

SUPPLEMENT to PERMIT No. 10-00  
National Research Company  
Chesterfield, Michigan  
January 25, 2001

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. [R 336.1201(1)]
2. If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install. [R 336.1201(4)]
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. [R 336.1201(6)(b)]
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. [R 336.1201(8), Section 5510 of Act 451, PA 1994]
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. [R 336.1219]
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. [R 336.1901]
7. The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this

- rule, to the District Supervisor, Air Quality Division. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within ten days, with the information required in this rule. [R 336.1912]
8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 of the Federal Clean Air Act.
  9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
  10. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, PA 1994, and the rules promulgated thereunder.
  11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. [R 336.1301]
    - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    - b) A visible emission limit specified by an applicable federal new source performance standard.
    - c) A visible emission limit specified as a condition of this permit to install.
  12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). [R 336.1370]
  13. Except as allowed by Rule 285 (a), (b), and (c), applicant shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. [R 336.1201(1)]
  14. The Department may require the applicant to conduct acceptable performance tests, at the applicant's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. [R 336.2001]

SPECIAL CONDITIONS  
 January 25, 2001  
 (8 Special Conditions)

1. The nitric acid mission rate from the eighteen (18) acid tanks, hereinafter "EU-1" shall not exceed 3.7 pounds per hour (R336 1205, R 336 1224,R 336 1225, R 336 1901)
2. The Hydrogen Fluoride emission rate from the EU-1 shall not exceed 1.3 pounds per hour. (R336 1205, R 336 1224, R 336 1225, R 336 1901)
3. The Hex. Chromium emission rate from the Box Type Tray Dryer Oven, hereinafter "EU-2" shall not exceed 1.57E-5 pounds per hour. (R336 1205, R 336 1224,R 336 1225, R 336 1901)
4. The total Lead emission rate from EU-2 shall not exceed 1.25E-4 pounds per hour. (R336 1205, R 336 1224,R 336 1225, R 336 1901)
5. The Arsenic emission rate from the EU-2 shall not exceed 1.1E-4 pounds per hour. (R336 1205, R 336 1224,R 336 1225, R 336 1901)
6. The particulate emission from the EU-2 shall not exceed 0.01 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. (R 336 1224, R 336 1225, R 336 1331(1)(c), R 336 1901)
7. Visible emissions from EU-2 shall not exceed 5 percnet opacity. (R 336 1224, R 336 1225, R 336 1331(1)(c), R 336 1901)
8. The applicant shall not operate the EU-1 unless the two wet scrubbers each followed by two Demisters are installed and operating properly. (R 336 1224,R 336 1225, R 336 1901and R 336 1910)
9. The applicant shall not operate the EU-2 unless a Rotoclone type wet scrubber is installed and operating properly. (R 336 1224,R 336 1225, R 336 1901and R 336 1910)
10. The applicant shall equip and maintain each of the wet scrubbers of EU-1 and the Rotoclone type wet scrubber of EU-2 with liquid flow control device. (R 336 1224,R 336 1225, R 336 1901 and R336 1910)
11. The exhaust gases from EU-1and EU-2 shall be discharged unobstructed vertically upwards to the ambient air from stacks with the following parameters: (R 336 1225 and R336 1901)

Stack ID	Stack height from ground (feet)	Maximum Stack Equivalent Diameter(Inches)
1 A	33	22.6
1 B	33	22.6
2	28.3	9.6

12. Daily records of make-up chemical materials in the acid tanks/baths and the sludge input and output of the sludge dryer shall be kept on file for a period of five years and made available to the Air Quality Division upon request. (R 336 1224, R 336 1225, R 336 1901)
13. Applicant shall not process more than 200 tons of wet sludge filter cake in EU-2 per 12 month rolling period. A written record of the amount of material processed each month shall be kept on file for a period of at least two years and made available to the Air Quality Division upon request.
14. Applicant shall not process any material in EU-2, except wet sludge filter cake from the waste treatment system with solids content not to exceed 60 percent by weight.
15. Applicant shall conduct a periodic testing of the wet sludge filter cake for solids, total metals and hex chromium content. The frequency and methods of testing shall be submitted to and approved by the District Supervisor, Air Quality Division. A written record of all testing results shall be kept on file for a period of at least two years and made available to the Air Quality Division upon request.
16. Applicant shall not process any material in EU-2 unless the dried sludge powder will become part of a product which constitutes a beneficial reuse, such that the dried sludge will not be placed on land in a manner that constitutes disposal, unless the product is an inert material as specified in R 299.4114 to R 299 4117.
17. Applicant shall charge the wet sludge to the dryer by an automatic (non-manual) feed mechanism.