



**BUREAU OF AIR MANAGEMENT
 NEW SOURCE REVIEW PERMIT
 TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

Owner/Operator	CPV Towantic, LLC
Address	50 Braintree Hill Office Park, Suite 300 Braintree, MA 02184
Equipment Location	16 Woodruff Hill Road Oxford, CT
Equipment Description	48.97 MMBtu/hr Natural Gas Fired CB Nebraska Boiler Model Number NB-300D-70
Town-Permit Numbers	144-0025
Premises Number	14
Stack Number	9
Modification Issue Date	May 1, 2023
Prior Permit Issue Dates	February 14, 2017 November 30, 2015
Expiration Date	None

 for
 Katherine S. Dykes
 Commissioner

May 1, 2023

 Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

PART I. DESIGN SPECIFICATIONS

A. General Description

CB-Nebraska NB-300D-70, 48.97MMBtu/hr natural gas fired auxiliary boiler. The boiler provides steam to warm up the steam turbine to minimize the duration of plant startups.

B. Equipment Design Specifications

1. Fuel Type: Natural Gas
2. Maximum Fuel Firing Rate (CF/hr): 47,647
3. Maximum Gross Heat Input (MMBTU/hr): 48.97
4. Maximum Steam Flow (lb/hr) @ 387°F and 200 psig: 37,216

C. Control Equipment Design Specifications

1. Ultra-Low NO_x Burner/Flue Gas Recirculation
 - a. Make: CB-Nebraska

D. Stack Parameters

1. Minimum Stack Height (ft): 62
2. Minimum Exhaust Gas Flow Rate (acfm): 4,910
3. Minimum Stack Exit Temperature at maximum firing rate (°F): 241 (at economizer exit)
4. Minimum Distance from Stack to Property Line (ft): 136

PART II. OPERATIONAL CONDITIONS

A. Equipment

1. This unit shall only fire natural gas.
2. Maximum Fuel Consumption over any Consecutive 12 Month Period: 190.6 MMft³
3. The Permittee shall not operate this unit with either of the combustion turbines, permit numbers 144-0023 and 144-0024, for 500 hours or more in any calendar year.
4. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.

5. The Permittee shall properly operate the flue gas recirculation (FGR) system at all times that this equipment is in operation and emitting air pollutants.

PART III. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

A. Pollutants

Pollutant	lb/hr		tpy
PM ₁₀	0.34		0.69
PM _{2.5}	0.34		0.69
SO ₂	0.07		0.15
NO _x	0.42	7 ppmvd @3% O ₂	0.84
VOC	0.20		0.40
CO	1.81	50 ppmvd @3% O ₂	3.63
Pb	2.39E-05		4.77E-05
H ₂ SO ₄	0.006		0.01
CO _{2e}		117 lbs/MMBtu	11,463

B. Hazardous Air Pollutants

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSCA Section 22a-174-29. [STATE ONLY REQUIREMENT]

C. Opacity

This equipment shall not exceed 10% opacity during any six minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9.

- D. Demonstration of compliance with the above emission limits may be met by calculating emissions based on emission factors from the following sources:

- NO_x, CO, VOC: Stack test data
- PM₁₀: Guaranteed Vendor Emissions Factor
- Opacity: Stack Test Data
- SO₂, H₂SO₄: Calculated from fuel sulfur content not exceeding 0.5 grains of Sulfur/100 dscf
- Pb: AP-42, Table 1.4-2
- CO_{2e}: 40 CFR Part 98, Tables A-1, C-1, and C-2

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Monitoring

1. The Permittee shall continuously monitor this unit's fuel consumption using a non-resettable totalizing fuel meter.
2. The Permittee shall continuously monitor this unit's hours of operation.
3. The Permittee shall perform inspections of the burners and flue gas recirculation (FGR) system as recommended by the manufacturer.
4. The Permittee shall monitor all hours of simultaneous operations of this unit with either of the combustion turbines.

B. Record Keeping

1. The Permittee shall keep records of hourly, monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
2. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO, and CO_{2e} emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
3. The Permittee shall make and keep records of all maintenance and tune-up activities for this unit.
4. The Permittee shall make and keep records of all inspections of the burners and FGR system.
5. The Permittee shall make and keep records of all hours of simultaneous operation of this unit with either of the combustion turbines. The Permittee shall total these hours for each month and for the calendar year. The Permittee shall make these calculations within 30 days of the end of the previous month.
6. The Permittee shall make and keep records of manufacturer written specifications and recommendations for operation and maintenance.
7. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

C. Reporting

1. The Permittee shall comply with the applicable reporting requirements of RCSA Sections 22a-174-22e(l) and 22a-174-22e(k).

2. The Permittee shall comply with the record keeping and reporting requirements in 40 CFR §60.48c.
3. The Permittee shall notify the commissioner, in writing, of the date of commencement of construction and the date of initial startup of this equipment. Such written notifications shall be submitted no later than 30 days after the subject event.

PART V. STACK EMISSION TEST REQUIREMENTS

Stack emission testing shall be performed in accordance with the [Emission Test Guidelines](#) available on the DEEP website.

Stack testing for the following pollutants shall be conducted within five years from the date of the previous stack test, beginning on February 15, 2023 and every 5 years thereafter.

- PM PM₁₀ PM_{2.5} SO₂ NO_x CO
 VOC Opacity Other (HAPs):

Stack test results shall be reported as follows: all pollutants in units of lb/hr and ppmvd at 3% O₂, where applicable.

PART VI. SPECIAL REQUIREMENTS

- A.** The Permittee shall comply with all applicable sections of the following New Source Performance Standards at all times.

Title 40 CFR Part 60, Subparts Dc and A

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

- B.** The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance as set forth in RCSA Section 22a-174-23. [STATE ONLY REQUIREMENT]

C. Premises Emissions Summary

1. On January 1st of each calendar year, if the potential emissions of NO_x or VOC from the premises are equal to or greater than 25 tons per year per pollutant, then for such pollutant(s), the Permittee shall:
 - a. Monitor NO_x and/or VOC emissions, as applicable, from the premises for such calendar year.
 - b. Calculate and record annual NO_x and/or VOC emissions, as applicable, from the premises for such calendar year, in units of tons. The Permittee shall make these calculations on or before February 1st of the following year with respect to the previous calendar year. Such records shall include a sample calculation(s).
 - c. If actual NO_x and/or VOC emissions, as applicable, from the premises are equal to or greater than 25 tons for such calendar year, the Permittee shall submit to the commissioner, on or before March 1st of the following year, an annual emissions summary with respect to the premises for the previous calendar year. Such summary shall be submitted on forms prescribed or provided by the commissioner.

2. A Permittee is exempt from Part VI.C.1 requirements of this permit if, on January 1st of the subject year, the premises was operating in accordance with any of the following:
 - a. A valid Title V permit issued pursuant to RCSA section 22a-174-33;
 - b. RCSA section 22a-174-33a; or
 - c. RCSA section 22a-174-33b

PART VII. ADDITIONAL TERMS AND CONDITIONS

- A.** This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Any representative of DEEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C.** This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D.** This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- E.** Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F.** Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.

- H. The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

- I. Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT
Engineering Division

TO: Jaimeson Sinclair, Director Application No.: 202211967
Date Received: 12/07/2022

FROM: James Grillo, APCE
Louis J. Corsino III, Supervising APCE

DATE: 04/05/2023

SUBJECT: Final Permit Signature for a Minor Modification to Permit No. 144-0025; CPV Towantic LLC, Oxford, CT

Discussion:

CPV Towantic LLC was issued a tentative determination for Permit No. 144-0025 on March 15, 2023. The permit fee was paid on April 4, 2023 and there were no additional comments on the draft permit received from the applicant.

Recommendation:

Based on the above information, it is recommended that CPV Towantic LLC be issued a minor permit modification to Permit No. 144-0025.

/s/James Grillo
James Grillo, APCE

04/05/2023
Date

Approvals:

/s/ Louis J. Corsino III
Louis J. Corsino III, SAPCE

4/6/2023
Date



May 1, 2023

Mr. Donald G. Atwood
Assett Manager Representative
CPV Towantic, LLC
50 Braintree Hill Office Park suite 300
Braintree, MA 02184
datwood@cpv.com

Dear Mr. Atwood:

Enclosed is a copy of your modified permit to construct and operate a 48.97 MMBtu/hr natural gas auxiliary boiler at 16 Woodruff Hill Road, Oxford, CT.

This letter does not relieve you of the responsibility to comply with the requirements of other appropriate Federal, State, and municipal agencies. This permit is not transferable from one permittee to another without prior written approval, from one location to another, or from one piece of equipment to another. The permit must be made available at the site of operation throughout the period that such permit is in effect.

Pursuant to Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA), CPV Towantic, LLC must apply for a permit modification/revision in writing if it plans any physical change, change in method of operation, or addition to this source which constitutes a modification or revision pursuant to RCSA sections 22a-174-1 and 22a-174-2a, respectively. Any such changes should first be discussed with Mr. James Grillo of the Bureau of Air Management, at james.grillo@ct.gov or 860-424-3570. Such changes shall not commence prior to the issuance of a permit modification.

Sincerely,

Jaimeson Sinclair
Director
Engineering Division
Bureau of Air Management

JS:JAG:jad

cc (via electronic mail): Keith Hill, Air Enforcement; Keith.Hill@ct.gov
Mark Potash, Air Enforcement; Mark.potash@ct.gov
Richard Rodrigue, Air Engineering; Richard.Rodrigue@ct.gov
Catherine A. Tubridy, NAES Corp.; Catherine.tubridy@naes.com

Enclosure