

Michigan Department of Natural Resources

Waste Management Division

**SOLID WASTE DISPOSAL AREA CONSTRUCTION PERMIT**

This construction permit is issued under the provisions of the Solid Waste Management Act, 1978 PA 641, as amended, to permit the construction of a solid waste disposal area in the State of Michigan. This permit does not obviate the necessity of obtaining other clearances and permits as may be required by state law.

FACILITY NAME: J H CAMPBELL PLANT

GRANTED TO: CONSUMERS POWER COMPANY

TYPE OF FACILITY: TYPE III SANITARY LANDFILL

PERMIT NO. 0299

FACILITY ID: 70-000001

ISSUE DATE: December 15, 1993


COUNTY: OTTAWA

EXPIRATION DATE: One year from date of issue unless development of facility begins within the year.

FACILITY DESCRIPTION: The new Type III sanitary landfill, known as the J H Campbell Plant consists of 143 acres located in the SE 1/4 of Section 10, the SW 1/4 of Section 11, the NW 1/4 of Section 14 and in the NE 1/4 of Section 15, T6N, R16W, Port Sheldon Township, Ottawa County, Michigan, (hereinafter the Facility). The facility is identified in Attachment A, and is fully described in the attached conditions.

RESPONSIBLE PARTY TO CONTACT: Mr. W. L. Beckman  
Manager of Environmental & Technical Services  
Consumers Power Company  
212 West Michigan Ave  
Jackson, Michigan 49201  
517-788-1930

This permit is subject to revocation by the Director of the Department of Natural Resources for any violation of the law under which it is issued or for any violation of the rules authorized thereunder, or any conditions noted. This permit shall be available through the applicant during the entire effective date and remains the property of the Director of the Department of Natural Resources. **THIS PERMIT IS NOT TRANSFERABLE UNLESS PRIOR AUTHORIZATION HAS BEEN OBTAINED FROM THE DEPARTMENT DIRECTOR.**

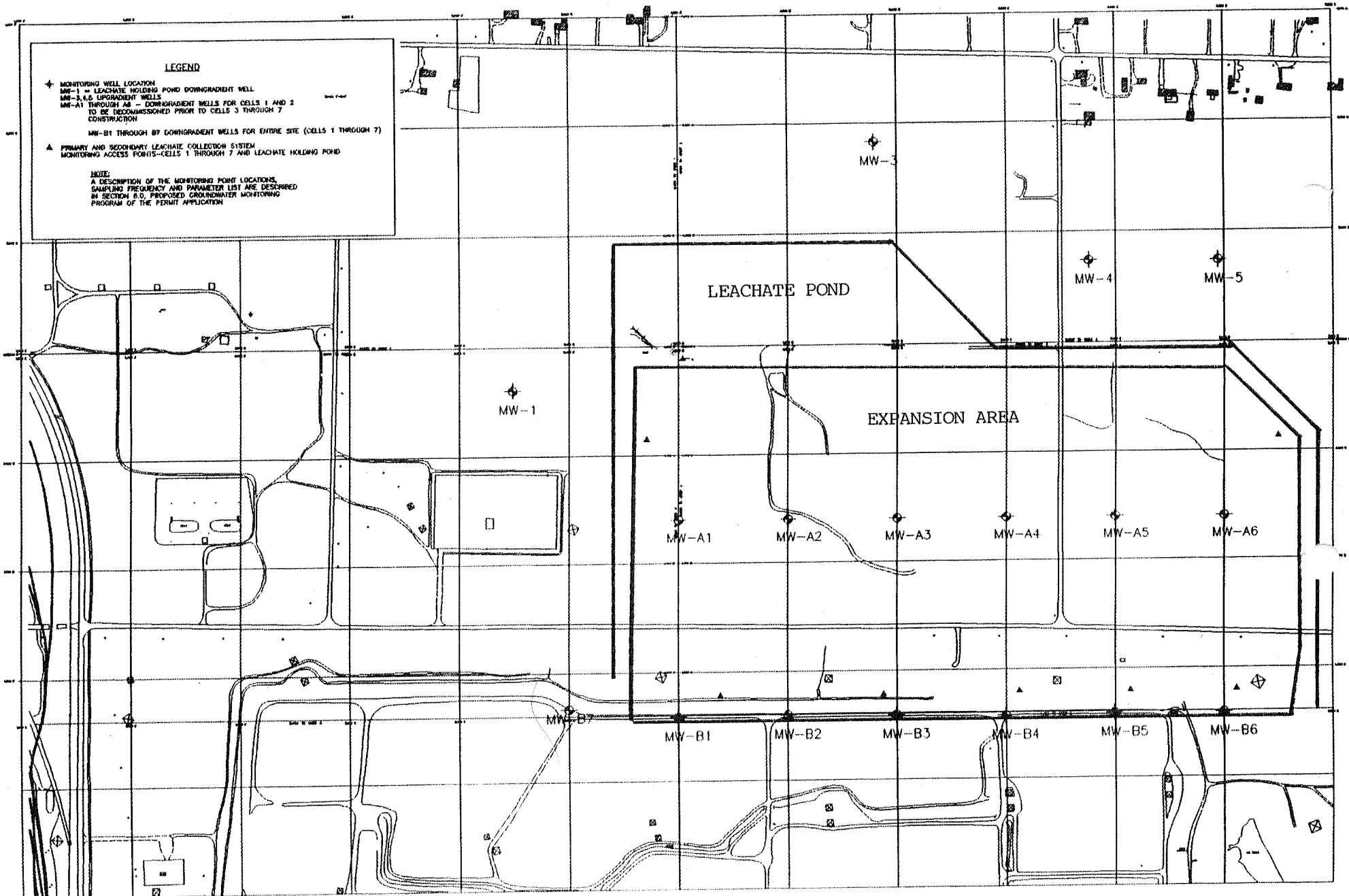
  
RUSSELL J. HARDING  
DEPUTY DIRECTOR

1. The permittee shall comply with all terms and conditions of this permit and the provisions of the Solid Waste Management Act and its rules. This permit consists of the following, including the permit application and any attachments to this permit.
2. The permittee shall construct the Facility in a manner that will not violate any state or federal law.
3. This permit authorizes the construction of the disposal area as defined in the Construction Permit Application for Solid Waste Area (Application) for the J H Campbell Plant, signed by Mr. W. L. Beckman, Manager of Environmental & Technical Services, Consumers Power Company, dated August 18, 1993, and received by the Michigan Department of Natural Resources (Department) on August 18, 1993 (hereinafter the "new disposal area"), and amended on November 19, 1993. The new disposal area authorized by this permit shall not be utilized for the disposal of solid waste until an operating license for the new disposal area is issued by the Department.
4. Attachment A shows the Facility, the area permitted for construction, monitoring points (groundwater wells, primary and secondary collection system), leachate storage points, site roads, and related appurtenances.
5. The issuance of this permit is based on the assumption that the information submitted in the Application dated August 18, 1993, received by the Department on August 18, 1993, and any subsequent amendments is accurate. Any inaccuracies or deviations found in this information may be grounds for the revocation or modification of this permit and/or other enforcement action. The permittee shall inform the Department's Waste Management Division, Grand Rapids District Supervisor, of any known inaccuracies and/or any deviation in the information of the application which would affect the permittee's ability to comply with the applicable rules or permit conditions. This permit is issued based on Department review of the Application for the J H Campbell Plant, signed by W. L. Beckman, on behalf of Consumers Power Company, and dated August 18, 1993. The Application includes the following documents or their approved revisions which are incorporated by reference and become enforceable portions of this permit:
  - a. Construction Permit Application Form PR-5522, dated August 18, 1993, amended November 19, 1993.
  - b. Fee in the amount of \$585.00.
  - c. Environmental Assessment titled, "Environmental Assessment, J.H. Campbell Ash Storage Facility, Solid Waste Disposal Area Expansion", prepared by Consumers Power Company, and dated August 1993, amended November 19, 1993.
  - d. Hydrogeological Report titled, "Hydrogeological Study Addendum for the Proposed J.H. Campbell Ash Storage Facility Expansion Project", prepared by STS Consultants Ltd., and dated August 18, 1993.

- e. Hydrogeological Monitoring Plan titled, "Proposed Groundwater Monitoring Program, J.H. Campbell Ash Storage Facility", prepared by Consumers Power Company, and dated July 31, 1993, amended November 19, 1993, and revised December 2, 1993.
  - f. Topographic Maps prepared by STS Consultants Ltd. and dated August 12, 1993.
  - g. Engineering Report titled, "J.H. Campbell Ash Storage Facility, Solid Waste Disposal Area Expansion (Coal Ash, Type III Landfill)", prepared by Consumers Power Company, and dated August 12, 1993, amended November 19, 1993.
  - h. Engineering Plans titled, "J.H. Campbell Ash Storage Facility", prepared by STS Consultants Ltd., and dated August 12, 1993, amended November 19, 1993 (Appendix 7.3, "Fugitive Dust Control Plan" revised November 30, 1993).
  - i. Operation Plans contained in the engineering report titled, "J.H. Campbell Ash Storage Facility, Solid Waste Disposal Area Expansion (Coal Ash, Type III Landfill)", prepared by Consumers Power Company, and dated August 12, 1993, amended November 19, 1993.
  - j. Construction Quality Assurance Plans titled, "Construction Quality Assurance Program, J.H. Campbell Ash Storage Facility, Solid Waste Disposal Area Expansion", prepared by STS Consultants Ltd., and dated August 12, 1993, amended November 19, 1993.
  - k. Documentation of consistency with the Ottawa County Solid Waste Management Plan prepared by Consumers Power Company and dated September 1992.
6. The sampling parameters and monitoring frequencies are outlined in the Hydrogeological Monitoring Plan and are summarized in Attachment B. The sampling results shall be submitted to the Department's Waste Management Division, Grand Rapids District Office.
7. **VARIANCES:** The permittee is granted the following variances from the Solid Waste Management Act and/or its rules:
- a. Rule 310(1): Vertical Isolation Distance.
  - b. Rule 315(4): Unloading of solid waste shall be continuously supervised.

**END OF CONDITIONS**

ATTACHMENT A



LEGEND

- ◆ MONITORING WELL LOCATION
- MW-1 - LEACHATE HOLDING POND DOWNGRADIENT WELL
- MW-3, 4, 5 UPGRADIENT WELLS
- MW-A1 THROUGH A6 - DOWNGRADIENT WELLS FOR CELLS 1 AND 2 TO BE DECOMMISSIONED PRIOR TO CELLS 3 THROUGH 7 CONSTRUCTION
- MW-B1 THROUGH B7 DOWNGRADIENT WELLS FOR ENTIRE SITE (CELLS 1 THROUGH 7)
- ▲ PRIMARY AND SECONDARY LEACHATE COLLECTION SYSTEM MONITORING ACCESS POINTS-CELLS 1 THROUGH 7 AND LEACHATE HOLDING POND

NOTE:  
A DESCRIPTION OF THE MONITORING POINT LOCATIONS, SAMPLING FREQUENCY AND PARAMETER LIST ARE DESCRIBED IN SECTION 8.0, PROPOSED GROUNDWATER MONITORING PROGRAM OF THE PERMIT APPLICATION



PCS LEACHATE MONITORING			
A	S	Q	PARAMETER
X	X	X	pH (Field Measurement)
X	X	X	Specific Conductance (Field Measurement)
X	X	X	Aluminum (total)
			Antimony (total)
X	X	X	Arsenic (total)
			Barium (total)
			Beryllium (total)
X	X	X	Boron (total)
X	X	X	Cadmium (total)
X	X	X	Calcium (total)
X	X	X	Chromium (total)
			Cobalt (total)
			Copper (total)
X			Iron (total)
X			Lead (total)
X			Magnesium (total)
X	X	X	Manganese (total)
			Mercury (total)
			Nickel (total)
			Phosphorus (total)
X			Potassium (total)
X	X	X	Selenium (total)
			Silver (total)
X			Sodium (total)
			Thallium (total)
			Vanadium (total)
			Zinc (total)
			Total Inorganic Nitrogen
X	X	X	Bicarbonate Alk. as HCO <sub>3</sub>
			Carbonate Alk. as CaCO <sub>3</sub>
X	X	X	Chloride
			Cyanide
X			Phenolics
X	X	X	Sulfate
			Total Dissolved Solids
			Biochemical Oxygen Demand (BOD-5)
			Chemical Oxygen Demand (COD)
X			Total Organic Carbon (TOC)
			Halogenated Volatile Organic Constituents
			Aromatic Volatile Organic Constituents
			Semivolatile Organic Constituents
			Leachate Depth
			Leachate Volume (monthly)

SECONDARY COLLECTION SYSTEM MONITORING			
A	S	Q	PARAMETER
X	X	X	pH (Field Measurement)
X	X	X	Specific Conductance (Field Measurement)
X	X	X	Aluminum (dissolved)
			Antimony (dissolved)
X	X	X	Arsenic (dissolved)
			Barium (dissolved)
			Beryllium (dissolved)
X	X	X	Boron (dissolved)
X	X	X	Cadmium (dissolved)
X	X	X	Calcium (dissolved)
X	X	X	Chromium (dissolved)
			Cobalt (dissolved)
			Copper (dissolved)
X			Iron (dissolved)
X			Lead (dissolved)
X			Magnesium (dissolved)
X	X	X	Manganese (dissolved)
			Mercury (dissolved)
			Nickel (dissolved)
			Phosphorus (dissolved)
X			Potassium (dissolved)
X	X	X	Selenium (dissolved)
			Silver (dissolved)
X			Sodium (dissolved)
			Thallium (dissolved)
			Vanadium (dissolved)
			Zinc (dissolved)
			Total Inorganic Nitrogen
X	X	X	Bicarbonate Alk. as HCO <sub>3</sub>
			Carbonate Alk. as CaCO <sub>3</sub>
X	X	X	Chloride
			Cyanide
X			Phenolics
X	X	X	Sulfate
			Total Dissolved Solids
			Biochemical Oxygen Demand (BOD-5)
			Chemical Oxygen Demand (COD)
X			Total Organic Carbon (TOC)
			Halogenated Volatile Organic Constituents
			Aromatic Volatile Organic Constituents
			Semivolatile Organic Constituents
			SCS Volume (weekly)
			Daily Average Flow Rate (weekly)

A=ANNUAL S=SEMIANNUAL Q=QUARTERLY