



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

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James S. Gilmore, III  
Governor

John Paul Woodley, Jr.  
Secretary of Natural Resources

Dennis H. Treacy  
Director

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### COMMONWEALTH OF VIRGINIA OPERATING PERMIT

#### STATIONARY SOURCE PERMIT TO OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Michigan Cogeneration Systems, Inc.  
29261 Wall Street  
Wixom, Michigan 48393  
Registration No. 71961  
County-Plant No. 0059-0575

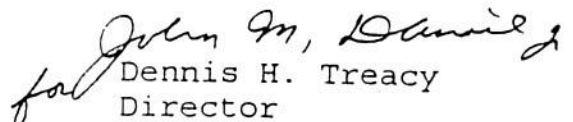
is authorized to operate

a landfill gas-fired electric power generation facility  
located at

I-95 Landfill  
9898 Furnace Road  
Lorton, Virginia

in accordance with the Conditions of this permit and all other applicable permits and regulations of the State Air Pollution Control Board.

Approved on MAY 10, 2000

*for*   
Dennis H. Treacy  
Director

Permit consists of 3 pages.  
Permit Conditions 1 to 9.

PERMIT CONDITIONS - the regulatory reference and authority for the condition is listed in parentheses ( ) after each condition.

1. This permit establishes source-specific emission standards and/or other requirements to implement reasonably available control technology (RACT) as required by 9 VAC 5-40-300, 9 VAC 5-40-310 and 9 VAC 5-40-311 of the State Air Pollution Control Board's Regulations.  
(9 VAC 5-80-800 C.2.b of State Regulations)
2. Equipment subject to 9 VAC 5 Chapter 40, Article 4 and RACT requirements pursuant to Section 182 of the federal Clean Air Act consists of:
  - eight Caterpillar Model 3516 landfill gas-fired reciprocating engines rated at  $8.5 \times 10^6$  Btu/hr maximum fuel input each
3. The emissions controls and limitations of the State Air Pollution Control Board permit to construct, that was issued on October 8, 1992, were determined to represent the required best available control technology, and therefore, for emissions of nitrogen oxides (NO<sub>x</sub>), are no less stringent than RACT. Consequently, for the purposes of this permit, the nitrogen oxides (NO<sub>x</sub>) emissions of the eight Caterpillar Model 3516 landfill gas-fired reciprocating engines shall be controlled by combusting a lean air/fuel mixture and controlling the air and fuel temperatures, and the emissions of NO<sub>x</sub> (as NO<sub>2</sub>) from each engine shall not exceed 0.0044 pounds per kilowatt hour, averaged over a three hour period.  
(9 VAC 5-40-310 and 9 VAC 5-40-311 of State Regulations)
4. The emissions controls and limitations of the State Air Pollution Control Board permit to construct, that was issued on October 8, 1992, were determined to represent the required best available control technology, and therefore, for emissions of volatile organic compounds (VOC), are no less stringent than RACT. Consequently, for the purposes of this permit, the volatile organic compounds (VOC) emissions from each of the eight Caterpillar Model 3516 landfill gas-fired reciprocating engines shall not exceed 0.0015 pounds per kilowatt hour, averaged over a three hour period.  
(9 VAC 5-40-300 of State Regulations)

5. Exempted from the requirements of 9 VAC 5 Chapter 40, Article 4 for both volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) are the following:
    - a. Process operations with a process weight rate capacity less than 100 pounds per hour;
    - b. Any combustion unit using solid fuel with a maximum heat input of less than 350,000 Btu per hour;
    - c. Any combustion unit using liquid fuel with a maximum heat input of less than 1,000,000 Btu per hour;
    - d. Any combustion unit using gaseous fuel with a maximum heat input of less than 10,000,000 Btu per hour.

(9 VAC 5-40-240 of State Regulations)
  6. At all times, including periods of startup, shutdown and malfunction, all units or processes, including any exempted by Condition 5., shall be maintained and operated to the extent possible in a manner consistent with good air pollution control practice of minimizing emissions.  

(9 VAC 5-40-20 and 9 VAC 5-170-160 of State Regulations)
  7. Methods for demonstrating and reporting compliance with the conditions of this permit shall be incorporated in the federal operating ("Title V") permit for this facility. The records necessary to meet these requirements shall be as described in the federal operating permit and shall be retained by the permittee for a minimum of five years from the time that the relevant data was collected.  

(9 VAC 5-80-110 of State Regulations)
  8. In the event of any change in control of ownership of the permitted source, the permittee shall notify the succeeding owner of the existence of this permit by letter and send a copy of that letter to the Regional Compliance Manager.  

(9 VAC 5-80-940 of State Regulations)
  9. A copy of this permit shall be maintained on the premises of the facility to which it applies.  

(9 VAC 5-80-860 of State Regulations)
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