



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

Title V Operating Permit
& Federally Enforceable State Operating Permit

Issued To: Bay Valley Foods, LLC

ACHD Permit #: 0079

Facility: Bay Valley Foods, LLC
1080 River Avenue
Pittsburgh, PA 15212-5995

Date of Issuance: February 23, 2017

Expiration Date: February 22, 2022

Renewal Date: August 23, 2021

Issued By:

Jayme Graham
Air Quality Program Mgr.

Prepared By:

JoAnn Truchan, P.E.
Air Quality Engineer

Reviewed By:

Hafeez Ajenifuja
Air Quality Engineer

TABLE OF CONTENTS

I.	CONTACT INFORMATION.....	3
II.	FACILITY DESCRIPTION.....	4
III.	GENERAL CONDITIONS – MAJOR SOURCE	7
IV.	SITE LEVEL TERMS AND CONDITIONS.....	16
V.	EMISSION UNIT LEVEL TERMS AND CONDITIONS.....	24
	A. BOILER B001: NO. 1 CE BOILER.....	24
	B. BOILER B002: NO. 2 CE BOILER.....	28
	C. BOILERS B003 AND B004: NO. 3 & NO. 4 B&W BOILERS.....	32
	D. BOILER B008: NO. 8 ZURN BOILER.....	36
VI.	MISCELLANEOUS	42
	A. EMERGENCY GENERATORS & COMPRESSOR.....	42
	B. SOURCES OF MINOR SIGNIFICANCE	43
VII.	ALTERNATIVE OPERATING SCENARIOS	44
VIII.	EMISSIONS LIMITATIONS SUMMARY	45

AMENDMENTS:

<i>DATE</i>	<i>SECTION(S)</i>
-------------	-------------------

I. CONTACT INFORMATION

Facility Location: Bay Valley Foods, LLC
1080 River Avenue
Pittsburgh, PA 15212-5995

Permittee/Owner: Bay Valley Foods, LLC
1080 River Avenue
Pittsburgh, PA 15212-5995

Permittee/Operator: (same as owner)
(if not Owner)

Responsible Official: Mr. Kenneth Nowosielski
Title: Production Manager
Company: Bay Valley Foods, LLC
Address: 1080 River Avenue
Pittsburgh, PA 15212-5995

Telephone Number: (412) 442-6901
Fax Number: (412) 442-6752

Facility Contact: Mr. Michael Brown
Title: Manager of Safety and Environmental Health
Telephone Number: (412) 442-6920
Fax Number: (412) 442-6711
E-mail Address: mike_brown@bayvalleyfoods.com

AGENCY ADDRESSES:

ACHD Engineer: Ms. JoAnn Truchan, P.E.
Title: Air Quality Engineer
Telephone Number: 412-578-7981
Fax Number: 412-578-8144
E-mail Address: joann.truchan@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 Bay Valley Foods facility in Pittsburgh is a manufacturing and packaging facility for baby foods and soups, along with other specialty foods. In addition to the production and packaging equipment, the facility has five (5) natural gas-fired boilers, which provide steam to the facility.

The facility is a major source of nitrogen oxides (NO_x) and carbon monoxide (CO) as defined in §2101.20 of Article XXI. The facility is a minor source of particulate matter (PM), particulate matter <10 µm in diameter (PM₁₀), particulate matter <2.5 µm in diameter (PM_{2.5}), sulfur oxides (SO_x), and hazardous air pollutants (HAP). The facility is also a major source of greenhouse gas emissions (CO_{2e}) as defined in the U.S. EPA Greenhouse Gas Tailoring Rule.

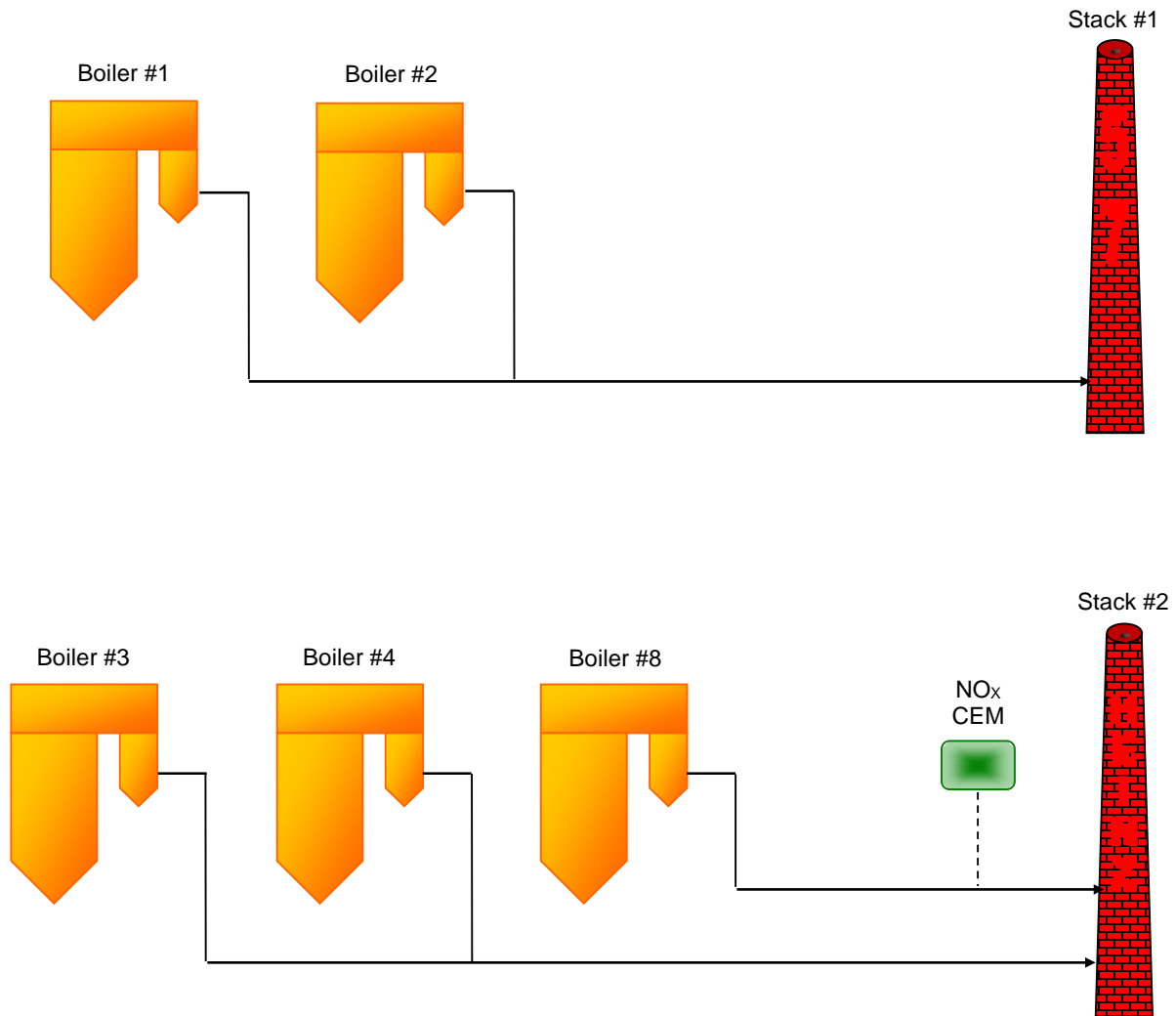
The emission units regulated by this permit are summarized in Table II-1:

TABLE II-1: Emission Unit Identification

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
B001	#1 Boiler – Combustion Engineering Traveling Grate	none	75 MMBtu/hr	Natural Gas	S001
B002	#2 Boiler – Combustion Engineering Traveling Grate	Low-NO _x Burners	91 MMBtu/hr	Natural Gas	S001
B003	#3 Boiler – Babcock & Wilcox Traveling Grate	none	42.2 MMBtu/hr	Natural Gas	S002
B004	#4 Boiler – Babcock & Wilcox Traveling Grate	none	42.2 MMBtu/hr	Natural Gas	S002
B008	#8 Zurn Boiler	Low-NO _x Burners; Flue Gas Recirculation	210 MMBtu/hr	Natural Gas	S002
D001	Diesel Fuel Tank	none	1,000 gallons	Diesel	--
D006	Diesel Fuel Tank	none	115 gallons	Diesel	--
E002	Bulk Flour Silo	Enclosure w/Bag Filter	42.8'×11'	Flour	--
G001	Glue Operations	none	--	Glue	--
G002	Ink Operations	none	--	Ink	--
EG001	Katolight 460T Emergency Generator	none	341,200 Btu/hr	LP Gas	S005
EG004	Spectrum 290DSJ Emergency Generator	none	85,300 Btu/hr	Diesel	S007
EG010	Patterson Fire Pump Engine	none	186,000 Btu/hr	Diesel	
AC-1	Sullair/Caterpillar 3408 DITA Air Compressor	none	460,365 Btu/hr	Diesel	

[See process flow diagrams below]

Process Flow Diagram: Boilers #1 & #2, Boilers #3 & #4, and Boiler #8



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. The first report shall be due May 30, 2017 for the time period beginning on the issuance date of this permit through March 31, 2013. Compliance certifications may be emailed to the Administrator at R3-APD-Permits@epa.gov 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 April 30 of each year for the time period beginning October 1 and ending March 31.
 - 2) One semiannual report is due by October 31 of each year for the time period beginning April 1 and ending September 30.
 - 3) The next semiannual report shall be due April 30, 2017 for the time period beginning on October 1, 2016 through March 31, 2017.
- e. Reports may be submitted electronically to AQReports@AlleghenyCounty.us. Certification by the responsible official in accordance with General Condition III.4 above shall be provided separately via 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. 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.

37. 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.

38. 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.

39. 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. Orders (§2108.01.f)

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

12. Violations (§2108.01.g)

The failure to submit any report or update thereof required by General Condition III.28 and Site Level Conditions IV.7 through IV.11 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

13. Emissions Testing (§2108.02)

- a. **Orders.** The person responsible for any source shall, upon order by the Department, conduct, or cause to be conducted, such emissions tests as specified by the Department within such reasonable time as is specified by the Department. Test results shall be submitted in writing to the Department within 20 days after completion of the tests, unless a different period is specified in the Department's order. Emissions testing shall comply with all applicable requirements of Article XXI §2108.02.e.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- c. **Testing Requirements.** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.
- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.
- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Abrasive Blasting (§2105.51)

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

complies with all applicable requirements of Article XXI §2105.51.

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

15. Asbestos Abatement (§2105.62, §2105.63)

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

16. Protection of Stratospheric Ozone (40 CFR Part 82)

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

17. Permit Source Premises (§2105.40)

- a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:
 - 1) Are visible at or beyond the property line of such source;
 - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
 - 3) Have an opacity of 60% or more at any time.
- b. **Deposition on Other Premises.** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.17.a above.

18. Parking Lots and Roadways (§2105.42)

- a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:
 - 1) Are visible at or beyond the property line;
 - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
 - 3) Have an opacity of 60% or more at any time.
- b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.
- c. Site Level Condition IV.18.a above shall apply during any repairs or maintenance done to such parking lot or roadway.
- d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.18 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.18.

19. Permit Source Transport (§2105.43)

- a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.19.

20. Construction and Land Clearing (§2105.45)

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

21. Mining (§2105.46)

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

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

22. Demolition (§2105.47)

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

23. Fugitive Emissions (§2105.49)

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

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

24. Episode Plans (§2106.02)

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

25. 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.

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

The permittee shall comply with each applicable emission limitation, work practice standard, and operation and maintenance requirement of 40 CFR Part 63, Subpart ZZZZ – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

27. Greenhouse Gas Reporting (40 CFR Part 98)

If the facility emits 25,000 metric tons or more of carbon dioxide equivalent (CO₂e) in any 12-month period, the facility shall submit reports to the US EPA in accordance with 40 CFR Part 98.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Boiler B001: No. 1 CE Boiler

Process Description: (former) traveling grate boiler
Facility ID: No. 1 CE Boiler
Capacity: 75 MMBtu/hr
Fuel: natural gas
Control Device: none

1. Restrictions:

- a. At no time shall the permittee operate the No. 1 Boiler using any fuel other than utility-grade natural gas. [Installation Permit #0079-I005, condition V.A.1.a; §2103.12.a.2.B]
- b. Heat input shall be limited to 75 MMBtu/hr. [IP #0079-I005, V.A.1.b; §2103.12.a.2.B]
- c. The amount of natural gas combusted shall not exceed 71,430 scf per hour or 626 mmscf in any consecutive 12-month period. Natural gas flow shall be restricted with a high gas flow control valve. The valve shall be locked into position. [IP #0079-I005, V.A.1.c; §2103.12.a.2.B]
- d. Emissions of particulate matter shall not exceed 0.008 lb/MMBtu of heat input. [IP #0079-I005, V.A.1.d; §2103.12.a.2.B; §2104.02.a.1]
- e. Emissions from Boiler No. 1 shall not exceed the following at any time: [IP #0079-I005, V.A.1.g; §2103.12.a.2.B; §2104.02.a.1]

Table V-A-1: Boiler No. 1 Emission Limits

Pollutant	Hourly Emission Limit – (lb/hr)	Annual Emission Limit (tons/year)*
Particulate Matter ²	0.60	2.63
PM ₁₀ ⁽²⁾	0.60	2.63
PM _{2.5} ⁽²⁾	0.60	2.63
Nitrogen Oxides	9.89	43.33
Sulfur Oxides	0.05	0.21
Carbon Monoxide	5.25	22.99
Volatile Organic Compounds	0.43	1.89

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

- f. Emissions of nitrogen oxides shall not exceed 108.6 ppm_{dv} at 3% O₂. [IP #0079-I005, V.A.1.e; §2103.12.a.2.B]

- g. Emissions of carbon monoxide shall not exceed 94.6 ppm_{dv} at 3% O₂. [IP #0079-I005, V.A.1.f; §2103.12.a.2.B]

2. Testing Requirements:

- a. The permittee shall perform emissions testing in accordance with Site Level Condition IV.13 at least once every two (2) years to demonstrate compliance with the NO_x and CO emission limits in condition V.A.1.e, f, and g above. [IP #0079-I005, V.A.2.a; §2103.12.a.2.B; §2103.12.h.1; §2108.02]
- b. The permittee shall conduct each emissions test according to the following methods unless the Department has approved another test method: [IP #0079-I005, V.A.2.b; §2103.12.h.1; §2108.02]
- 1) Method 1 of Appendix A of 40 CFR Part 60 for sample and velocity traverses;
 - 2) Method 2, 2F, or 2G of Appendix A of 40 CFR Part 60 for velocity and volumetric flow rates;
 - 3) Method 3A or 3B of Appendix A of 40 CFR Part 60 for O₂ and CO₂ concentrations;
 - 4) Method 4 of Appendix A of 40 CFR Part 60 for stack gas moisture;
 - 5) Method 10, 10A, or 10B for CO;
 - 6) Method 7E for NO_x;
 - 7) Method 19 F-factor methodology of Appendix A of 40 CFR Part 60 to convert emissions concentration to lb/MMBtu emission rates
- c. The permittee shall conduct three separate test runs for each emissions test. Each test run shall last at least 1 hour. [IP #0079-I005, V.A.2.c; §2103.12.h.1; §2108.02]
- 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. [IP #0079-I005, V.A.2.d; §2103.12.a.2.B]

3. Monitoring Requirements:

- a. The permittee shall install and maintain the necessary fuel flow meter(s) to determine and to record the amount of natural gas combusted in the boiler. [IP #0079-I005, V.A.3.a; §2103.12.a.2.B; §2103.12.i]
- b. The permittee shall monitor the NO_x and CO emission rates monthly using a portable analyzer. For each monitoring event, the permittee shall measure or calculate the following: [IP #0079-I005, V.A.3.b; §2103.12.a.2.B; §2103.12.i]
- 1) Concentration of NO_x in ppm by volume, corrected to 3% O₂;
 - 2) Emissions of NO_x in lb/MMBtu;
 - 3) Concentration of CO in ppm by volume, corrected to 3% O₂;
 - 4) Emissions of CO in lb/MMBtu;
 - 5) Percent oxygen; and
 - 6) Fuel consumption.
- c. The permittee shall calibrate, maintain, and operate the portable analyzing device in accordance with applicable sections of ASTM D6522-11 (or other methods as approved by the Department) and manufacturer recommendations. [IP #0079-I005, V.A.3.c; §2108.03.c]
- d. The permittee shall inspect the boilers weekly, to ensure the physical integrity and proper operation of the boiler and associated equipment. [IP #0079-I005, V.A.3.d; §2103.12.i]

- e. The permittee shall inspect the high gas flow control valve required under condition V.A.1.c above monthly to ensure that the position has not been altered from its set-point. [IP #0079-I005, V.A.3.e; §2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall keep the following records: [IP #0079-I005, V.A.4.a; §2103.12.j]
 - 1) A copy of each semiannual compliance report that is submitted.
 - 2) Records of performance tests or other compliance demonstrations and performance evaluations.
- b. For each monthly test with a portable analyzer as required under condition V.A.3.b above, the permittee shall keep the following records: [IP #0079-I005, V.A.4.b; §2103.12.j]
 - 1) All measurements required under condition V.A.3.b;
 - 2) All calibration checks required under condition V.A.3.c;
 - 3) All adjustments and maintenance performed on the portable analyzer;
- c. The permittee shall keep and maintain the following records for each boiler: [IP #0079-I005, V.A.4.c; §2103.12.j]
 - 1) Monthly fuel usage;
 - 2) Cold starts (date, time, and duration of each occurrence);
 - 3) Records of the inspections of the high gas flow control valve required under condition V.A.3.e above as well as any adjustments made;
 - 4) Hours of operation; and
 - 5) Records of operation, maintenance, inspection, calibration, tune-ups, and/or replacement of equipment.
- d. All records required under this section shall be maintained by the permittee for a period of five years following the date of such record. [IP #0079-I005, V.A.4.d; §2103.12.j.2]

5. Reporting Requirements:

- a. The permittee shall notify the Department of its intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [IP #0079-I005, V.A.5.a; §2103.12.k]
- b. The permittee shall submit semi-annual reports to the Department in accordance with General Condition III.15. [IP #0079-I005, V.A.5.b; §2103.12.k]
- c. The semi-annual report shall contain the following information: [IP #0079-I005, V.A.5.c; §2103.12.k]
 - 1) Company name and address.
 - 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - 3) Date of report and beginning and ending dates of the reporting period;
 - 4) Records of fuel combustion required under condition V.A.4.c.1) above;
 - 5) A summary of the results of the biennial emissions tests, calculations, and documentation of any operating limits that were re-established during this test, if applicable;
 - 6) A summary of the results of the monthly monitoring with a portable analyzer required under

- condition V.A.3.b above;
- 7) Any startup, shutdown, or malfunction during the reporting period, including any routine shutdown and startup;
 - 8) If there are no deviations, a statement that there were no deviations during the reporting period; and
- d. For each deviation from an emission limit or other requirement of this permit, the permittee shall also include the following information in the report: [IP #0079-I005, V.A.5.d; §2103.12.k]
- 1) The date and time that each malfunction started and stopped and description of the nature of the deviation;
 - 2) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period;
- e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [IP #0079-I005, V.A.5.e; §2103.12.k]
- f. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with Site Level Condition IV.9 is waived and the permittee may report all cold starts in the semi-annual report required under condition V.A.5.b above. [IP #0079-I005, V.A.5.f; §2103.12.k]

6. Work Practice Standard:

- a. The permittee shall perform an annual adjustment or tune-up on the boiler to include at a minimum: [IP #0079-I005, V.A.6.a; §2105.03]
- 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 the emissions of CO; and
 - 3) Inspection of the air-to-fuel ratio, control system, and adjustment necessary to insure proper calibration and operation as specified by the manufacturer.
- b. The permittee shall record each adjustment conducted under the procedures in condition V.A.6.a above in a permanently bound log book or other method approved by the Department which contains at a minimum: [IP #0079-I005, V.A.6.b; §2105.03]
- 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 rates before and after adjustment; and
 - 5) The excess oxygen rate before and after adjustment.
- c. The permittee shall keep all manufacturers' specifications and operation manuals on-site and available for Department inspection and copying for the life of the equipment. [IP #0079-I005, V.A.6.c; §2103.12.j]

B. Boiler B002: No. 2 CE Boiler

Process Description: (former) traveling grate boiler
Facility ID: No. 2 CE Boiler
Capacity: 91 MMBtu/hr
Fuel: natural gas
Control Device: low-NO_x burners

1. Restrictions:

- a. The permittee shall not operate or allow to be operated the No. 2 Boiler unless low-NO_x burners meeting the requirements of conditions V.B.1.f and g below have been installed. [§2103.12.a.2.D]
- b. At no time shall the permittee operate the No. 2 Boiler using any fuel other than utility-grade natural gas. [IP #0079-I005, V.B.1.a; §2103.12.a.2.D]
- c. Heat input shall be limited to 91 MMBtu/hr. [IP #0079-I005, V.B.1.b; §2103.12.a.2.D]
- d. The amount of natural gas combusted shall not exceed 86,700 scf per hour or 759.2 mmscf in any consecutive 12-month period. [IP #0079-I005, V.B.1.c; §2103.12.a.2.D]
- e. Emissions of particulate matter shall not exceed 0.008 lb/MMBtu of heat input. [IP #0079-I005, V.B.1.e; §2103.12.a.2.D §2104.02.a.1]
- f. Emissions of nitrogen oxides shall not exceed 30 ppmdv at 3% O₂. [IP #0079-I005, V.B.1.f; §2103.12.a.2.D]
- g. Emissions of carbon monoxide shall not exceed 200 ppm_{dv} at 3% O₂. [IP #0079-I005, V.B.1.g; §2103.12.a.2.D]
- h. Emissions from Boiler No. 2 shall not exceed the following at any time: [IP #0079-I005, V.B.1.h; §2103.12.a.2.D §2104.02.a.1]

Table V-B-1: Boiler No. 2 Emission Limits

Pollutant	Hourly Emission Limit – (lb/hr)	Annual Emission Limit (tons/year)¹
Particulate Matter ²	0.73	3.19
PM ₁₀ ⁽²⁾	0.73	3.19
PM _{2.5} ⁽²⁾	0.73	3.19
Nitrogen Oxides	3.32	14.35
Sulfur Oxides	0.06	0.25
Carbon Monoxide	13.46	58.96
Volatile Organic Compounds	0.52	2.30

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

2. All particulate matter emission limits are for total particulate.

2. Testing Requirements:

- a. The permittee shall perform emissions testing in accordance with Site Level Condition IV.13 within 120 days of commencement of operation of the low NO_x burners, and at least once every two (2) years thereafter, to demonstrate compliance with the NO_x and CO emission limits in condition V.B.1.f, g, and h above. [IP #0079-I005, V.B.2.a; §2103.12.h.1; §2108.02]
- b. The permittee shall conduct each emissions test according to the following methods unless the Department has approved another test method: [IP #0079-I005, V.B.2.b; §2103.12.h.1; §2108.02]
 - 1) Method 1 of Appendix A of 40 CFR Part 60 for sample and velocity traverses;
 - 2) Method 2, 2F, or 2G of Appendix A of 40 CFR Part 60 for velocity and volumetric flow rates;
 - 3) Method 3A or 3B of Appendix A of 40 CFR Part 60 for O₂ and CO₂ concentrations;
 - 4) Method 4 of Appendix A of 40 CFR Part 60 for stack gas moisture;
 - 5) Method 10, 10A, or 10B for CO;
 - 6) Method 7E for NO_x;
 - 7) Method 19 F-factor methodology of Appendix A of 40 CFR Part 60 to convert emissions concentration to lb/MMBtu emission rates
- c. The permittee shall conduct three separate test runs for each emissions test. Each test run shall last at least 1 hour. [IP #0079-I005, V.B.2.c; §2103.12.h.1; §2108.02]
- 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. [IP #0079-I005, V.B.2.d; §2103.12.a.2.D]

3. Monitoring Requirements:

- a. The permittee shall install and maintain the necessary fuel flow meter(s) to determine and to record the amount of natural gas combusted in the boiler. [IP #0079-I005, V.B.3.a; §2103.12.a.2.D; §2103.12.i]
- b. The permittee shall monitor the NO_x and CO emission rates monthly using a portable analyzer. For each monitoring event, the permittee shall measure or calculate the following: [IP #0079-I005, V.B.3.b; §2103.12.a.2.D; §2103.12.i]
 - 1) Concentration of NO_x in ppm by volume, corrected to 3% O₂;
 - 2) Emissions of NO_x in lb/MMBtu;
 - 3) Concentration of CO in ppm by volume, corrected to 3% O₂;
 - 4) Emissions of CO in lb/MMBtu;
 - 5) Percent oxygen; and
 - 6) Fuel consumption.
- c. The permittee shall calibrate, maintain, and operate the portable analyzing device in accordance with applicable sections of ASTM D6522-11 (or other methods as approved by the Department) and manufacturer recommendations. [IP #0079-I005, V.B.3.c; §2108.03.c]
- d. The permittee shall inspect the boilers weekly, to ensure the physical integrity and proper operation of the boiler and associated equipment. [IP #0079-I005, V.B.3.d; §2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall keep the following records: [IP #0079-I005, V.B.4.a; §2103.12.j]
 - 1) A copy of each semiannual compliance report that is submitted.
 - 2) Records of performance tests or other compliance demonstrations and performance evaluations.
- b. For each monthly test with a portable analyzer as required under condition V.B.3.b above, the permittee shall keep the following records: [IP #0079-I005, V.B.4.b; §2103.12.j]
 - 1) All measurements required under condition V.B.3.b;
 - 2) All calibration checks required under condition V.B.3.c;
 - 3) All adjustments and maintenance performed on the portable analyzer;
- c. The permittee shall keep and maintain the following records for each boiler: [IP #0079-I005, V.B.4.c; §2103.12.j]
 - 1) Monthly fuel usage;
 - 2) Cold starts (date, time, and duration of each occurrence);
 - 3) Hours of operation; and
 - 4) Records of operation, maintenance, inspection, calibration, tune-ups, and/or replacement of equipment.
- d. All records required under this section shall be maintained by the permittee for a period of five years following the date of such record. [IP #0079-I005, V.B.4.d; §2103.12.j.2]

5. Reporting Requirements:

- a. The permittee shall notify the Department of its intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [IP #0079-I005, V.B.5.a; §2103.12.a.2.D; §2103.12.k]
- b. The permittee shall submit semi-annual reports to the Department in accordance with General Condition III.15. [IP #0079-I005, V.B.5.b; §2103.12.a.2.D; §2103.12.k]
- c. The semi-annual report shall contain the following information: [IP #0079-I005, V.B.5.c; §2103.12.a.2.D; §2103.12.k]
 - 1) Company name and address.
 - 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - 3) Date of report and beginning and ending dates of the reporting period;
 - 4) Records of fuel combustion required under condition V.B.4.c.1) above;
 - 5) A summary of the results of the biennial emissions tests, calculations, and documentation of any operating limits that were re-established during this test, if applicable;
 - 6) A summary of the results of the monthly monitoring with a portable analyzer required under condition V.B.3.b above;
 - 7) Any startup, shutdown, or malfunction during the reporting period, including any routine shutdown and startup;
 - 8) If there are no deviations, a statement that there were no deviations during the reporting period; and

- d. For each deviation from an emission limit or other requirement of this permit, the permittee shall also include the following information in the report: [IP #0079-I005, V.B.5.d; §2103.12.a.2.D; §2103.12.k]
 - 1) The date and time that each malfunction started and stopped and description of the nature of the deviation;
 - 2) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period;
- e. Reporting instances of non-compliance, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [IP #0079-I005, V.B.5.e; §2103.12.a.2.D; §2103.12.k]
- f. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with Site Level Condition IV.9 is waived and the permittee may report all cold starts in the semi-annual report required under condition V.B.5.b above. [IP #0079-I005, V.B.5.f; §2103.12.a.2.D; §2103.12.k]

6. Work Practice Standard:

- a. The permittee shall perform an annual adjustment or tune-up on the boiler to include at a minimum: [IP #0079-I005, V.B.6.a; §2103.12.a.2.D; §2105.03]
 - 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 the emissions of CO; and
 - 3) Inspection of the air-to-fuel ratio, control system, and adjustment necessary to insure proper calibration and operation as specified by the manufacturer.
- b. The permittee shall record each adjustment conducted under the procedures in condition V.B.6.a above in a permanently bound log book or other method approved by the Department which contains at a minimum: [IP #0079-I005, V.B.6.b; §2103.12.a.2.D; §2105.03]
 - 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 rates before and after adjustment; and
 - 5) The excess oxygen rate before and after adjustment.
- c. The permittee shall keep all manufacturers' specifications and operation manuals on-site and available for Department inspection and copying for the life of the equipment. [IP #0079-I005, V.B.6.c; §2103.12.a.2.D; §2103.12.j]

C. Boilers B003 and B004: No. 3 & No. 4 B&W Boilers

Process Description: (former) traveling grate boilers
Facility ID: No. 3 B&W Boiler; No. 4 B&W Boiler
Capacity: 42.2 MMBtu/hr, each
Fuel: natural gas
Control Device: none

1. Restrictions:

- a. At no time shall the permittee operate the boilers using any fuel other than utility-grade natural gas. [IP #0079-I005, V.C.1.a; §2103.12.a.2.B]
- b. Heat input shall be limited to 42.2 MMBtu/hr in each boiler. [IP #0079-I005, V.C.1.b; §2103.12.a.2.B]
- c. The amount of natural gas combusted in each boiler shall not exceed 40,200 scf per hour or 352 mmscf in any consecutive 12-month period. [IP #0079-I005, V.C.1.c; §2103.12.a.2.B]
- d. Emissions of particulate matter shall not exceed 0.008 lb/MMBtu of heat input. [IP #0079-I005, V.C.1.d; §2103.12.a.2.B; §2104.02.a.1]
- e. Emissions of nitrogen oxides shall not exceed 86 ppm_{dv} at 3% O₂. [IP #0079-I005, V.C.1.e; §2103.12.a.2.B]
- f. Emissions of carbon monoxide shall not exceed 182.3 ppm_{dv} at 3% O₂. [IP #0079-I005, V.C.1.f; §2103.12.a.2.B]
- g. Emissions from Boilers No. 3 and No. 4 shall not exceed the following at any time: [IP #0079-I005, V.C.1.g; §2103.12.a.2.B; §2104.02.a.1]

Table V-C-1: Boiler No. 3 & No. 4 Emission Limits

Pollutant	Hourly Emission Limit – Per Boiler (lb/hr)	Hourly Combined Emission Limit – Boilers #3 and #4 (lb/hr)	Annual Combined Emission Limit (tons/year)¹
Particulate Matter ²	0.34	0.68	2.96
PM ₁₀ ⁽²⁾	0.34	0.68	2.96
PM _{2.5} ⁽²⁾	0.34	0.68	2.96
Nitrogen Oxides	4.41	8.81	38.63
Sulfur Oxides	0.03	0.05	0.23
Carbon Monoxide	5.69	11.38	49.84
Volatile Organic Compounds	0.24	0.49	2.13

1. A year is defined as any 12 consecutive months.
 2. All particulate matter emission limits are for total particulate.

2. Testing Requirements:

- a. The permittee shall perform emissions testing in accordance with Site Level Condition IV.13 at least once every two (2) years to demonstrate compliance with the NO_x and CO emission limits in condition V.C.1.e, f, and g above. [IP #0079-I005, V.C.2.a; §2103.12.a.2.B; §2103.12.h.1; §2108.02]
- b. The permittee shall conduct each emissions test according to the following methods unless the Department has approved another test method: [IP #0079-I005, V.C.2.b; §2103.12.h.1; §2108.02]
 - 1) Method 1 of Appendix A of 40 CFR Part 60 for sample and velocity traverses;
 - 2) Method 2, 2F, or 2G of Appendix A of 40 CFR Part 60 for velocity and volumetric flow rates;
 - 3) Method 3A or 3B of Appendix A of 40 CFR Part 60 for O₂ and CO₂ concentrations;
 - 4) Method 4 of Appendix A of 40 CFR Part 60 for stack gas moisture;
 - 5) Method 10, 10A, or 10B for CO;
 - 6) Method 7E for NO_x;
 - 7) Method 19 F-factor methodology of Appendix A of 40 CFR Part 60 to convert emissions concentration to lb/MMBtu emission rates
- c. The permittee shall conduct three separate test runs for each emissions test. Each test run shall last at least 1 hour. [IP #0079-I005, V.C.2.c; §2103.12.h.1; §2108.02]
- 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. [IP #0079-I005, V.C.2.d; §2103.12.a.2.B]

3. Monitoring Requirements:

- a. The permittee shall install and maintain the necessary fuel flow meter(s) to determine and to record the amount of natural gas combusted in each boiler. [IP #0079-I005, V.C.3.a; §2103.12.a.2.B; §2103.12.i]
- b. The permittee shall monitor the NO_x and CO emission rates from each boiler monthly using a portable analyzer. For each monitoring event, the permittee shall measure or calculate the following: [IP #0079-I005, V.C.3.b; §2103.12.a.2.B; §2103.12.i]
 - 1) Concentration of NO_x in ppm by volume, corrected to 3% O₂;
 - 2) Emissions of NO_x in lb/MMBtu;
 - 3) Concentration of CO in ppm by volume, corrected to 3% O₂;
 - 4) Emissions of CO in lb/MMBtu;
 - 5) Percent oxygen; and
 - 6) Fuel consumption.
- c. The permittee shall calibrate, maintain, and operate the portable analyzing device in accordance with applicable sections of ASTM D6522-11 (or other methods as approved by the Department) and manufacturer recommendations. [IP #0079-I005, V.C.3.c; §2108.03.c]
- d. The permittee shall inspect the boilers weekly, to ensure the physical integrity and proper operation of the boiler and associated equipment. [IP #0079-I005, V.C.3.d; §2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall keep the following records: [IP #0079-I005, V.C.4.a; §2103.12.j]
 - 1) A copy of each semiannual compliance report that is submitted.
 - 2) Records of performance tests or other compliance demonstrations and performance evaluations.
- b. For each monthly test with a portable analyzer as required under condition V.C.3.b above, the permittee shall keep the following records: [IP #0079-I005, V.C.4.b; §2103.12.j]
 - 1) All measurements required under condition V.C.3.b;
 - 2) All calibration checks required under condition V.C.3.c;
 - 3) All adjustments and maintenance performed on the portable analyzer;
- c. The permittee shall keep and maintain the following records for each boiler: [IP #0079-I005, V.C.4.c; §2103.12.j]
 - 1) Monthly fuel usage;
 - 2) Cold starts (date, time, and duration of each occurrence);
 - 3) Hours of operation; and
 - 4) Records of operation, maintenance, inspection, calibration, tune-ups, and/or replacement of equipment.
- d. All records required under this section shall be maintained by the permittee for a period of five years following the date of such record. [IP #0079-I005, V.C.4.d; §2103.12.j.2]

5. Reporting Requirements:

- a. The permittee shall notify the Department of its intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [IP #0079-I005, V.C.5.a; §2103.12.a.2.B; §2103.12.k]
- b. The permittee shall submit semi-annual reports to the Department in accordance with General Condition III.15. [IP #0079-I005, V.C.5.b; §2103.12.a.2.B; §2103.12.k]
- c. The semi-annual report shall contain the following information: [IP #0079-I005, V.C.5.c; §2103.12.a.2.B; §2103.12.k]
 - 1) Company name and address.
 - 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - 3) Date of report and beginning and ending dates of the reporting period;
 - 4) Records of fuel combustion required under condition V.C.4.c.1) above;
 - 5) A summary of the results of the biennial emissions tests, calculations, and documentation of any operating limits that were re-established during this test, if applicable;
 - 6) A summary of the results of the monthly monitoring with a portable analyzer required under condition V.C.3.b above;
 - 7) Any startup, shutdown, or malfunction during the reporting period, including any routine shutdown and startup;
 - 8) If there are no deviations, a statement that there were no deviations during the reporting period; and
- d. For each deviation from an emission limit or other requirement of this permit, the permittee shall

also include the following information in the report: [IP #0079-I005, V.C.5.d; §2103.12.a.2.B; §2103.12.k]

- 1) The date and time that each malfunction started and stopped and description of the nature of the deviation;
 - 2) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period;
- e. Reporting instances of non-compliance, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [IP #0079-I005, V.C.5.e; §2103.12.a.2.B; §2103.12.k]
- f. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with Site Level Condition IV.9 is waived and the permittee may report all cold starts in the semi-annual report required under condition V.C.5.b above. [IP #0079-I005, V.C.5.f; §2103.12.a.2.B; §2103.12.k]

6. Work Practice Standard:

- a. The permittee shall perform an annual adjustment or tune-up on the boiler to include at a minimum: [IP #0079-I005, V.C.6.a; §2103.12.a.2.B; §2105.03]
- 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 the emissions of CO; and
 - 3) Inspection of the air-to-fuel ratio, control system, and adjustment necessary to insure proper calibration and operation as specified by the manufacturer.
- b. The permittee shall record each adjustment conducted under the procedures in condition V.C.6.a above in a permanently bound log book or other method approved by the Department which contains at a minimum: [IP #0079-I005, V.C.6.b; §2103.12.a.2.B; §2105.03]
- 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 rates before and after adjustment; and
 - 5) The excess oxygen rate before and after adjustment.
- c. The permittee shall keep all manufacturers' specifications and operation manuals on-site and available for Department inspection and copying for the life of the equipment. [IP #0079-I005, V.C.6.c; §2103.12.a.2.B; §2103.12.j]

D. Boiler B008: No. 8 Zurn Boiler

Process Description: Natural gas-fired boiler
Facility ID: No. 8 Zurn Boiler
Capacity: 210 MMBtu/hr
Fuel: Natural Gas
Control Device: Low-NO_x burner with flue gas recirculation

1. Restrictions:

- a. Only utility-grade natural gas shall be combusted in the Zurn boiler. [IP #0079-I004, V.A.1.a; §2103.12.a.2.D; §60.48b(j)(2)]
- b. Heat input shall be limited to 210 MMBtu/hr. [IP #0079-I004, V.A.1.b; §2103.12.a.2.D]
- c. The amount of natural gas combusted shall not exceed 197,000 scf per hour or 1,272 mmscf in any consecutive 12-month period. [IP #0079-I004, V.A.1.c; §2103.12.a.2.D]
- d. Emissions of particulate matter shall not exceed 0.008 lb/MMBtu. [IP #0079-I004, V.A.1.d; §2103.12.a.2.D; §2104.02.a.1]
- e. Emissions of nitrogen oxides shall be limited to 0.036 lb/MMBtu and shall not exceed 30 ppm_{vd} at 3% O₂. [IP #0079-I004, V.A.1.e; §2103.12.a.2.D; §60.44b(a)(1)]
- f. Emissions of carbon monoxide shall be limited to 0.146 lb/MMBtu and shall not exceed 200 ppm_{vd} at 3% O₂. [IP #0079-I004, V.A.1.f; §2103.12.a.2.D]
- g. Emissions from the Zurn boiler shall not exceed the following at any time: [IP #0079-I004, V.A.1.g; §2103.12.a.2.D; §2104.02.a.1]

Table V-D-1: Boiler No. 8 Emission Limits

Pollutant	Short-Term Emission Limits (lb/hr)	Long-Term Emission Limits (tpy) ²
Particulate Matter ¹	1.68	5.42
PM ₁₀ ¹	1.68	5.42
PM _{2.5} ¹	1.68	5.42
Nitrogen Oxides	7.56	24.2
Sulfur Oxides	0.12	0.39
Carbon Monoxide	30.7	99.0
Volatile Organic Compounds	0.69	2.22

1. Includes both filterable and condensable particulate.
2. A year is defined as any consecutive 12-month period.

- h. The NO_x emissions limits in conditions V.D.1.e & g above apply at all times including periods of startup, shutdown, or malfunction. [IP #0079-I004, V.A.1.h; §2103.12.a.2.D; §60.44b(h)]

2. Testing Requirements:

- a. The permittee shall perform emissions testing at least once every year to determine compliance with the CO limits in conditions V.D.1.f and g above, and at least once every two (2) years to determine compliance with the NO_x limits in conditions V.D.1.e and g above. [IP #0079-I004, V.A.2.a; §2103.12.a.2.D; §2103.12.h.1; §2108.02; §60.46b(a)]
- b. Testing for NO_x and CO shall be determined by an average of three (3) 1-hour test runs. Testing shall be conducted in accordance with Site Level Condition IV.13 (“Emissions Testing”) and the following U.S. EPA test methods or other test methods approved by the Department: [IP #0079-I004, V.A.2.b; §2103.12.a.2.D; §2103.12.h]
 - 1) Method 7, 7e, or equivalent for NO_x;
 - 2) Method 10 for CO.
- c. If after the initial emissions test, emissions of NO_x and CO are demonstrated to be significantly less than the limits in conditions V.D.1.e, f, and g above, the Department shall re-evaluate and may revise those limits. [IP #0079-I004, V.A.2.c; §2103.12.a.2.D; §2103.12.h]
- d. If after three (3) consecutive annual tests, the permittee demonstrates CO emissions of 150 ppm_{vd} (at 3% O₂) or less, and there are no changes in the operation of the boiler that could increase emissions, the permittee may submit a request to the Department to perform emissions testing once every two (2) years. The permittee shall continue to test CO emissions every two years unless a test shows emissions greater than 150 ppm_{vd}, at which time annual emissions testing shall resume. [IP #0079-I004, V.A.2.d; §2103.12.a.2.D; §2103.12.h]
- e. For compliance with 40 CFR Part 60, Subpart Db testing requirements, NO_x shall be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate shall be used to determine compliance with the NO_x emission limits in conditions V.D.1.e & g above. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. [IP #0079-I004, V.A.2.e; §2103.12.a.2.D; §2103.12.h.1; §60.46b(e)(1)]
- f. 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. [IP #0079-I004, V.A.2.f; §2103.12.a.2.D; §2103.12.h]

3. Monitoring Requirements:

- a. The permittee shall install and maintain the necessary meter(s) to determine and to record the amount of natural gas combusted. The meter(s) shall be calibrated regularly in accordance with the manufacturer’s recommended guidelines. [IP #0079-I004, V.A.3.a; §2103.12.a.2.D; §2103.12.i]
- b. The permittee shall install, calibrate, maintain, and operate a Continuous Emissions Monitoring System (CEMS) for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere, and shall record the output of the system. The CEMS shall be installed in compliance with 25 PA Code §§139.101-139.111. [IP #0079-I004, V.A.3.b; §2103.12.i; §2108.03.b; §60.48b(b)(1)]
- c. The CEMS shall be operated and data recorded during all periods of operation of the Zurn boiler except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and

zero and span adjustments. [IP #0079-I004, V.A.3.c; RACT #211, §1.4; §2103.12.i; §60.48b(c)]

- d. The 1-hour average NO_x emission rates measured by the continuous NO_x monitor required by condition V.D.3.b above shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates (lb/hr) under condition V.D.1.e above. The 1-hour averages shall be calculated using the data points outlined below: [IP #0079-I004, V.A.3.d; §2103.12.i; §60.48b(d); §60.13(h)(2)]
- 1) Except as provided under condition 3) below, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.
 - 2) Except as provided under condition 3) below, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.
 - 3) For any operating hour in which required maintenance or quality-assurance activities are performed:
 - a) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or
 - b) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.
 - 4) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of condition 3) above are met, based solely on valid data recorded after the successful calibration.
 - 5) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.
 - 6) Except as provided under 7) below, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.
 - 7) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant).
- e. The procedures under 40 CFR, §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. The span value for NO_x shall be 500 ppm: [IP #0079-I004, V.A.3.e; §2103.12.i; §60.48b(e)(2)(i)]
- f. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7 or Method 7A of appendix A of 40 CFR Part 60, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each operating day, in at least 22 out of 30 successive operating days. [IP #0079-I004, V.A.3.f; RACT #211, §1.4; §2103.12.i; §60.48b(f)]
- g. The permittee shall maintain fuel records of the sulfur content of the fuels burned, as described under condition V.D.4.c below. [IP #0079-I004, V.A.3.g; RACT #211, §1.4; §2103.12.i; §60.48b(j)(2)]

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following records: [IP #0079-I004, V.A.4.a; §2103.12.j;

§60.49b(d)(2); §63.7540(a); §63.7555(c)]

- 1) Monthly fuel usage;
 - 2) Monthly steam load;
 - 3) Cold starts (date, time, and duration of each occurrence); and
 - 4) Records of operation, maintenance, inspection, calibration, tune-ups, and/or replacement of equipment.
- b. The permittee shall maintain records of the following information for each operating day: [IP #0079-I004, V.A.4.b; §2103.12.j; §60.49b(g); §60.49b(i)]
- 1) Calendar date;
 - 2) The average hourly NO_x emission rates (expressed as NO₂) (lb/MMBtu heat input and lb/hr) measured;
 - 3) The 30-day average NO_x emission rates (lb/MMBtu heat input) calculated at the end of each operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - 4) Identification of the days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emission limits in conditions V.D.1.e & g above, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - 5) Identification of the days for which data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - 6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - 7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
 - 8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - 9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with conditions 2) or 3) above; and
 - 10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of 40 CFR Part 60.
- c. The permittee shall obtain and maintain at the facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the fuel meets the definition of natural gas as defined in 40 CFR, §60.41b and the applicable sulfur limit in condition V.D.1.a above. [IP #0079-I004, V.A.4.c; §2103.12.j; §60.49b(r)]
- d. All records required shall be maintained by the permittee for a period of five (5) years following the date of such record. [IP #0079-I004, V.A.4.d; §2103.12.j.2; §2105.03.d; §60.49b(o); §63.7560(b)]

5. Reporting Requirements:

- a. The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15. [IP #0079-I004, V.A.5.e; §2103.12.k; §60.49b(w); §63.7550(b)]
- b. The semiannual report shall include the following information: [IP #0079-I004, V.A.5.f; §2103.12.k; §60.48c(e); §63.7550(c)(1)-(3)]
 - 1) Company name and address;
 - 2) Statement by the responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - 3) Calendar dates covered in the reporting period;

- 4) The records of fuel combustion required under condition V.D.4.c;
 - 5) The NO_x emissions rates (hourly and 30-day average) required to be recorded under condition V.D.4.b above;
 - 6) Other CEMS information required under condition V.D.4.b above;
 - 7) If a malfunction occurred during the reporting period, the number, duration, and a brief description for each type of malfunction, as well as a description of actions taken to minimize emissions, including actions taken to correct the malfunction;
 - 8) The date of the most recent tune-up required by condition V.D.6.a below;
 - 9) Cold start information; and
 - 10) Reasons for any noncompliance with the conditions in this permit.
- c. Reports shall be submitted to the Department certifying that only natural gas meeting the requirements of condition V.D.1.a were combusted during the reporting period; [IP #0079-I004, V.A.5.g; §2103.12.j; §60.49b(r)]
- d. If an annual tune-up of the boiler was conducted in accordance with condition V.D.6.a below during the reporting period, the permittee shall maintain on-site and submit an annual report containing the following information: [IP #0079-I004, V.A.5.h; §2103.12.k; §63.7540(a)(10)(vi)]
- 1) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the boiler; and
 - 2) A description of any corrective actions taken as a part of the combustion adjustment.
- e. The permittee shall submit quarterly reports for the CEMS. The quarterly report shall include for each reporting period: [IP #0079-I004, V.A.5.i; §2108.03.d.1, 3 & 4]
- 1) An identification of each instance during which emissions exceeded the limits in conditions V.D.1.e and V.D.1.g above;
 - 2) An identification of each period during which the continuous emission monitoring system was inoperative, except for zero and span drift checks, the reasons therefore, and the nature of repairs or adjustments performed or to be performed; and
 - 3) An identification of calibrations, zero and span drift checks, and other quality assurance procedures.
- f. The permittee shall submit excess emission reports for any excess emissions that occurred during the reporting period. [IP #0079-I004, V.A.5.j; §2103.12.k; §60.49b(h)(2)(i)]
- g. 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. [IP #0079-I004, V.A.5.k; §2103.12.a.2.D; §2103.12.k.1]

6. Work Practice Standard:

- a. The permittee shall conduct a tune-up of the boiler annually as specified below: [IP #0079-I004, V.A.6.a; §2103.12.a.2.D; §63.7500(a)(1), Table 3-2; §63.7540(a)(10)]
- 1) Inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown, but it must be inspected at least once every 36 months);
 - 2) Inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - 3) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;

- 4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available; and
 - 5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
- b. If the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup. [IP #0079-I004, V.A.6.b; §2103.12.a.2.D; §63.7540(a)(13)]
 - c. Each annual tune-up specified in condition V.D.6.a above must be no more than 13 months after the previous tune-up. [IP #0079-I004, V.A.6.c; §2103.12.a.2.D; §63.7515(d)]
 - d. At all times, the permittee shall operate and maintain the Zurn Boiler, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used shall be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [IP #0079-I004, V.A.6.d; §2103.12.a.2.D; §2105.03; §63.7500(a)(3)]
 - e. The permittee shall keep all manufacturers' specifications and operation manuals on-site and available for Department inspection and copying for the life of the equipment. [IP #0079-I004, V.A.6.e; §2103.12.a.2.D; §2103.12.j]

VI. MISCELLANEOUS**A. Emergency Generators & Compressor**

- a. The following table summarizes the emergency generators and compressors located at Bay Valley Foods that were determined to be of minor significance:

Table VI-A-1: Emergency Generators

Facility ID	Generator Name & Model	Maximum Capacity	Fuel	Basis for Exemption
G001	Katolight 460T	341,200 Btu/hr	LP Gas	PTE is <1.0 tpy for NO _x , <0.2 tpy for CO, and <0.08 tpy for all other criteria pollutants
G004	Spectrum 290DSJ	85,300 Btu/hr	Diesel	Rating is <100 bhp
G010	Patterson Fire Pump Engine	186,000 Btu/hr	Diesel	Rating is <100 bhp
AC-1	Sullair/Caterpillar 3408 DITA Air Compressor	460,365 Btu/hr	Diesel	PTE is <1.0 tpy for NO _x , <0.2 tpy for CO, and <0.08 tpy for all other criteria pollutants

- b. The permittee shall not operate or allow to be operated any emergency generator or compressor unless it is properly operated and maintained according to the following specifications at all times: [§2103.12.a.2.B]
- 1) Engines combusting fuel oil shall combust only diesel fuel with a maximum allowable sulfur content of 15 ppm, by weight. [§63.6590(c); §60.4207(b)]
 - 2) The engines shall be properly operated and maintained according to manufacturer's specifications. The manufacturer's operation and maintenance manuals shall be kept on site at all times. [§63.6625(e)(3); §60.4211(a)(1)&(2)]
 - 3) Engines shall be fired during emergency conditions only.
- c. The permittee shall keep and maintain the following data for each generator and compressor: [§2103.12.j & k; §63.6655(e), (f)]
- 1) Fuel consumption (monthly, and 12-month), type of fuel consumed and suppliers' 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); and
 - 4) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.
- d. The permittee shall report the Monthly and 12-month data required to be recorded by condition VI.A.c above to the Department in accordance with General Condition III.15. [§2103.12.k]
- e. The permittee shall conduct the following maintenance on each generator and compressor: [§63.6603(a)]
- 1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - 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.

B. Sources of Minor Significance

- a. The following table summarizes additional processes and/or activities conducted at Bay Valley Foods that were determined to be of minor significance:

Table VI-B-1: Sources of Minor Significance

Facility ID	Source Description	Basis for Exemption
D001	Diesel Fuel Tank	Fuel oil storage – 1,000 gallons
D006	Diesel Fuel Tank	Fuel oil storage – 115 gallons
E002	Bulk Flour Silo	Enclosed silo with bag filter
F001	Roads & Vehicles	PTE <0.22 tpy PM and <0.05 tpy PM ₁₀
G001	Miscellaneous Source – Glue	PTE < 0.1 tpy VOC
G002	Miscellaneous Source – Ink	PTE <1.5 tpy VOC

- b. The permittee shall keep and maintain the following data for the Bulk Flour Silo: [§2103.12.a.2.B; §2103.12.j & k]
- 1) Monthly and annual throughput;
 - 2) Records of maintenance and inspection of silos; and
 - 3) Records of maintenance and inspection of bag filters.
- c. The permittee shall keep and maintain records of monthly and annual use of solvent-based glue and solvent-based ink. Records shall include type of solvent-based product used and amount. [§2103.12.a.2.B; §2103.12.j & k]
- d. The permittee shall report the monthly and 12-month data required to be recorded by condition VI.B.b and c above to the Department in accordance with General Condition III.15. [§2103.12.a.2.B; §2103.12.k]

VII. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this facility.

VIII. EMISSIONS LIMITATIONS SUMMARY

The annual emission limitations for the Bay Valley Foods facility are summarized in the following table:

TABLE VIII-1: Total Facility Maximum Potential-to-Emit

Pollutant	Total (tpy[*])
Particulate Matter	14.60
Particulate Matter <10 µm (PM ₁₀)	14.43
Particulate Matter <2.5 µm (PM _{2.5})	14.39
Nitrogen Oxides (NO _x)	123.12
Sulfur Oxides (SO _x)	1.14
Carbon Monoxide (CO)	231.60
Volatile Organic Compounds (VOC)	10.14
Greenhouse Gases (CO ₂ e)	236,176

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