

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-46-0037</u>	Source(s)	<u>Facility VOC and NO<sub>x</sub> Sources</u>
Owner	<u>Cabot Performance Materials</u>	Air	<u></u>
Address	<u>County Line Road</u>	Cleaning	<u></u>
	<u>Boyertown, PA 19512-1608</u>	Device	<u></u>
Attention	<u>Mr. Anthony T. Campitelli</u>	Location	<u>Douglass Township</u>
	<u>Manager, Environmental Affairs</u>		<u>Berks and Montgomery Counties</u>

This permit is subject to the following conditions:

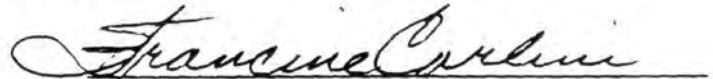
1. That the source(s) and any associated air cleaning devices are to be:
  - a. operated in such a manner as not to cause air pollution;
  - b. in compliance with the specifications and conditions of all applicable Plan Approval(s) issued;
  - c. operated and maintained in a manner consistent with good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

(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 4/13/1999

Expires 4/13/2004

  
Francine Carlini  
Regional Manager  
Air Quality

cc: Division of Permits, RCSOB  
Administration  
SEFO  
Re (SMC99)35-7A

OPERATING PERMIT CONDITIONS  
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**CONDITIONS (continued):**

3. This RACT 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 Acid Baths (Building 47):
  - i. **Source group No. 1** comprised of 18 Tanks (A, B, C, and D), SE Feed Tanks (6A, 6B, 7A, and 7B), Tantalum Raffinate Transfer Tanks (3), Tantalum Raffinate Storage Tanks 17A and 17B, 002 Tantalum Fraction Transfer Tanks (3), 002 Tantalum Fraction Storage Tank T 29, 004 Tantalum Fraction Transfer Tanks (3), MIBK Work Tanks No. 1, No. 2, No. 3, No. 4, and No. 5, MIBK Transfer Tank (Tantalum), and MIBK Transfer Tank (P-Scrub), MIBK Transfer Tank (Niobium), Raffinate Acidification Tanks 10A and 10B, Niobium Feed Tanks 8A, 8B, 9A, and 9B, Niobium Raffinate Storage Tank 17C, and Niobium Fraction Storage Tank T-41 - all in Building 74;
  - ii. **Source group No. 2** comprised of Extraction Mixer/Settler No. 1, Extraction Mixer/Settler No. 2, Extraction Mixer/Settler No. 3, Primary Strip Mixer/Settler No. 1, Primary Strip Mixer/Settler No. 2, Primary Strip Mixer/Settler No. 3, Secondary Strip Mixer/Settler No. 1, Secondary Strip Mixer/Settler No. 2, Secondary Strip Mixer/Settler No. 3, Scrap Line Extraction Mixer/Settler, Scrap Line Strip Mixer/Settler, Extraction Mixer/Settler No. 4, P-Scrub Mixer/Settler No. 1, P-Scrub Mixer/Settler No. 2, Strip Mixer/Settler No. 1, and Strip Mixer/Settler No. 2 - all in Building 74;
  - iii. **Source group No. 3** Heating Tank (B-19);
  - iv. **Source group No. 4** comprised of Fractionation Tanks 21B, 21C, and 23A, Precipitation Tank 21A, Wash/Thickening Tank 21D, Filter Press Feed Tank 23B, and 23C - all in Building No. 23;
  - v. **Source group No. 5** Tray Dryers (4); and
  - vi. **Source group No. 6** comprised of Milling Process Equipment in Building 47/101, Filter bottom, and Alcohol Fill/Recovery Tank in Building 101.
4. The following sources shall be operated with VOC emission rates of no greater than 3 pounds per hour, 15 pounds per day or 2.7 tons per year with existing controls:
  - a. i) Building 73 sources - Feed Liquor Tanks T402, T403, T404, T405, T406, T407, and ALP Filter Press.

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**CONDITIONS (continued):**

- ii) Building 19 sources: Outdoor Storage Tanks T263 and 264, Precipitation Process Tanks (13), Tantalum Salt Production Miscellaneous Small Sources, and Tank 10,
  - iii) Building 55 sources: 004 Tantalum Fraction Storage Tank, 002 Tantalum Fraction Heating Tank (B-55), B-55 Tantalum Fraction Storage Tank, Precipitation Process Tanks (7), Tantalum Oxide Production Miscellaneous Small Sources, B-55 Ammonia Stripper,
  - iv) Building 23 sources: Filter Press, and Niobium Oxide Production Miscellaneous Small Sources,
  - v) Building 47 sources: Filter Bottoms (8), Vacuum Receiver Vent,
  - vi) Building 101 Sources: Vacuum Receiver Liquid Waste Stream, T-3 Settling Tanks,
  - vii) Building 62 Sources: filter Press/Filtration Tank, Lagoons 5, and 6,
  - viii) Segregation Tanks 3, 3A, and 4.
- b. Storage Tank Nos. T-030, T-614, T-211, T-214, T-215, T-619, T-285, T-206, T-612, T-620, T-621, and T-613.
  - c. Combustion sources: Rotary kiln in Building 14, 2 Rotary Dryers in Building 19, Grieve Oven, Make-up Air Heaters No. 1, No. 2, and No. 3, Molten Salt Bath, Rotary Dryer in Building 17, and Ore Roaster.
  - d. Pilot Plant sources and R&D Lab sources.
- 5. The heat input rate for each boiler (No. 1, No. 2, and No. 3) shall not exceed 50 Million BTU/hour.
  - 6. Boilers No. 1, No. 2, and No. 3 shall operate in accordance with 25 Pa. Code Section 129.93(b)(2).
  - 7. The oil usage in each of Boilers No. 2 and No. 3 shall not exceed 327 gallons per hour.
  - 8. The natural gas usage in Boiler No. 2 shall not exceed 425,000 MCF/year.

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CONDITIONS (continued):

9. RACT for the sources in Condition Nos. 3 and 4 shall be in operation according to manufacturer's specifications and good air pollution control practices.
10. The sources cited in Condition 4.a.i. Building 73 sources shall be operated in association with the B-73 water scrubber.
11. Sources listed under Source group No. 1 in Condition No. 3, other than the MIBK Work Tanks No. 1, No. 2, No. 3, No. 4, and No. 5, MIBK Transfer Tank (Tantalum), MIBK Transfer Tank (P-scrub), and MIBK Transfer Tank (Niobium), shall be operated in association with the B-74 water scrubber.
12. Source group No. 3 cited in Condition No. 3, and Outdoor Storage Tanks T263, 264 and Segregation Tank 2 shall be operated in association with the B-55 water scrubber.
13. 004 Tantalum Fraction Storage Tank, and 002 Tantalum Fraction Heating Tank in Building 55 shall be operated in association with the B-55 water scrubber.
14. Tray dryers (4), and Vacuum Receiver Liquid Waste Stream in Building 47 shall be operated in association with the B-47 water scrubber.
15. The company shall maintain records in accordance with the minimum recordkeeping requirements of 25 Pa. Code 129.95. At a minimum, this shall include:
  - a. Records shall provide sufficient data and calculations to clearly demonstrate that the requirements of Condition Nos. 5 through 14 are met.
  - b. Data or information required to determine compliance with the Condition Nos. 5, 6, 7 and 8 shall be recorded and maintained in a time frame consistent with the averaging period of the requirements.
  - c. Records shall be retained for at least two years and be made available to the Department upon request.
16. ~~The operation of the facility 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.~~
17. ~~The company shall within an hour of occurrence 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,~~

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CONDITIONS (continued):

any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection.

18. The expiration date shown on this RACT Operating Permit is for State purposes. For Federal Enforcement purposes the RACT provisions of this Operating Permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the U.S. Environmental Protection Agency (EPA).
19. If, at any time, the permittee causes, permits or allows any modification (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Protection) of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, or causes, permits and allows any modifications, malfunction or removal of any air pollution control device required as a condition of 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).
20. The aforementioned source(s) may be operated and used only so long as any associated air pollution control devices are operated and maintained in accordance with manufacturer's specification.
21. If, at any time, it is determined that the operation of the aforementioned source(s) is causing the emission of particulate matter in excess of the limitations specified in Section 123.13 or fugitive air contaminants in excess of the limitations specified in Section 123.1, both sections of Chapter 123 of Article III of the Rules and Regulations of the Department of Environmental Protection, or is causing the emission of either of these 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, the company shall take immediate steps, including the installation of additional air cleaning device(s), if necessary, to reduce the emissions to within the applicable limitations.
22. 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.

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CONDITIONS (continued):

23. 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.

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

24. 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

(SMC99)35-7C