

# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION 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:	PPL Wallingford Energy, LLC
Address:	2 N. Ninth Street, Allentown, PA 18101
Equipment Location:	115 John Street, Wallingford, CT 06492
Equipment Description:	Cleaver Brooks Boiler Model CB(LE) 1700-750-125

Town-Permit Numbers:	189-0199
Premises Number:	114
Original Permit Issue Date:	June 5, 2001
Modification Issue Date:	12/17/07
Expiration Date:	None

/s/ Anne Gobin for Gina McCarthy Commissioner December 17, 2007 Date

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The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the commissioner, demonstration of compliance shall be shown.

#### PART I. OPERATIONAL CONDITIONS

#### A. Operating Limits

- 1. Fuel Type(s): Natural Gas
- Maximum Fuel Consumption over any Consecutive 12 Month Period: 13,892,125 ft<sup>3</sup>

#### B. Design Specifications

- 1. Maximum Fuel Firing Rate(s): 33,475 ft<sup>3</sup>/ hr
- 2. Maximum Gross Heat Input: 33.475 MMBTU/hr

#### C. Stack Parameters

- 1. Minimum Stack Height (ft): 40
- 2. Minimum Exhaust Gas Flow Rate (acfm): 8,898
- 3. Stack Exit Temperature (°F): 263
- 4. Minimum Distance from Stack to Property Line (ft): 48.7

**PART II. CONTROL EQUIPMENT** (Applicable if -X- Checked) (See Appendix E for Design Specifications)

#### A. Type

$\boxtimes$	None Scrubber	Selective Non-Catalytic Reduction
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	Electrostatic Precipitator	Low NOx Burner
	Cyclone	Fabric Filter
	Multi-Cyclone	Particulate Trap
$\Box$	Thermal DeNOx	Other

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#### PART III. CONTINUOUS EMISSION MONITORING REQUIREMENTS AND ASSOCIATED EMISSION LIMITS (Applicable if -X- Checked)

CEM shall not be required at this time.

#### PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

- A. The Permittee shall keep records of annual fuel consumption. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding the current month's fuel usage to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
- B. The Permittee shall keep records on premise indicating continual compliance with all above conditions at all times and shall make them available upon request by the Commissioner for the duration of this permit, or for the previous five years, whichever is less.

#### PART V. ALLOWABLE EMISSION LIMITS

The Permittee shall meet the emission limits stated herein at all times.

Criteria Pollutants	lb/hr	lb/MM BTU	TPY
TSP	0.3350	0.0100	0.0695
PM-10	0.3350	0.0100	0.0695
SOx	0.0335	0.0010	6.95E-03
NOx	1.1700	0.0350	0.2430
VOC	0.5360	0.0160	0.1110
CO	1.2400	0.0370	0.2570

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#### PART V. ALLOWABLE EMISSION LIMITS, continued

Non-Criteria Pollutants	lb/hr	MASC $(\mu g/m^3)$
Ammonia Arsenic Benzene Beryllium Cadmium Chromium Cobalt Dichlorobenzene Formaldehyde Hexane Lead Manganese Mercury Nickel POM Naphthalene	0.1071 6.7e-06 7.0e-05 4.0e-07 3.7e-05 4.7e-05 2.8e-06 4.0e-05 0.00251 0.06026 1.7e-05 1.3e-05 8.7e-06 7.0e-05 2.0e-05 2.0e-05	6620.4 0.9195 2758.5 0.1839 7.356 45.975 36.78 165510.0 220.68 66204.0 55.17 367.8 3.678 5.517 -
Selenium Toluene	8.0e-07 0.00011	73.56 137925.0

#### \*Maximum allowable stack concentration

The above statement shall not preclude the commissioner from requiring 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 VI. STACK EMISSION TEST REQUIREMENTS (Applicable if -X- Checked)

Stack emission testing shall be required for the following pollutant(s):

None at this time

PM	SOx	NOx	СО	VOC	🗌 Pb

Other (HAPs): \_\_\_\_, \_\_\_\_,

(See Appendix B for General Requirements)

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#### PART VII. APPLICABLE REGULATORY REFERENCES

RCSA §§22a-174-3a; 22a-174-18; 22a-174-19; 22a-174-29(b); 22a-174-22

These references are not intended to be all inclusive - other sections of the regulations may apply.

#### PART VIII. SPECIAL REQUIREMENTS

- A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
- B. The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA Sections 22a-69-1 through 22a-69-7.4.
- C. The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times. (Applicable if -X- checked)

10 CFR Part 60, Subpart:	🗌 Db 🛛 I	DC 🗌 GG 🛛 🛛	A
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None

(See Appendix C for Detailed Requirements)

#### PART IX. PREMISES-WIDE REQUIREMENTS

Notwithstanding the annual individual air pollutant limit for each turbine or boiler, the premises' emissions from the following permitted emission units, Permit Numbers: 189-0194, 189-0195, 189-0196, 189-0197, 189-0198, 189-0199, and the Black Start Generator operating pursuant to RCSA \$22a-174-3b shall not exceed the following limits. The total TSP/PM-10 emissions shall not exceed 121.747 TPY, the total SO<sub>x</sub> emissions shall not exceed 13.255 TPY, the total NO<sub>x</sub> emissions shall not exceed 48.223 TPY, the total VOC shall not exceed 49.611 TPY, and the total CO emissions shall not exceed 169.697 TPY. Demonstration of compliance with each respective annual premises-wide limit shall be enforced on a rolling 12 month basis.

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#### PART X. 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 the DEP 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."

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#### PART X. ADDITIONAL TERMS AND CONDITIONS, continued

- 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 Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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