



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 and Section 22a-174-3a of the Regulations of Connecticut State Agencies.

Owner/Operator:	Spartech Polycast Inc.
Address:	69 Southfield Avenue, Stamford, CT 06904
Equipment Location:	69 Southfield Avenue, Stamford, CT 06904
Equipment Description:	Onan 500 DFFB Cummins KTTA19-G2 emergency generator

Town/Permit Numbers:	172-0079
Premises Number:	91
Permit Issue Date:	01/15/97
Modification Issue Date:	11/01/07
Expiration Date:	None

for Anne M. Mori
Gina McCarthy
Commissioner

Nov 1, 2007
Date

ORIGINAL

PERMIT FOR FUEL BURNING EQUIPMENT

**STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION
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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): Distillate oil
2. Maximum Fuel Consumption over any Consecutive Twelve (12) Month Period: 16,500 gallons
3. Fuel Sulfur Content (% by weight, dry basis): 0.0015 (15 ppmvd)
4. Maximum Hours of Operation: Daily 24; Over any Consecutive Twelve (12) Month Period: 8,760

B. Design Specifications

1. Maximum Fuel Firing Rate: 34.9 gallons/hour
2. Maximum Gross Heat Input (MM BTU/hr): 4.9

C. Stack Parameters

1. Minimum Stack Height (ft): 12
2. Minimum Exhaust Gas Flow Rate (acfm): 4,305
3. Stack Exit Temperature (°F): 1,050
4. Minimum Distance from Stack to Property Line (ft): 105

PART II. CONTROL EQUIPMENT (Applicable if -X- 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 -X- 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, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Monitoring

1. When more than one fuel supply tank is to service this source or when multiple sources are supplied by one fuel tank, the Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor fuel feed to this permitted source.

B. Record Keeping

1. The permittee shall keep records of annual fuel consumption. 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 within thirty (30) days of the end of the previous month.
2. The permittee shall keep records of the fuel certification for each delivery of fuel from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel.

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BUREAU OF AIR MANAGEMENT****PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, cont.**

3. The permittee shall make and keep records on premises to determine compliance with the terms and conditions of this permit in accordance with RCSA 22a-174-4. Such records shall be made available upon request by the Commissioner and kept for the duration of this permit or for the previous five (5) years, whichever is less.

C. Reporting

1. The permittee shall submit all required reports pursuant to RCSA 22a-174-22(1) if the engine is not operated as an emergency engine.

PART V. SPECIAL REQUIREMENTS FOR EMERGENCY ENGINES ONLY

- A. An emergency engine is defined in section 22a-174-22 of the Regulations.
- B. This equipment must be dedicated solely to responding in emergency situations. These situations are defined in section 22a-174-22 of the Regulations.
- C. The permittee shall not conduct routine scheduled testing or maintenance of the subject engine during days when ambient ozone is forecasted by the commissioner to be moderate to unhealthy, unhealthy, or very unhealthy.

1. Forecast Information

Official ambient ozone information can be obtained by calling:

- i. (860) 424-4167 Department's Bureau of Air Management
Monitoring Section (Recorded Message Updated
daily at 3:00 p.m.)
- ii. (860) 424-3027 Department's Bureau of Air Management
Monitoring Section (For additional air
quality information)
- iii. (800) 922-2263 American Lung Association (For health effects
information)

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PART V. SPECIAL REQUIREMENTS FOR EMERGENCY ENGINES ONLY, continued:

2. Exemption

The permittee shall be exempt from Part V.C of this permit if all of the following conditions are met:

- i. the subject engine is unattended;
 - ii. the schedule for routine testing or maintenance of such engine is automated and cannot be modified from a remote location; and
 - iii. if a permittee operates more than one emergency engine at the subject premise, the schedule for routine testing or maintenance of all such emergency engines does not call for the routine testing or maintenance of more than one such engine on the same day.
- D. At the premise where the authorized activity takes place, or at such other place as the Commissioner approves in writing, the permittee shall maintain the date and type of emergency during which the subject engine is operated.

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PART VI. ALLOWABLE EMISSION LIMITS

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

<u>Criteria Pollutants</u>	<u>#/hr</u>	<u>#/MM BTU</u>	<u>TPY</u>
TSP	0.198	0.040	0.047
PM-10	0.198	0.040	0.047
SOx	0.007	0.002	0.002
NOx	18.833	3.843	4.452
VOC	0.595	0.121	0.141
CO	2.083	0.425	0.492

<u>Non-Criteria Pollutants</u>	<u>MASC *</u> <u>(ug/m³)</u>
Sulfuric Acid	2,105
Formaldehyde	1,260
Acrolein	526

*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. AP-42, Fifth Edition, Volume 1, Chapter 3.3, dated 10/96.
2. Manufacturer's emission factors.
3. Sulfuric Acid Calculated from 0.0015%S or less in distillate oil.

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 VII. STACK EMISSION TEST REQUIREMENTS (Applicable if -X- 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 VIII. APPLICABLE REGULATORY REFERENCES (The Regulations of Connecticut State Agencies, hereinafter referred to as the Regulations)

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 IX. SPECIAL REQUIREMENTS

- A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
- B. *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.

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

40 CFR Part 60, Subpart: Db Dc GG A

- None

(See Appendix C for Detailed Requirements)

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.

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PART X. ADDITIONAL TERMS AND CONDITIONS, continued:

- 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."
- 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 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.

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PART X. ADDITIONAL TERMS AND CONDITIONS, continued:

- 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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Appendices attached (Applicable if -X- checked):

- A Continuous Emission Monitoring Requirements
- B Stack Emission Test Requirements
- C New Source Performance Standards
- E Control Equipment Design Specifications

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APPENDIX E
Control Equipment Design Specifications

Air Pollution Control Equipment (applicable if -X- checked).

The following specifications need not be verified on a continuous basis, however, if requested by the Bureau, demonstration shall be shown.

None

Scrubber

Make and Model: _____

Reagent: _____

Reagent Flow Rate: _____

Pressure Drop (in H₂O): _____

Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): _____

PH: _____

Design Outlet Grain Loading (gr/dscf): _____

Design Removal Efficiency (%): _____

Electrostatic Precipitator (ESP)

Make and Model: _____

Number of Fields: _____

Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): _____

Design Outlet Grain Loading (gr/dscf): _____

Design Removal Efficiency (%): _____

Cyclone Multicyclone

Make and Model: _____

Pressure Drop (in H₂O): _____

Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): _____

Selective Non-catalytic Reduction (SNCR)

Urea Ammonia

Make and Model: _____

Injection Rate at Maximum Rated Capacity (lb/hr): _____

Operating Temperature Range (°F): _____

Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): _____

Design Removal Efficiency (%): _____

Selective Catalytic Reduction (SCR)

Make and Model: _____

Catalyst Type: _____

Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): _____

Pressure Drop (in H₂O): _____

Ammonia Injection Rate at Maximum Rated Capacity (lb/hr): _____

Design Removal Efficiency (%): _____

APPENDIX E
Control Equipment Design Specifications

- Low NOx Burner
Make and Model: _____
Guaranteed NOx Emission Rate (lb/MM BTU): _____
Design Removal Efficiency (%): _____

- Particulate Trap
Make and Model: _____
Design Removal Efficiency (%): _____

- Fabric Filter
Make and Model: _____
Number of Bags in Use: _____
Air/Cloth Ratio: _____
Bag Material: _____
Cleaning Method: _____
Pressure Drop (in H₂O): _____
Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): _____
Design Outlet Grain Loading (gr/dscf): _____
Design Removal Efficiency (%): _____

- Other: _____
