

PERMIT FOR FUEL BURNING EQUIPMENT

**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT**

1. Legal Firm Name: The Gilman Brothers Co.
2. Address: Gilman Road, Gilman, Connecticut 06336
3. Equipment Location: Gilman Road, Gilman, Connecticut 06336
4. Equipment Description (Model, I.D. #): Cleaver Brooks Boiler
Model CB100-200

PERMIT TO:

Construct Operate Modify

FEDERAL REQUIREMENTS:

NSPS (40 CFR Part 60) Subpart: _____

NESHAPS (40 CFR Part 61) Subpart: _____

MACT (40 CFR Part 63) Subpart: _____

OZONE NON-ATTAINMENT STATUS:

severe (Major source if VOC or NOx > 25 TPY)

serious (Major source if VOC or NOx > 50 TPY)

Date Issued	Exp. Date
8/11/98	
Town No.	Premise No.
13	1
Permit No.	Stack No.
0005	5
Permit Fee	
\$1000.00	

INTERNAL COMBUSTION ENGINES ONLY:

Emergency use only

Non-emergency use, including self generation

TYPE OF POLLUTANT FOR WHICH THIS PREMISE IS A "MAJOR SOURCE":

SOURCE CLASS:	TSP	SOx	NOx	CO	VOC	PM-10	LEAD	OTHER
New Source <input checked="" type="checkbox"/>	_____	_____	_____	_____	_____	_____	_____	_____
Major Mod <input type="checkbox"/>								
Minor Mod <input type="checkbox"/>								
Aggregate <input type="checkbox"/>								



 ARTHUR J. ROCQUE, JR.
 COMMISSIONER, DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 OR DESIGNATED AGENT

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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

1. Fuel Type(s): A 50%-50% blend of #2 and #4 Oil, blended by fuel dealer
2. Maximum Fuel Consumption over any Consecutive Twelve (12) Month Period: 65,500 gallons
3. Fuel Sulfur Content (% by weight, dry basis): 0.6% or less

Design Specifications

1. Maximum Fuel Firing Rate(s): 60 gallons per hour
2. Maximum Gross Heat Input (MM BTU/hr): 8.369
3. Minimum Stack Height (ft): 28
4. Minimum Exhaust Gas Flow Rate (acfm): 1700
5. Stack Exit Temperature (°F): 300
6. Minimum Distance from Stack to Property Line (ft): 375

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

A. Type

- | | |
|---|--|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Selective Non-Catalytic Reduction |
| <input type="checkbox"/> Scrubber | <input type="checkbox"/> Selective Catalytic Reduction |
| <input type="checkbox"/> Electrostatic Precipitator | <input type="checkbox"/> Low NOx Burner |
| <input type="checkbox"/> Cyclone | <input type="checkbox"/> Fabric Filter |
| <input type="checkbox"/> Multi-Cyclone | <input type="checkbox"/> Particulate Trap |
| <input type="checkbox"/> Thermal DeNOx | <input type="checkbox"/> Other |

B. Minimum Efficiency

1. Capture Efficiency (%): _____
2. Removal Efficiency (%): _____
3. Overall Efficiency (%): _____

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

CEM shall be required for the following pollutant/operational parameters and enforced on the following basis:

<u>Pollutant/Operational Parameter</u>	<u>Averaging Times</u>	<u>Emission Limit</u>	<u>Units</u>
<input checked="" type="checkbox"/> None			
<input type="checkbox"/> Opacity	six minute block		
<input type="checkbox"/> SOx	3 hour rolling		
<input type="checkbox"/> NOx	24 hour rolling		
<input type="checkbox"/> CO	1 hour block		
<input type="checkbox"/> CO ₂	1 hour block		
<input type="checkbox"/> O ₂	1 hour block		
<input type="checkbox"/> Temperature	continuous		

(See Appendix A for General Requirements)

PART IV. MONITORING, REPORTING AND RECORD KEEPING REQUIREMENTS

1. Annual fuel consumption shall be based on any consecutive twelve (12) month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations monthly.
2. The Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor fuel feed to this permitted source.
3. Each oil fuel shipment for this equipment shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. The Permittee shall maintain records of each shipping receipt and certification.
4. The Permittee shall keep records on premise indicating continual compliance with all above conditions at all times and shall make them available for inspection upon request by the Commissioner for the duration of this permit, or for the previous three (3) years, whichever is less.

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PART V. ALLOWABLE EMISSION LIMITS

The Permittee shall not exceed the emission limits stated herein at any time.

<u>Criteria Pollutants</u>	<u>#/MM BTU</u>	<u>MASC * (ug/m³)</u>	<u>TPY</u>
PM-10	0.031		0.142
SOx	0.656		2.999
NOx	0.143		0.655
VOC	0.002		0.011
CO	0.036		0.164
Pb	1.11e-04	5442.63	5.07e-04

Non-Criteria
Pollutants

Sulfuric Acid	0.009	36284.21	
Formaldehyde		21770.53	
Nickel		9071.05	
Arsenic		90.71	
Beryllium		18.14	
Cadmium		725.68	
Chromium		18142.11	
Copper		36284.21	
Mercury		1814.21	

*maximum allowable stack concentration

Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

1. Criteria and toxic emission factors: Compilation of Air Pollutant Emission Factors, AP-42, 5th Edition, Section 1.3, Fuel Oil Combustion, Tables 1.3-2, 1.3-4, & 1.3-11, January 1995.
2. Copper emission factor: David P. LaRiviere, APCE memo on Toxic Emission Factors for Oil-Fired Boilers, 7/9/93.

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.

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PART VI. STACK EMISSION TEST REQUIREMENTS (Applicable if -✓- Checked)

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

None at this time

TSP SOx NOx CO

VOC PM-10 Pb

Other (HAPS): _____, _____, _____

(See Appendix B for General Requirements)

PART VII. APPLICABLE REGULATORY REFERENCES (The Regulations of Connecticut State Agencies)

22a-174-3(a), (b), (f); 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

1. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
2. Noise (for non-emergency use)

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 Sections 22a-69-1 through 22a-69-7.4 of the Regulations of Connecticut State Agencies.

3. The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times. (Applicable if -✓- checked)

40 CFR Part 60, Subpart Db Dc GG A

None

(See Appendix C for Detailed Requirements)

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PART IX. ADDITIONAL TERMS AND CONDITIONS

1. Upon completion of construction, the permittee shall certify to the Commissioner, in writing, that the facility has been constructed in accordance with the terms and conditions of its construction permit. Upon the Commissioner's approval of the certification and confirmation that the facility is constructed in accordance with its construction permit, the Commissioner shall issue a permit to operate.
2. 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.
3. 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.
4. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
5. 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.
6. 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 the documents and all attachments and 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, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense." Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense in accordance with Connecticut General Statutes §22a-6, under §53a-157 of the Connecticut General Statutes.

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PART IX. ADDITIONAL TERMS AND CONDITIONS, continued:

7. 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.
8. Within fifteen 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.
9. 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.
10. 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 Assistant Director; Engineering & Enforcement; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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