DEQ

Michigan Department of Environmental Quality
Waste and Hazardous Materials Division

SOLID WASTE DISPOSAL AREA CONSTRUCTION PERMIT FOR A RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROJECT

This construction permit is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., to permit the construction of a research, development, and demonstration project in the state of Michigan. This permit does not obviate the necessity of obtaining other authorization as may be required by state law.

FACILITY NAME: Smiths Creek Landfill

PERMITTEE/FACILITY OWNER: County of St. Clair, Michigan

PROPERTY OWNER: County of St. Clair, Michigan

TYPE OF PROJECT: Research, Development, and Demonstration Project

FACILITY ID: 452546

COUNTY: St. Clair

PERMIT NUMBER: 4085

ISSUE DATE: February 23, 2007

EXPIRATION DATE: Three years from date of issuance unless an extension is granted under the provisions of Section 324.11511b of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

PROJECT DESCRIPTION: The Smiths Creek Landfill bioreactor Research, Development, and Demonstration Project (RDDP) will study the effects of septage addition to Cell 3A (3.8 acres) versus the effects of leachate addition to Cell 3B (3.1 acres) at the Smiths Creek Landfill, a 264.5-acre facility located at 6779 Smiths Creek Road, city of Smiths Creek, Kimball Township, St. Clair County, Michigan. The Facility is identified in Attachment A and is fully described in this permit.

RESPONSIBLE PARTY: Mr. Shaun Groden, Administrator/Controller
County of St. Clair
County Building
200 Grand River Avenue, Suite 203
Port Huron, Michigan 48060
810-367-3061

This permit is subject to revocation by the Director of the Michigan Department of Environmental Quality (Director) if the Director finds that the RDDP is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. This permit shall be available through the applicant during its term and remains the property of the Director. Failure to comply with the terms and provisions of this permit may result in legal action leading to civil and/or criminal penalties as stipulated in Part 115.

THIS PERMIT IS NOT TRANSFERABLE UNLESS PRIOR AUTHORIZATION HAS BEEN OBTAINED FROM THE DIRECTOR.

Steven E. Chester
Director
Michigan Department of Environmental Quality

Permittee/Facility Owner: County of St. Clair
Facility Name: Smiths Creek Landfill
Construction Permit Number: 4085
Issue Date: February 23, 2007

The permittee shall comply with all terms of this permit, the solid waste disposal area construction permit(s) and the provisions of Part 115 and its rules. This permit includes the permit application and any attachments to this permit.

1) The permittee shall construct the RDDP in a manner that will not violate any state or federal law.

2) This permit authorizes the construction of the RDDP as defined in the Application for Permit to Construct a Solid Waste Disposal Area (Application) documents dated July 10, 2006, and received by the Michigan Department of Environmental Quality (MDEQ), Waste and Hazardous Materials Division (WHMD), on July 11, 2006. This authorization includes the construction/installation of structures, equipment, piping and other appurtenances associated with the septage receiving facility, the septage and leachate distribution system, gas collection and control system, and bioreactor-monitoring network.

3) The issuance of this RDDP Permit does not replace or supersede the need and requirement for the facility to obtain a solid waste operating license prior to operating the areas covered by this Permit as an RDDP bioreactor. The RDDP area authorized by this permit shall not be utilized for the disposal of solid waste not already authorized in Solid Waste Disposal Area License Number 9140 until an operating license for the disposal area is issued by the MDEQ.

4) The issuance of this RDDP Permit does not replace or change the requirements or authorizations of other existing permits and licenses issued to this facility nor relieve the facility in meeting the requirements of those permits and licenses.

5) The attached map (Attachment A) shows the RDDP, the area permitted for construction, areas authorized for the placement and/or acceptance of solid and liquid waste, monitoring points, leachate storage units, site roads, and related appurtenances.

6) Issuance of this permit is based on the assumption that the information submitted by the Applicant in the Application dated July 10, 2006, received by the MDEQ on July 11, 2006, revised August 21, 2006, 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 MDEQ, WHMD, Southeast Michigan District Supervisor, of any known inaccuracies and/or any deviation in the information of the Application that would affect the permittee's ability to comply with the applicable rules or permit conditions. This permit is issued based on MDEQ review of the Application, EQP 5506. The Application includes the following documents or their approved revisions that are incorporated by reference and become enforceable portions of this permit:

   a. Application Form EQP 5506.

   b. Fee in the amount of $1,500.

   c. Solid Waste Disposal Area Construction Permit Number 4061 issued to the County of St. Clair on April 8, 2004.

   d. Document titled "Application for Construction Permit for the Research, Development, and Demonstration Project (RDDP), Smiths Creek Landfill Septage Bioreactor, Engineering Report" prepared by CTI & Associates, Inc., and dated July 2006 with revisions dated February 2007 and received February 2, 2007.

   e. Engineering drawings, numbered 1 through 18, in a plan set titled "Smiths Creek Landfill Septage Bioreactor RDDP Construction Permit Application, Kimball Township, St. Clair County, Michigan" prepared by CTI & Associates, Inc., and dated July 2006 with revisions dated November 2006 and received February 2, 2007.

7) At any time the Director determines that the overall goals of the RDDP, including, but not limited to, protection of human health or the environment, are not being achieved, the Director may order immediate termination of all or part of the operations of the RDDP or may order other corrective measures.

8) Any modifications or changes to the construction, monitoring, and operation of the RDDP as defined in the Application documents and authorized by this permit must be approved by the MDEQ, which may require modification of this permit.

9) **SPECIAL CONDITIONS**:

a. The active landfill gas collection system must be operational before the addition of any material to accelerate or enhance biostabilization of the solid waste. To control odors, the landfill gas collection system shall collect landfill gas as soon as collectable levels of gas are present either within the waste or within the collection system.

b. Septage waste and all other liquid waste that is beneficially added and all other solid waste that is added to the bioreactor cell is subject to county Solid Waste Management Plan limitations and shall be accounted for purposes of the Solid Waste Surcharge payments under Section 11525a of Part 115.

c. The Septage Receiving Facility must comply with the applicable requirements of Part 117, Septage Waste Servicers, of the NREPA, as well as Part 115.

d. The permittee shall submit a report to the Chief of the WHMD at least once every 12 months on the progress of the RDDP in achieving its goals. The report shall, at a minimum, include a summary of all monitoring and testing results, a detailed summary of the type, quantity, and effectiveness of the daily and alternative covers used, and a summary of the Septage Receiving Facility (SRF) operation relative to the requirements of the SRF Operation and Maintenance Plan.

e. The Permittee shall notify the WHMD, Southeast Michigan District Supervisor, within 24 hours, of any fire event on the site. If the fire event occurs when the district office is closed, then the Permittee shall report the incident to the MDEQ's 24-hour Pollution Emergency Alerting System (PEAS) at 800-292-4706 within 24 hours of identification.

f. The postclosure period for the bioreactor cell will begin when the MDEQ determines that the unit where the RDDP was authorized has reached a condition similar to that which landfills that were not authorized as RDDPs would reach prior to postclosure. Parameters including moisture content, leachate quality, gas composition and production, waste stability, and waste settlement will be monitored to provide indicators of the start of the postclosure period.

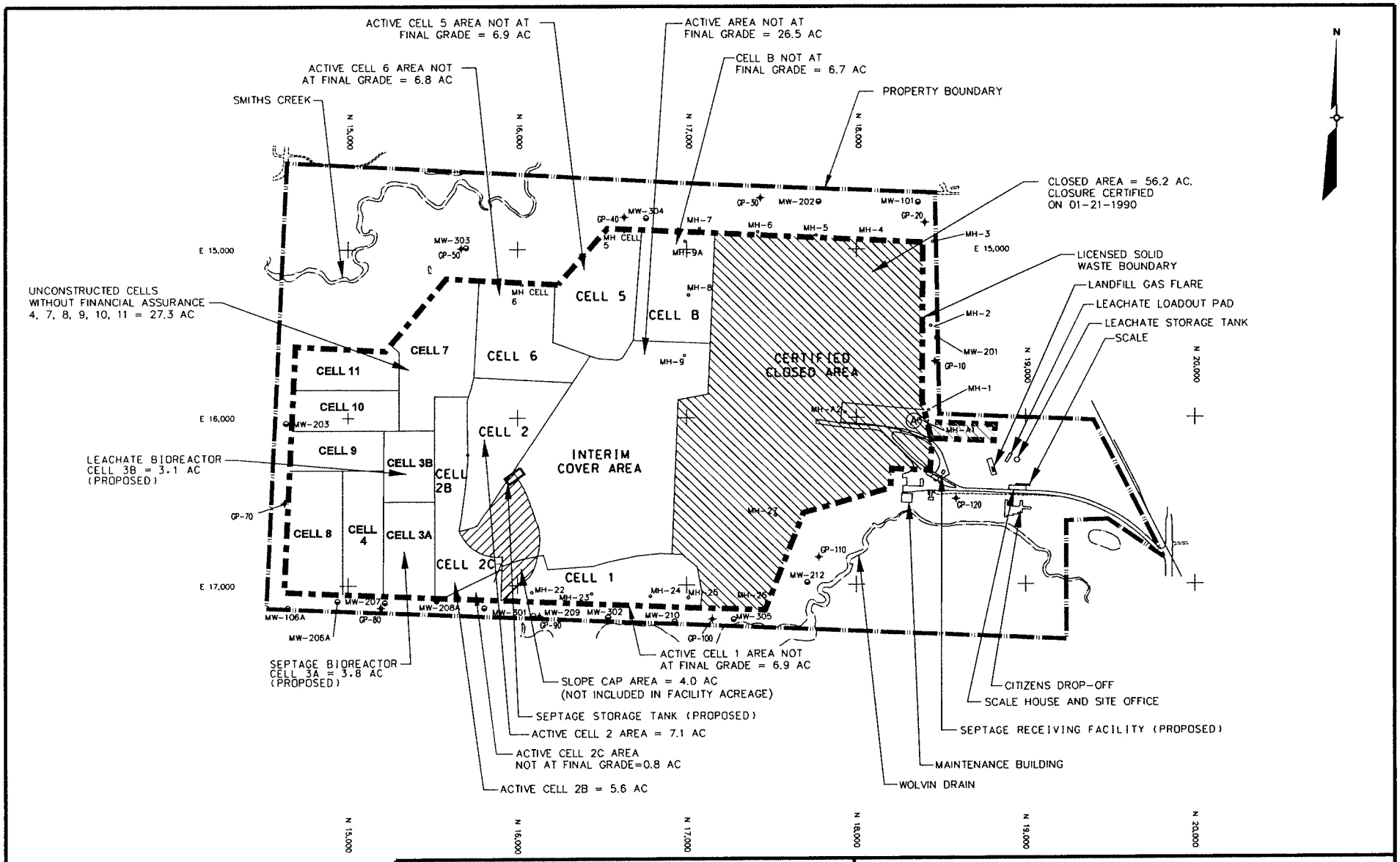
g. The Perpetual Care Fund required under Section 11525 of Part 115 shall be maintained for the period after final closure of the bioreactor cell as specified under that section.

h. Conversion to Full Scale: The Director may authorize the conversion of this RDDP to a full-scale operation if the permittee of the RDDP demonstrates to the satisfaction of the Director that the goals of the RDDP have been met and the authorization does not constitute a less stringent permitting requirement than is required under Subtitle D of Title 42 of the United States Code, Sections 6941 to 6949a.

10) **TERM**: This construction permit shall expire three years after the date of issuance, unless an extension is granted under the provisions of Section 11511b of Part 115 subject to all of the following requirements:

    a. The application to extend the term of the permit must be received by the MDEQ at least 90 days before the expiration of the permit.
    b. The application shall include a detailed assessment of the RDDP showing the progress of the RDDP in achieving its goals, a list of problems with the RDDP, and progress toward resolving those problems.
    c. An individual extension shall not exceed 3 years, and the total term of the permit with all extensions shall not exceed 12 years.

END OF PERMIT



CTI and Associates, Inc.
12482 Emerson Drive
Brighton, Michigan 48116
248.486.5100

ATTACHMENT A
FACILITY MAP

SMITHS CREEK LANDFILL
ST. CLAIR COUNTY, MICHIGAN

JULY 2006 SCALE: 1" = 800' 58042006