



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:        | Bristol-Myers Squibb Company                       |
| Address:               | 5 Research Parkway, Wallingford, Connecticut 06492 |
| Equipment Location:    | 5 Research Parkway, Wallingford, Connecticut 06492 |
| Equipment Description: | Waukesha Diesel Generator Model VHP 5900 DS        |

|                             |               |
|-----------------------------|---------------|
| Permit Number:              | 0073          |
| Town/Premises Numbers:      | 189/197       |
| Original Permit Issue Date: | July 28, 1989 |
| Modification Issue Date:    |               |
| Expiration Date:            | None          |

\_\_\_\_\_  
Gina McCarthy  
Commissioner

\_\_\_\_\_  
Date

## PERMIT FOR FUEL BURNING EQUIPMENT

### STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

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): #2 Diesel
2. Maximum Fuel Consumption over any Consecutive Twelve (12) Month Period: 179,000 gallons (Total combined with P-189-0064)
3. Fuel Sulfur Content(% by weight, dry basis): 0.0015

##### B. Design Specifications

1. Maximum Fuel Firing Rate(s): 72 gallons/hour
2. Maximum Gross Heat Input (MM BTU/hr): 9.8
3. Minimum Stack Height (ft): 35
4. Minimum Exhaust Gas Flow Rate (acfm): 7,444
5. Stack Exit Temperature (°F): 796
6. Minimum Distance from Stack to Property Line (ft): 425

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

##### A. Type

- |   |   |
|---|---|
| <input type="checkbox"/> None                       | <input type="checkbox"/> Selective Non-Catalytic Reduction        |
| <input type="checkbox"/> Scrubber                   | <input checked="" 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

N/A (In-line device)

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

CEM shall not be required at this time.

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Town No: 189

Premises No: 197

Permit No: 0073

Stack No: 5

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**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.
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.

**PART V. ALLOWABLE EMISSION LIMITS**

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

| Criteria<br>Pollutants | ppm | #/hr  | #/MM BTU | TPY  |
|------------------------|-----|-------|----------|------|
| TSP                    |     | 0.98  | 0.100    | 0.61 |
| PM-10                  |     | 0.98  | 0.100    | 0.61 |
| SOx                    |     | 0.01  | 0.002    | 0.01 |
| NOx                    |     | 14.79 | 1.509    | 9.21 |
| VOC                    |     | 0.29  | 0.038    | 0.18 |
| CO                     |     | 2.11  | 0.215    | 1.32 |
| Ammonia                | 10  |       |          |      |

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

| <u>Non-Criteria<br/>Pollutants</u> | <u>MASC*<br/>(ug/m<sup>3</sup>)</u> |
|------------------------------------|-------------------------------------|
| Sulfuric Acid                      | 1.02E-04                            |
| Benzene                            | 7.68E-04                            |
| Toluene                            | 3.64E-06                            |
| Acetaldehyde                       | 1.84E-06                            |
| Acrolein                           | 2.56E-03                            |
| Xylene                             | 4.44E-06                            |
| Formaldehyde                       | 6.14E-03                            |
| Naphthalene                        | 5.12E-05                            |

\*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. HAP emission factors were obtained from AP-42, 5<sup>th</sup> edition, Table 3.4-4, Supplement B, November 1996.
2. Criteria pollutant emission factors obtained, in order of preference, from stack test data, from representative manufacturer's data, or AP-42, 5<sup>th</sup> edition, Table 3.4-1, November 1996.
3. All HLV values are 8-hr standards set forth in the Connecticut Regulations, Section 22a-174-29, printing date February 1989.

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
- TSP       SOx       NOx       CO
- VOC       PM-10       Pb
- Other (HAPS): Ammonia

(See Appendix B for General Requirements)

Note: NOx testing shall be conducted at > 90% of full load. Stack testing will demonstrate compliance with NOx, CO, VOC, PM-10 and ammonia emission rates. These tests shall be completed and deemed sufficient for compliance every five years after the issuance of the modified operating permit.

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**PART VII. 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 VIII. 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 IX. 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.

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**PART IX. ADDITIONAL TERMS AND CONDITIONS, continued**

- 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.
- 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; Compliance & Field Operations 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

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 (EF):
Minimum Gas Flow Rate at Maximum Rated Capacity (acfm):
Design Removal Efficiency (%):

- Selective Catalytic Reduction (SCR)

Make and Model: Miratech or Equivalent
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 (%):

- Low NOx Burner

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

- Particulate Trap

Make and Model:
Design Removal Efficiency (%):

APPENDIX E  
Control Equipment Design Specifications

Fabric Filter

Make and Model: \_\_\_\_\_  
Number of Bags in Use: \_\_\_\_\_  
Air/Cloth Ratio: \_\_\_\_\_  
Bag Material: \_\_\_\_\_  
Cleaning Method: \_\_\_\_\_  
Pressure Drop (in H<sub>2</sub>O): \_\_\_\_\_  
Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): \_\_\_\_\_  
Design Outlet Grain Loading (gr/dscf): \_\_\_\_\_  
Design Removal Efficiency (%): \_\_\_\_\_

Other: \_\_\_\_\_  
\_\_\_\_\_