate	0.71	3.11
PM-10	0.71	3.11

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

- e. Compliance with the terms of conditions V.G.1.b may constitute compliance with the emission limitations of condition V.G.1.c above. (IP 0022-I001, Condition VI.1.g; §2103.12.h.1)

2. Testing Requirements:

None except as provided elsewhere.

3. Monitoring Requirements:

- a. The permittee shall determine the conductivity of the make-up water and cooling tower water for towers no.6 & no.7, weekly. (§2103.12.h.1)
- b. The permittee shall determine the total dissolved solids (TDS) of the cooling tower water by conductivity testing, weekly. A conductivity test protocol shall be submitted to the department for approval prior to startup of the cooling tower. The protocol must contain, at a minimum, the procedures for determining the relationship between conductivity and TDS, the percent error expected in the measurements and maintenance and calibration procedures for the test equipment (IP 0022-I001, Condition VI.3.c; §2103.12.h.1).
- c. The permittee shall inspect the cooling towers no. 6 & no. 7 weekly to insure compliance with condition V.G.1.b above (IP 0022-I001, Condition VI.3.a; §2103.12.h.1).

4. Recordkeeping Requirements.:

- a. The permittee shall record the monthly make-up water used in each cooling tower and the weekly conductivity measurements in condition V.G.1.a above (§2103.12.h.1)
- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2102.04.b.6; IP 0022-I001, Condition VI.4.f)

5. Reporting Requirements:

- a. The permittee shall report all instances of non-compliance with conditions V.G.1.a through V.G.1.e, V.G.3.a through V.G.3.c and V.G.4.a in accordance with General Condition III.15 along with all corrective action taken to restore compliance, to the Department within thirty days of the end of each calendar half. (IP 0022-I001, Condition VI.5.a §2103.12.h.1)
- b. Reporting instances of non-compliance in accordance with condition V.G.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.h.1)
- c. The permittee shall report any physical changes or changes in methods of operation in the subject sources that may result in increased emissions, to the Department, according to the procedures specified in Site Level Condition IV.8 above, as applicable. (§2103.12.k.1)

6. Work practice Requirements:

The permittee shall properly maintain and operate the cooling towers No. 6 & No. 7 (§2105.03)

VI. MISCELLANEOUS

The following list of trivial activities for which there are no applicable emission limitations, testing, monitoring, recordkeeping, or reporting requirements sources have been found to be of minor significance

Three (3) 25,000 gallons Underground Storage Tank containing #2 fuel oil

VII. ALTERNATIVE OPERATING SCENARIOS

There are no alternative operating scenarios for this facility.

VIII. EMISSIONS LIMITATIONS SUMMARY

Combined emissions from boilers no.1-5 and the main cooling towers shall not exceed the following at any time:

TABLE VII-1: Emission Limitations

Pollutant	Tons/yr
Particulate Matter	28.19
PM-10	28.19
SO ₂	5.44
NO _x	214.47
CO	130.73
VOC	8.49

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