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

OPERATING PERMIT

APR 13 1990

In accordance with provisions of the Air Pollution Control Act, the act of January 80,1960, 1972. 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.	OP-46-0081	Source(s)	Facility VOC RACT	
Owner	Markel Corporation	Air		
Address	416 School Lane, PO Box 752	Cleaning		
	Norristown, PA 19404	Device		
Attention	Mr. William J. Hackenyos	Location	Plymouth Township	
	Vice President, Administration		Montgomery County	
	7-1-1			

This permit is subject to the following conditions:

- 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 Approvals issued;
 - 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.

Expires

A/9/1999

Francine Carlini
Regional Manager
Air Quality

Administration

Administration SEFO Re (SMC99)74A

CONDITIONS (continued):

- 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:
 - Source ID 101 Six Horizontal Extruders
 Source ID 102 Three Vertical Extruders

Source ID 103 - Three Vertical Wire Extruders

Source ID 104 - Two Horizontal Wire Extruders, and

(b)

- Fluoropolymer Mix Room Operations
- (2) Coated Tubing Products Parts Washers
- (2) Maintenance and Engineering Department Parts Washers
- (1) 8,000-gallon aboveground Isopar G Storage Tank
- (1) 3,000-gallon aboveground No. 2 Fuel Oil Storage Tank
- Source C01-(1) 5.02 MMBtu/hr natural gas fired boiler (with No. 2 fuel oil as backup)
- Source C02-(1) 5.02 MMBtu/hr natural gas fired boiler (with No. 2 fuel oil as backup)
- Sources C03 through C06-(4) natural gas fired 0.25 MMBtu/hr preheaters
- Extruder No. 5 (vertical)
- 4. The total volatile organic compound (VOC) emission from the Sources 101 and 104 (Horizontal Extruders A, B, C, D, E, F, G, and H), including stack and fugitive losses, shall not exceed 21.5 tons per year on 12 month rolling basis. The VOC emissions from the thermal oxidizer stack shall not exceed 2.4 pounds per hour.
- 5. The total volatile organic compound (VOC) emission from the Sources 102 (Vertical Extruders Nos. 3, 6, and 10) and 103 (Vertical Extruders Nos. 1, 2 and 4) shall not exceed 18.27, and 13.08 tons per year respectively on 12 month rolling basis.
- 6. The VOC emissions from the following individual sources and the total VOC emissions from the following source categories shall not exceed 2.7 tons per year or 15 pounds per day or 3 pounds per hour:
 - (a) One No. 2 fuel oil storage tank and one Isopar G storage tank,
 - (b) Two maintenance/engineering parts washers and two tubing products washers,
 - (c) Combustion units C01 through C06, and
 - (d) Extruder No. 5

CONDITIONS (continued):

- VOC RACT for the following sources is maintenance and operation in accordance with manufacturer's specifications and good air pollution control practices:
 One No. 2 fuel oil storage tank, one Isopar G storage tank, two maintenance/engineering parts washers, two tubing products washers, Fluropolymer mixing room, two boilers, four air preheaters, Vertical Extruders (Nos. 3, 6 and 10), Vertical Wire Extruders (Nos. 1, 2 and 4) and Extruder No. 5.
- VOC RACT for the eight (8) Horizontal Extruders (Sources 101 and 104) shall be the operation of the catalytic oxidizer system as required by Condition Nos. 12 and 13.
- All lids on drums and containers containing volatile organic compounds shall be kept closed
 except when the contents are being transferred.
- 10. Any spills of solvents shall be cleaned up immediately.
- 11. Company shall maintain records in accordance with the minimum recordkeeping requirements of 25 Pa. Code § 129.95. At a minimum, this shall include:
 - (a) The Isopar G usage in Sources 101 through 104 to demonstrate compliance with Condition Nos. 4 and 5.
 - (b) Records shall be retained for at least five years and be made available to the Department upon request.
- 12. The VOC emissions from Sources 101 and 104 shall be controlled by a Stetler & Brinck, Model H25M-STS catalytic oxidizer system that either achieves a minimum of 95% (by weight) destruction efficiency of the VOCs in the gas stream or maintains an outlet concentration of 20 ppm by volume as propane. The overall control efficiency shall be maintained at a minimum of 90%.
- 13. The gas inlet temperature to the catalyst shall be maintained at a minimum of 600°F. The company shall optimize the inlet temperature during the compliance test. Markel shall operate temperature monitoring instrumentation which continuously indicates and records the inlet gas temperature to the catalyst.
- 14. The company shall use one of the following methods to monitor the condition of the catalytic oxidizer to assure compliance with Condition No. 12.
 - (a) Perform an annual analysis of the catalyst in the catalytic bed for signs of degradation, or
 - (b) Perform VOC emission stack tests when requested by the Department.
- The company shall track VOC emissions to document compliance with Condition Nos. 4 and 12. The system shall quantify emissions (before and after control) from the eight Horizontal Extrusion lines in Condition No. 3.

CONDITIONS (continued):

- 16. The tracking system shall include but not limited to the following information:
 - Total quantity of VOCs used on a daily basis in the Horizontal Extruders
 - Total hours of Horizontal Extruder operation per day
- 17. The company shall produce a monthly report of the VOC emission summary generated from the tracking system. The report shall detail average hourly, total monthly, and annual emissions on a 12-month rolling basis. Markel shall use the VOC destruction efficiency determined during the most recent compliance test.
- 18. The company shall initiate a preventive corrective and routine maintenance program to ensure the integrity of the oxidizer. The schedule shall include a routine maintenance of equipment during biannual plant shutdowns. Markel shall record the date and description of maintenance performed on the system.
- 19. This Operating Permit incorporates the requirements of Plan Approval PA-46-0081A.
- 20. 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.
- 21. The company shall within an hour of discovery 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 Projection.
- 22. The expiration date shown on this 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).
- 23. 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).
- 24. 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 the specifications set forth in the respective plan approval(s) and the RACT application (as approved by the Department), and in accordance with any conditions set forth herein.

CONDITIONS (continued):

- 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, and 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.
- 26. 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.
- 27. 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.