

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
FIELD OPERATIONS - BUREAU OF AIR QUALITY

OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the Rules and Regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the air contamination source(s) described below:

Permit No.	<u>OP-46-0048B</u>	Source(s)	<u>Boilers (Nos. 1C, 2B and 3A), Emergency Generators, Heaters and other sources as described herein.</u>
Owner	<u>Rhone-Poulenc Rorer Pharmaceutical, Inc.</u>	Air	<u>Venturi Scrubber and packed tower scrubber</u>
Address	<u>500 Arcola Road</u>	Cleaning	<u></u>
	<u>Collegetown, PA 19426</u>	Device	<u></u>
Attention	<u>Mr. Gary S. Rowles</u>	Location	<u>Upper Providence Township</u>
	<u>Director, Facility Management</u>		<u>Montgomery County</u>

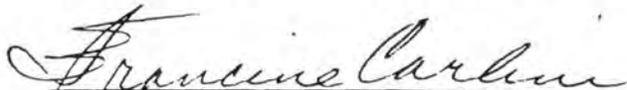
This permit is subject to the following conditions:

1. That the source(s) and any associated air cleaning devices are to be:
  - a. operated in such a manner as not to cause air pollution;
  - b. in compliance with the specifications and conditions of the applicable plan approval(s) and operating permit(s); and
  - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner described above. This permit is valid for a period of 5 years for all sources listed in this operating permit.

(SEE ADDITIONAL CONDITIONS ATTACHED)

Failure to comply with the conditions placed on this permit is a violation of Section 127.444. Violation of this or any other provision of Article III of the Rules and Regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued 04/02/1998  
~~04/02/2003~~  
~~Expires~~ \_\_\_\_\_

  
Francine Carlini  
Regional Manager  
Air Quality

Division of Permits, RCSOB  
Administration  
SEFO  
Re (GJC98)40-2

**OPERATING PERMIT CONDITIONS**  
**PERMIT NO. OP-46-0048B**  
**RHONE-POULENC RORER PHARMACEUTICALS**

**CONDITIONS (continued):**

3. This Operating Permit includes Reasonably Available Control Technology (RACT) determinations as required by Title I provisions of the CAAA, and, 25 PA Code Sections 129.91 through 129.95 for the following sources: three Babcock and Wilcox Boilers ( FM 10-66 ); three Emergency Generators, Caterpillar (Model No. 3512); four emergency generators ( Detroit Model No. 9163-7416); a Pathological Incinerator ( Trecaire Model 40-R Trecaan Combustion Ltd.); a Space Heater (Burnham Corp S/N 2703 1245), three (3) No. 2 fuel oil under ground storage tanks, four (4) day tanks, 275 gallons each, for the emergency electric generators, one (1) 250 gallons fuel oil storage tank, and one (1) 250 gallons gasoline tank, and Laboratory Hoods.  
  
This operating permit also includes a Process Development Laboratory Kettles, 4 Shelf Dryers and a micronizer.
4. This Operating Permit supersedes and incorporates previously issued Permit Nos. 46-302-177A, 46-301-266 and 46-313-091. The Terms and Conditions of these permits have been incorporated into this permit.
5. The annual nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOC) emissions from the facility shall not exceed 151.0 and 29.4 tons per year on a 12 month rolling basis, respectively.
6. (a) The NO<sub>x</sub> emissions from each boiler, when running on natural gas, will not exceed 26.16 tons per year on a 12 month rolling basis.  
  
(b) The NO<sub>x</sub> emissions from the boilers shall not exceed 89.3 tons per year on a 12 month rolling basis.
7. NO<sub>x</sub> RACT for the three (3) Babcock and Wilcox boilers shall be annual adjustment and tune up in accordance with 25 Pa. Code Section 129.93(b) (2), (3), (4), and (5).
8. NO<sub>x</sub> RACT for all sources identified in Condition 3, except the three (3) Babcock and Wilcox Boilers and the process development laboratory, shall be maintenance and operation in accordance with manufacturer's specifications [25 PA Code Section 129.93 (c)] and good air pollution control practices.
9. VOC RACT for the process development laboratory in the facility shall be operation in accordance with 25 Pa. Code Section 129.68.

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CONDITIONS (continued):

10. RACT Monitoring and Recordkeeping:

RPR shall maintain records in accordance with the minimum recordkeeping requirements of 25 Pa. Code Section 129.95. At a minimum, this shall include:

- a. Records shall provide sufficient data and calculations to clearly demonstrate that the requirements of Conditions 5, 6, 7, and 9 are met.
- b. Data or information required to determine compliance with Conditions 5 and 6 shall be recorded and maintained in a time frame consistent with the averaging period of the requirements.
- c. Records required under this permit shall be kept for a period of two (2) years and shall be made available to the Department upon its request.

Conditions from Permit No. 46-313-091

- ~~11. The air cleaning devices for the Process Development Laboratory are: eleven (11) primary condensers; (four) 4 secondary condensers; two (2) eductors; two (2) packed tower scrubbers; and one (1) fabric collector.~~
- ~~12. An operating pressure drop of, at least, 20 psig shall be maintained across each eductor on any occasion that the sources are operated.~~
- ~~13. The water flow rate to each eductor of, at least, 17 GPM shall be maintained on any occasion that the sources are operated. A flow switch shall alarm upon loss of flow.~~
- ~~14. An operating pressure drop of, at least, 0.5 inches w.g. shall be maintained across each scrubber on any occasion that the sources are operated.~~
- ~~15. The two (2) packed tower scrubbers will utilize a scrubbing liquid of 12.5% NaOH or a 15% HCl scrubbing liquid. The inlet and outlet concentrations are variable and the overall efficiency is 99% when used with an eductor upstream. The results of the grab samples analyzed for pH level at the start of each batch shall be recorded in a log identifying the respective batch process and the operating dates.~~
- ~~16. RPR shall record the quantity and identify all VOC solvents used in the operation of this Process Development laboratory on a daily basis.~~
- ~~17. The fabric collector(s) must be equipped with a device for monitoring the pressure differential across the collector(s).~~

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**PERMIT NO. OP-46-0048 B**  
**RHONE-POULENC RORER PHARMACEUTICALS**

CONDITIONS (continued):

~~18. Rhone-Poulenc Rorer Pharmaceuticals (RPR) shall keep on hand a sufficient quantity of spare fabric collector bags for the fabric collector(s) associated with the aforementioned source(s), in order to be able to immediately replace any bags requiring replacement due to deterioration resulting from routine operation of the source(s) and fabric collector(s).~~

Conditions from Permit No. 46-302-177A

~~19. The three (3) boilers (Nos. 1C, 2B and 3A) will operate primarily on natural gas with No. 2 fuel oil being used as secondary fuel.~~

~~20. Two (2) boilers will be used to satisfy the facility steam needs with the third boiler as a stand-by. In June, July and August only one (1) boiler will be used to satisfy steam needs.~~

~~21. The sulfur content of the No. 2 fuel oil fired in these three (3) boilers shall not, at any time, exceed 0.3% (by weight) as required by 25 Pa. Code Section 123.22(e). Additionally, no fuel oil shall be burned which causes emission of sulfur dioxide greater than 0.5 pounds/ million Btu or 0.5% sulfur by weight.~~

~~22. RPR shall, upon Department request, provide fuel analyses, or fuel samples of the No. 2 oil used in the three (3) boilers.~~

~~23. No reclaimed or waste oil or other waste materials shall be added to the No. 2 fuel oil when firing these three (3) boilers.~~

~~24. Boilers are subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart 40 CFR § 60.4 requires submission of copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:~~

~~Director  
Air, Toxics and Radiation Division  
US EPA, Region III  
Chestnut Street  
Philadelphia, PA 19107~~

**OPERATING PERMIT CONDITION**  
**PERMIT NO. OP-46-0048B**  
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**CONDITIONS (continued):**

~~25~~ The three boilers have rated capacities of 50,000 pounds per hour of steam which are regulated under Subpart Dc of the New Source Performance Standards (NSPS), 40 CFR Part 60.

For three boilers, primarily burning natural gas, RPR shall:

- ~~a~~ Install separate natural gas and fuel oil flow meter to each boiler to individually monitor the fuel flow to each boiler while operating.
- ~~b~~ Record fuel usage daily.
- ~~c~~ Monitor by supplier certification any shipments of distillate No. 2 fuel oil before use in a boiler.
- ~~d~~ Calculate a 30 day rolling average of the sulfur limit of 40 CFR 60.42c(d) for each boiler, each day fuel oil is combusted.
- ~~e~~ Submit a quarterly report containing each 30 day average SO<sub>2</sub> emission rate or 30 day average sulfur content. Include the reasons for noncompliance with the standard and a description of all corrective actions taken.

Conditions from Permit No. 46-301-266

~~26~~ RPR shall operate the Pathological Incinerator for no longer than 5,475 hours in 12 consecutive months.

~~27~~ This Operating Permit is issued to Rhone-Poulenc Rorer Pharmaceuticals, Inc. (RPR) for the operation of a Pathological Controlled Air Incineration System (Treca Combustion Ltd. Model Trecaire 40-R) to burn hospital and infectious waste ("waste"), as defined in the Department's Best Available Technology for Hospital/Infectious Waste Incinerators, dated August 11, 1989, ("BAT").

~~28~~ The air contaminant emissions from the incinerator are to be controlled by a quench chamber, a high energy venturi scrubber in series with a Packed Tower Scrubber, manufactured by Airpol, Inc.

~~29~~ This Operating Permit limits the incinerator at RPR's facility to a maximum of 300 pounds per hour and 3,000 pounds per day of waste. Only waste generated at RPR, Upper Providence Township shall be charged into the incinerator. No chemotherapeutic waste shall be charged into the incinerator. No radioactive material shall be charged to the incinerator unless approved by the Bureau of Radiation Protection.

**OPERATING PERMIT CONDITIONS**  
**PERMIT NO. OP-46-0048B**  
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CONDITIONS (continued):

~~30~~ Stack Emission Limitations

~~A.~~ Criteria Pollutants

- ~~1.~~ Particulate Matter emissions shall not exceed 0.04 grains per dry standard cubic feet of exhaust gas, corrected to 7% O<sub>2</sub>.
- ~~2.~~ Carbon monoxide (CO) emissions, as measured at a location downstream of the control devices shall not exceed 100 ppmv, hourly average, corrected to 7% O<sub>2</sub> on a dry basis.
- ~~3.~~ Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 30 ppmv, hourly average, corrected to 7% O<sub>2</sub> on a dry basis; or shall be reduced by 75% (by weight) on an eight-hour basis.

~~B.~~ Non-criteria Pollutants

- ~~1.~~ The maximum annual concentrations of the following contaminants shall not exceed the following levels:

Contaminant	Ambient Concentration (ug/m <sup>3</sup> )
PCDD and PCDF expressed as 3, 7, 8 TCDD Equivalents	0.30 x 10 <sup>-7</sup>
Arsenic and compounds	0.23 x 10 <sup>-3</sup>
Beryllium and compounds	0.42 x 10 <sup>-3</sup>
Cadmium and compounds	0.56 x 10 <sup>-3</sup>
Nickel and compounds	0.33 x 10 <sup>-2</sup>
Hexavalent Chromium and compounds	0.83 x 10 <sup>-4</sup>
Lead and compounds	0.09
Mercury and compounds	0.24 x 10 <sup>-1</sup>

- ~~2.~~ Hydrochloric acid (HCl) emissions shall not exceed 30 ppmv, hourly average, corrected to 7% O<sub>2</sub> on a dry basis; or, shall be reduced by 90% (by weight) on an hourly basis.

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CONDITIONS (continued):

~~c~~ Miscellaneous Pollutants

Visible air contaminants shall not be emitted in such a manner that the opacity of the emissions is equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; or equal to greater than 30% at any time.

~~31~~ Operating Requirements

~~a~~ The burners associated with this incinerator shall be fired and modulated, so as to maintain a secondary combustion chamber exit gas temperature of, at least, 1800<sup>0</sup>F. This burner is to be designed so that without the assistance of the heat content of the waste, a minimum temperature of 2,000<sup>0</sup>F can be maintained for, at least, 2.0 seconds.

~~b~~ This incineration system shall have a primary combustion chamber with two (2) 750,000 Btu/hr burners and a secondary combustion chamber with one (1) 2,900, 000 Btu/hr burner.

~~c~~ All of the burners in this incineration system shall be fired by natural gas.

~~d~~ RPR shall operate this incineration system with the secondary chamber at a minimum of 1,800<sup>0</sup>F with a minimum residence time of 2.0 seconds.

~~e~~ This incineration system shall have an interlock system to prevent charging if:

~~1~~ The secondary chamber exit gas temperature drops below 1,800<sup>0</sup>F for a fifteen (15) minute period.

~~2~~ The carbon monoxide (CO) emissions are equal to or greater than 150 ppmv, corrected to 7% O<sub>2</sub> on a dry basis for a fifteen (15) minute period.

~~3~~ The opacity of the visible emissions is equal to or greater than 10% for a period of fifteen (15) minutes.

~~f~~ The following minimum pressure differential must be maintained across the indicated control devices:

Control Device	Pressure Differential (inches w.g.)	Instrument No.
Venturi Scrubber	40	DPT-2

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**CONDITIONS (continued):**

The following minimum liquid flow rate must be maintained in the indicated control devices.

<b>Control Device</b>	<b>Liquid Flow Rate, gpm</b>	<b>Instrument No.</b>
Total flow through venturi throat and quench chamber	30 (H <sub>2</sub> O)	FT-9A
Packed Tower Scrubber	45 (NaOH Solution)	FT-9B

- ~~B~~ RPR shall operate this incineration system in such a manner that the maximum burning time shall not exceed 15 hours per day including preheating, waste charging and waste burnout time. Total operating time including ash clean out of the incinerator shall not exceed 16 hours per day, starting at 6:00 a.m. and ending at 10:00 p.m. each day.
- ~~32~~ The storage and handling of the ash generated by the operation of the aforementioned incinerator shall not, at any time, result in the emission of fugitive air contaminants in excess of the limitations specified in Section 123.1 of Chapter 123 of the Rules and Regulations of the Department.
- ~~33~~ This permit does not authorize the construction or modification of any source.
- ~~34~~ RPR shall operate each of the three (3) Caterpillar emergency electric generators for no more than 490 hours per year, and each of the four (4) Detroit electric generators for no more than 296 hours per year.
- ~~35~~ The operation of the sources shall not, at any time, result in the emission of any air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection.
- ~~36~~ RPR shall promptly notify the Department of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection.
- ~~37~~ If, at any time, the permittee causes, permits or allows any modifications (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Protection) of Environmental Protection) of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, then and in that event, this permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).

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**CONDITIONS (continued):**

- ~~38~~ If, at any time, it is determined that the operation of the aforementioned source(s) is causing the emission of visible air contaminants in excess of the limitations specified in Section 123.41, or malodorous air contaminants in excess of the limitations specified in Section 123.31 of Article III of the Rules and Regulations of the Department of Environmental Protection, or is causing the emission of these contaminants or any other type of air contaminant in excess of the limitations specified in this permit and specified in, or established pursuant to, any other applicable rule or regulation contained in Article III, the owner shall take immediate steps, including the installation of additional air cleaning device(s), if necessary, to reduce the air contaminant emissions to within the applicable limitations.
- ~~39~~ If, at any time, the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.
- ~~40~~ If, at any time, it is determined that the operation of the aforementioned source (s) is causing the emission of pollutants of Article III of the Rules and Regulations of the Department of Environmental Protection, or is causing the emission of these contaminants or any other type of air contaminant in excess of the limitations specified in, or established pursuant to, any other applicable rule or regulation contained in Article III, RPR shall take immediate steps, including the installation of air cleaning device(s), if necessary, to reduce the air contaminant emissions to within the applicable limitations.
- ~~41~~ This operating permit is valid for a limited period of time and may be renewed before its expiration. Requests for an operating permit renewal must be in writing and must be accompanied by the appropriate permit application processing and annual permit administration fees, as specified in Section 127.703 of the Rules and Regulations of the Department of Environmental Protection. These fees shall be paid in the form of a check payable to the "Commonwealth of Pennsylvania - Clean Air Fund." The request should be made using the appropriate application form and must be received by the Department along with a completed Air Pollution Control Act Compliance Review form no later than 30 days prior to the expiration date of this permit.

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CONDITIONS (continued):

All necessary forms can be obtained from the Department upon request.

~~42~~ Any notification required as a result of any condition, herein, should be directed to:

Regional Air Quality Program Manager  
Department of Environmental Protection  
Suite 6010  
Lee Park, 555 North Lane  
Conshohocken, PA 19428  
Telephone: 610-832-6241

Re 30 (GJC98)40-2a