

SUPPLEMENT TO PERMIT NO. 5-96

Michigan Department of Environmental Quality  
Environmental Response Division  
Edwardsburg, Michigan

March 8, 1996

GENERAL CONDITIONS

1. Rule 201(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.
2. Rule 201(4) - 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, P.O. 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.
3. Rule 201(6)(a) - If this Permit to Install is issued for a process or process equipment located at a stationary source which is subject to a Renewable Operating Permit pursuant to Rule 210, trial operation is allowed if the equipment performs in accordance with the terms and conditions of this Permit to Install and until the appropriate terms and conditions of this Permit to Install have been incorporated into the Renewable Operating Permit as a modification pursuant to Rule 216 or upon renewal pursuant to Rule 217. Upon incorporation of the appropriate terms and conditions into the Renewable Operating Permit, this Permit to Install shall become void.
4. Rules 201(6)(b)(i) or 216(1)(a)(v)(A) - Except as provided in General Condition No. 3, operation of the process or process equipment is allowed if, not more than 30 days after completion of the installation, construction, reconstruction, relocation, alteration, or modification authorized by this Permit to Install, the person to whom this Permit to Install was issued, or the authorized agent pursuant to Rule 204, notifies the District Supervisor, Air Quality Division, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, alteration, or modification is considered to occur not later than commencement of trial operation of the process or process equipment.
5. Rule 201(6)(b)(ii) - Except as provided in General Condition No. 3, not more than 18 months after completion of the installation, construction, reconstruction, relocation, alteration, or modification authorized by this Permit to Install, the person to whom this permit was issued, or the authorized agent pursuant to Rule 204, shall notify the District Supervisor, Air Quality Division, in writing, of the status of compliance of the process or process equipment with the terms and conditions of the Permit to Install. The notification shall include all of the following:
  - A. The results of all testing, monitoring, and recordkeeping performed to determine the actual emissions from the process or process equipment and to demonstrate compliance with the terms and conditions of the Permit to Install.

- B. A schedule of compliance for the process or process equipment as described in Rule 119(a).
  - C. A statement, signed by the person owning or operating the process or process equipment, that, based on information and belief formed after reasonable inquiry, the statements and information in the notification are true, accurate, and complete.
6. Rule 201(7) and Section 5510 of Act 451, P.A. 1994 - 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 Departments' rules or the Clean Air Act.
  7. Rule 219 - A new owner or operator of the process or process equipment covered by this Permit to Install shall immediately make a written request to the Department for a change of ownership or operational control. The request shall include all of the information required in Rule 219(1)(a), (b) and (c). If the request for a change in ownership or operational control is approved, the terms and conditions of this Permit to Install shall apply to the person or legal entity which hereafter owns or operates the process or process equipment for which this Permit to Install is issued. The written request shall be sent to the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909.
  8. Rule 901 - 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.
  9. Rule 912 - 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 not 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 10 days, with the information required in this rule.
  10. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future regulations which may be promulgated under Part 55 of Act 451, P.A. 1994.
  11. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
  12. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, P.A. 1994, and the rules promulgated thereunder.

SPECIAL CONDITIONS

13. The visible emissions from the air stripper, hereinafter "system", with dual-stage vapor phase carbon absorption control, hereinafter "control" shall not exceed 0 % opacity.
14. The volatile organic compound (VOC) from the system and control shall not exceed 0.1 pound per hour nor 0.5 ton per year, based on a 12-month rolling average.
15. Rules 1001, 1003 and 1004 - Verification of VOC emission rates from the system and control by testing, at owner's expense, in accordance with Department requirements, may be required for operating approval. Verification of emissions rates includes the submittal of a complete report of the test results. If a test is required, stack testing procedures and the location of stack testing ports must have prior approval by the District Supervisor, Air Quality Division, and results shall be submitted within 120 days of the written requirement for such verification.
16. Applicant shall monitor and record the flow rate and total VOC concentration of the influent and effluent water streams of the air stripper on a weekly basis in a manner and with instrumentation acceptable to the Air Quality Division until 10 valid samples are obtained. Thereafter, the influent and effluent water streams of the air stripper shall be monitored for these parameters on a monthly basis. As a minimum, VOCs which should be included in determining the total VOC concentration are tetrachloroethene (PCE), trichloroethene (TCE), benzene, toluene, ethylbenzene, and xylenes (BTEX). All data, including calculation of VOC emission rates shall be submitted to the District Supervisor using Appendix A or approved equivalent method, within 30 days following collection of the initial data, and thereafter with 30 days following the end of the quarter in which the data were collected. Any request for a change in the sampling and/or reporting frequency must be submitted to the District Supervisor, Air Quality Division, for review and approval.
17. The exhaust gases from the system and control shall be discharged unobstructed vertically upwards to the ambient air from five identical stacks having a maximum diameter of 12 inches at an exit point not less than 36 feet above ground level.

NPZ:baw

Appendix A  
 Permit to Install No.

Groundwater Remediation - Air Stripper, controlled  
 Emission Calculation and Reporting

Reporting period \_\_\_\_\_ to \_\_\_\_\_

Name of person submitting report \_\_\_\_\_

Signature \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, state, zip \_\_\_\_\_

Telephone number (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ ext. \_\_\_\_\_

Date	Water fl gal/mi (A)	Concentrations (pp			Contr Effic.- (C)	VOC emissi Pounds per h (E)
		Inl (B)	Outl (C)	In - (D)		
xx-xx-xx	100	21	1	20	95	0.5

Equations:

$D = B - C$                        $E = A * D * 60 * 8.34 * (100 - F) * 1E-8$