



Michigan Department of Environmental Quality
Office of Waste Management and Radiological Protection

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license 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., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Smiths Creek Landfill

LICENSEE/OPERATOR: County of St. Clair, Michigan

FACILITY OWNER: County of St. Clair, Michigan

PROPERTY OWNER: County of St. Clair, Michigan

FACILITY TYPE(S): Municipal Solid Waste Landfill and Research, Development, and Demonstration Project

FACILITY ID NUMBER: 452546

COUNTY: St. Clair

LICENSE NUMBER: 9387

ISSUE DATE: May 20, 2014

EXPIRATION DATE: May 20, 2019

FACILITY DESCRIPTION: The Smiths Creek Landfill, a Municipal Solid Waste Landfill and Research, Development, and Demonstration Project, consists of 265.4 acres located at 6779 Smiths Creek Road, Kimball Township, St. Clair County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Identified in item two of the license.

RESPONSIBLE PARTY: Mr. Matthew B. Williams, Landfill Manager
County of St. Clair, Michigan
6779 Smiths Creek Road
Smiths Creek, Michigan 48074
810-989-6979

RENEWAL OPERATING LICENSE: This License Number 9387 supersedes and replaces Solid Waste Disposal Area Operating License Number 9342 issued to County of St. Clair, Michigan on January 8, 2013.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality, if the Director finds that this Facility 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. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Solid Waste Section
Office of Waste Management and Radiological Protection

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The licensee shall comply with all terms of this license and the provisions of Part 115 and the administrative rules implementing Part 115 (Part 115 Rules). This license includes the license application and any attachments to this license.

1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
2. The following portions of the Facility are authorized to receive solid waste by this license:

ACTIVE PORTIONS NOT AT FINAL GRADE: The area(s) identified as Interim Cover Area (27.1), Cell B (6.7 acres), Cell 1 (6.9 acres), Cell 2 (7.1 acres), Cell 2B (5.6 acres), Cell 2C (0.8 acres, Type III waste), Cell 5 (6.9 acres), Cell 6 (6.8 acres), Cell 3 (6.9 acres), a portion of Cell 7 (5.15 acres), and Cell 7B (2.01 acres) were authorized to receive waste by the previous license. This area's total acreage is 81.16 acres.

3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by the Michigan Department of Environmental Quality (MDEQ) of construction certification:

UNCONSTRUCTED AREA(S) WITH FINANCIAL ASSURANCE: The area(s) identified as Cell 4 (9.79 acres) and a portion of Cell 7B (0.15 acres), totaling 9.94 acres, are included in the calculation of financial assurance as required by Section 11523 of Part 115. This portion(s) of the Facility shall be authorized to receive waste, as part of this license, when acceptable certification is submitted to the MDEQ, as required by Section 11516(5) of Part 115, and determined by the MDEQ to be consistent with Part 115 and the Part 115 Rules. The certification shall verify that construction of this area(s) was in accordance with the Construction Permit(s) listed in Item 8 of this license, Part 115, and the Part 115 Rules.

4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:

a. **UNCONSTRUCTED AREA(S) WITHOUT FINANCIAL ASSURANCE:** The area(s) identified as Cell 8 (8.6 acres), areas of Cells 9, 10, and 11 overlying part of the Closed Area (42.3 acres), Cell 11 lateral expansion area (4.3 acres), and Type III: Cell 5B (0.5 acres), Cell 6B (0.5 acres), Cell 7C (0.9 acres), Cell 11B (0.3 acres) are not constructed and are not included in the calculation of financial assurance as required by Section 11523 of Part 115. This area's total acreage is 15.1 acres.

b. **CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY THE MDEQ:** The following unit(s) and/or portion(s) are closed:

PRE-EXISTING UNIT(S): The unit(s) identified as Closed Area had final closure certified on January 21, 1990. This certification was reviewed and approved by the MDEQ on January 21, 1990. This area's total acreage is 56.2 acres.

5. The attached map (Attachment A) shows the Facility, the area permitted for construction, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances.
6. Issuance of this license is conditioned on the accuracy of the information submitted by the Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by the MDEQ on January 13, 2014, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license and may be grounds for enforcement action. The licensee shall inform the MDEQ's Office of Waste Management and Radiological Protection (OWMRP), Southeast Michigan District Supervisor, of any inaccuracies in the information in the Application upon discovery.

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7. This license is issued based on the MDEQ's review of the Application, submitted by the County of St. Clair, Michigan, for the Smiths Creek Landfill, dated January 2, 2014, and revised May 9, 2014, and May 14, 2014. The Application consists of the following:

- a. Application Form EQP 5507.
- b. Application fee in the amount of \$5,000.00.
- c. Certification of construction by N/A.
- d. Waste Characterization: N/A.
- e. Restrictive Covenant:

The Smiths Creek Landfill restrictive covenant on 264.5 acres is on file at the St. Clair County Register of Deeds recorded on June 3, 2002, as Liber 2449 pages 928-931. A copy is on file with the MDEQ.

- f. Perpetual Care Fund Agreement, established as an escrow account, signed by Mr. Donald E. Dodge, Administrator, St. Clair County on March 13, 1997, was executed by the MDEQ on April 17, 1997.
- g. Financial Assurance.

i. Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the calculation worksheet form EQP 5507A entitled, "Form A, Financial Assurance Required," and is \$8,500,894.00.

The Facility has provided financial assurance totaling \$8,500,895.00, based on the requirements of Section 11523 of Part 115, consisting of a combination of the Perpetual Care Fund established under Section 11525 of Part 115, bonds, and the financial capability of the Applicant as evidenced by a financial test. The financial assurance mechanisms used by the Facility are summarized below in Items ii, iii, and iv, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

The Perpetual Care Fund Agreement statement showed a balance of \$2,078,629.00 in the Facility's Perpetual Care Fund as of December 31, 2013. Of this amount, the MDEQ has granted the request to use \$2,078,629.00 toward the total amount of financial assurance required.

iii. Financial Assurance Provided Via Bond:

The following financial assurance has been received from the Applicant to meet the amount of financial assurance required:

Irrevocable Letter of Credit	\$2,595,000.00
Total Amount Received:	\$2,595,000.00

iv. Financial Assurance Provided Via a Financial Test for a Type II Landfill:

A financial test may be used by the owner of a Type II landfill as a means to meet an amount up to, but not exceeding, 70 percent of the closure, postclosure, and corrective action cost estimate pursuant to Section 11523a of Part 115. This Facility has provided a financial test in the amount of 3,827,266.00. Financial capability demonstrated by a financial test must be updated each fiscal year. The next update is due June 30, 2014 and each year thereafter. If the owner/operator fails to update the test, or is no longer able to

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satisfy the test, the owner/operator must obtain alternate financial assurance within 210 days following the close of the owner/operator's fiscal year.

v. Financial Assurance Updates Required:

For Type II landfills, the financial assurance cost estimates of closure and postclosure activities must be updated annually and the corresponding requisite amount of financial assurance must be adjusted annually for the costs of inflation. The corresponding financial assurance, as adjusted for inflation and other factors, is due on May 20, 2015, and each year thereafter.

8. This previously "grandfathered" Facility did not have a construction permit until Solid Waste Disposal Area Construction Permit Number 4061 was issued to the County of St. Clair, Michigan, on April 8, 2004. The Facility's first license (Number 2452) was issued on May 29, 1967, pursuant to the repealed Garbage and Refuse Disposal Act, 1965, PA 87. The following documents approved prior to, and with the issuance of, the aforementioned construction permit, are incorporated in this license by reference:
 - a. Engineering plans, dated July 17, 1979.
 - b. Construction Permit Application for Smiths Creek Landfill Solid Waste Disposal Area Vertical Expansion, Volumes I, II, and III, prepared by CTI and Associates, Inc., dated December 2003 and revised March 2004.
 - c. Engineering plans titled "Smiths Creek Landfill Construction Permit, Kimball Township, St. Clair County, Michigan." The plans consisting of 24 sheets were prepared by CTI and Associates, Inc., dated December 2003 and revised May 2004, April 2005, and May 2005.
 - d. Groundwater Monitoring Plan and Hydrogeological Assessment for Smiths Creek Landfill, prepared by Wehran EMCON, dated October 1994, and revised August 1995.
 - e. Statistical Analysis of Background Groundwater Monitoring Data for Smiths Creek Landfill, prepared by IT EMCON, dated October 1999.
9. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 8, are incorporated in this license by reference:
 - a. Document titled "Engineering Improvements, Smiths Creek Landfill, St. Clair County, Michigan," dated April 2005.
 - b. Documents titled "Slideslope Stability Evaluation, Cell 7 Construction, Smiths Creek Landfill," prepared by CTI and Associates, Inc., dated April 2007.
 - c. Engineering plans titled "Smiths Creek Landfill, Cell 7 Construction Drawings," prepared by CTI and Associates, Inc., dated May 2007.
 - d. Document titled "Hydrogeological Monitoring Plan Smith Creek Landfill," prepared by CTI dated December 2007, and revised March 2010, October 11, 2010, and November 8, 2010.
 - e. Document titled "Request for Approval of Alternative Daily Cover, Smith Creek Landfill, St. Clair County, Michigan," prepared by CTI and Associates, Inc., dated December 5, 2011, with supplemental information dated January 19, 2012.
 - f. Document titled "Monitoring well Abandonment and Installation, Smiths Creek Landfill, Smiths Creek, Michigan," prepared by CTI and Associates, Inc., dated July 12, 2012.
10. The following documents approved with the issuance of the Research, Development, and Demonstration Project (RDDP) Construction Permit Number 4085 issued on February 23, 2007, and the RDDP Construction Permit Modification Number 4125 issued on July 11, 2012, are incorporated in this license by reference:

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- a. 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.
 - b. 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.
 - c. Document titled "Modification Request for Construction Permit #4085 Smiths Creek Landfill, County of St. Clair, Michigan" dated February 7, 2012, and revised March 15, 2012.
11. The following documents approved with the issuance of Solid Waste Disposal Area Construction Permit Number 4134 on June 26, 2013, and the Research, Development, and Demonstration Project (RDDP) Construction Permit Number 4137 issued on December 13, 2013, are incorporated in this license by reference:
- a. Smiths Creek Landfill 2012 Expansion Permit Application, Volumes I-IV, dated July 2012, revised May 2013 and June 2013, and prepared by CTI and Associates, Inc.
 - b. Volume I of IV: Executive Summary and Hydrogeological Investigation Report, from the document listed in Item 11a, and revised June 2013.
 - c. Volume II of IV: Environmental Assessment Report, from the document listed in Item 11a, and revised May 2013.
 - d. Volume III of IV: Engineering Report, from the document listed in Item 11a, and revised May 2013.
 - e. Volume IV of IV: Other Plans, from the document listed in Item 11a, and revised June 2013.
 - f. Smiths Creek Landfill 2012 Expansion Permit Application, Kimball Township, St. Clair County, Michigan, dated July 2012, revised May 2013, and consisting of twenty seven (27) engineering drawings.
 - g. Document titled "Application for Construction Permit for the Research, Development, and Demonstration Project (RDDP), 2013 Smiths Creek Landfill Septage Bioreactor, Engineering and Operations Report" prepared by CTI & Associates, Inc., and dated July 2013, revised November 25, 2013, and received November 26, 2013.
 - h. Engineering drawings numbered 1 through 5 in a 16 sheet plan set titled "Smiths Creek Landfill 2013 RDDP Permit Application, Kimball Township, St. Clair County, Michigan" prepared by CTI & Associates, Inc., and dated July 2013, revised November 2013 and received November 26, 2013.
12. The following documents approved since the issuance of the construction permits, referenced in Item 10 and Item 11, are incorporated into this license by reference:
- a. Document titled "Septage Receiving Facility Operation and Maintenance Plan, Smiths Creek Landfill," prepared by CTI and Associates, Inc., dated June 2006, revised February 2007, and March 2008.
 - b. Document titled "2007 Septage Receiving System Construction Documentation Report, Smiths Creek Landfill," prepared by CTI and Associates, Inc., dated December 2007.
 - c. Engineering plans (two sheets) titled "Smiths Creek Landfill, St. Clair, Michigan, Cell 3 Record Gas Information" prepared by CTI and Associates, Inc., dated May 2011.
 - d. Engineering plans (two sheets) titled "Smiths Creek Landfill Septage Holding Tank Area Conceptual Construction Drawings" prepared by CTI and Associates, Inc. dated October 16, 2012.
 - e. Engineering plans (two sheets) titled "Smiths Creek Landfill Septage Holding Tank Area Record Drawings" prepared by CTI and Associates, Inc., dated November 14, 2012.

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- f. Document titled "Proposed Minor Liner Grade Changes, Solid Waste Disposal Area Construction Permit Number 4061, Smiths Creek Landfill, prepared by CTI and Associates, Inc., dated December 5, 2012.
 - g. Document titled "Research, Development, and Demonstration Project (RDDP), Smiths Creek Septage Bioreactor, 2012 Annual Report," dated March 2013.
 - h. Document titled "Minor Upgrade to Construction Permit #4134, Smiths Creek Landfill, County of St. Clair, Michigan," prepared by CTI and Associates, Inc., dated March 26, 2014.
 - i. Three engineering drawings titled "Smiths Creek Landfill, St. Clair County, Michigan, 2012 Expansion Permit Application," prepared by CTI and Associates, Inc., dated April 30, 2014, and modifying permit drawings number 1-General Site Layout; drawing number 2- Liner Grading Plan; and the Title Sheet.
13. Consent Order/Judgment Number: N/A.
14. The licensee shall repair any portion of the certified liner or leachate collection system that is found to be deficient or damaged during the term of this license unless determined otherwise by the MDEQ.
15. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer in accordance with R 299.4921 of the Part 115 Rules and approved by the MDEQ before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to the MDEQ's OWMRP, Southeast Michigan District Office Supervisor, for review and approval.
16. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated December 2007, and revised March 2010, October 11, 2010, November 8, 2010, and April 2013. The sampling analytical results shall be submitted to the MDEQ's OWMRP, Southeast Michigan District Office.
17. Modifications to the approved hydrogeological monitoring plan referenced in Item 16 may be approved, in writing, by the OWMRP, Southeast Michigan District Supervisor. Proposed revisions must be submitted in a format specified by the MDEQ.
18. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the OWMRP, Southeast Michigan District Supervisor.
19. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(l) of the Part 115 Rules, may be approved, in writing, by the OWMRP, Southeast Michigan District Supervisor.
20. Requests for alternate daily cover may be approved, in writing, by the OWMRP, Southeast Michigan District Supervisor.
21. Leakage Control Criteria:
- The active portions of the unit(s) authorized to receive waste by this license is a monitorable unit(s) which is located over a natural soil barrier and that is in compliance with the provisions of R 299.4422(2) of the Part 115 Rules. In addition, the Facility has elected to install a secondary leachate collection system. The action flow rate for each unit is 25 gallons/acre/day.
22. **VARIANCES:** None.
23. **SPECIAL CONDITIONS:**
- a. The licensee shall place a compacted layer of not less than six inches of earthen material, unless an exemption is granted, of suitable cover material on all exposed solid waste by the end of each working day, as required by R 299.4429(1) of the Part 115 Rules. Suitable cover shall be either uncontaminated soil or an alternate cover approved by the OWMRP, listed in Item i, below. Alternate cover shall be restricted as indicated in Item ii and applied as per the approved operational plan submitted by the licensee.

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- i. Approved alternate cover shall be any of the following:

<u>Product/Waste Material</u>	<u>Source</u>	<u>Monthly Volume</u>
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See approved alternate daily cover plan listed in Item 9e.

- ii. The above materials are approved for daily cover when used in the following manner:

- (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
- (2) The licensee shall maintain copies of the testing performed on Class B and Class C materials in the facility operating record.
- (3) The licensee shall only stockpile material in a secure manner within the active cell.
- (4) This approval does not preclude the licensee from disposing of the material as waste in the active fill area instead of using the material as daily cover.
- (5) This approval shall immediately become void upon documentation by the MDEQ that the alternative cover is not being used in accordance with listed conditions, that the alternative cover is not providing the necessary protection, that the material no longer meets the alternative daily cover guidelines, or that the process producing the waste material has changed.
- (6) If the material does not meet the guidelines from Attachment 2 of Policy and Procedure OWMRP-115-10, for nonvolatiles, the licensee shall ensure that fugitive dust emissions from this material do not occur. Acceptable methods to ensure fugitive emissions do not occur are:
 - (a) Implement a schedule to wet down material; or
 - (b) Cover the material with a tarp; or
 - (c) Apply an approved foam or other appropriate commercial dust control product.
- (7) This approval to use alternative cover shall expire upon expiration of this operating license.

- b. The Licensee shall obtain a Part 303, Wetlands Protection permit prior to construction which impacts any regulated wetlands.

24. SPECIAL CONDITIONS SPECIFIC TO THE RDDP:

The following special conditions are specifically related to the RDDP portion of the landfill:

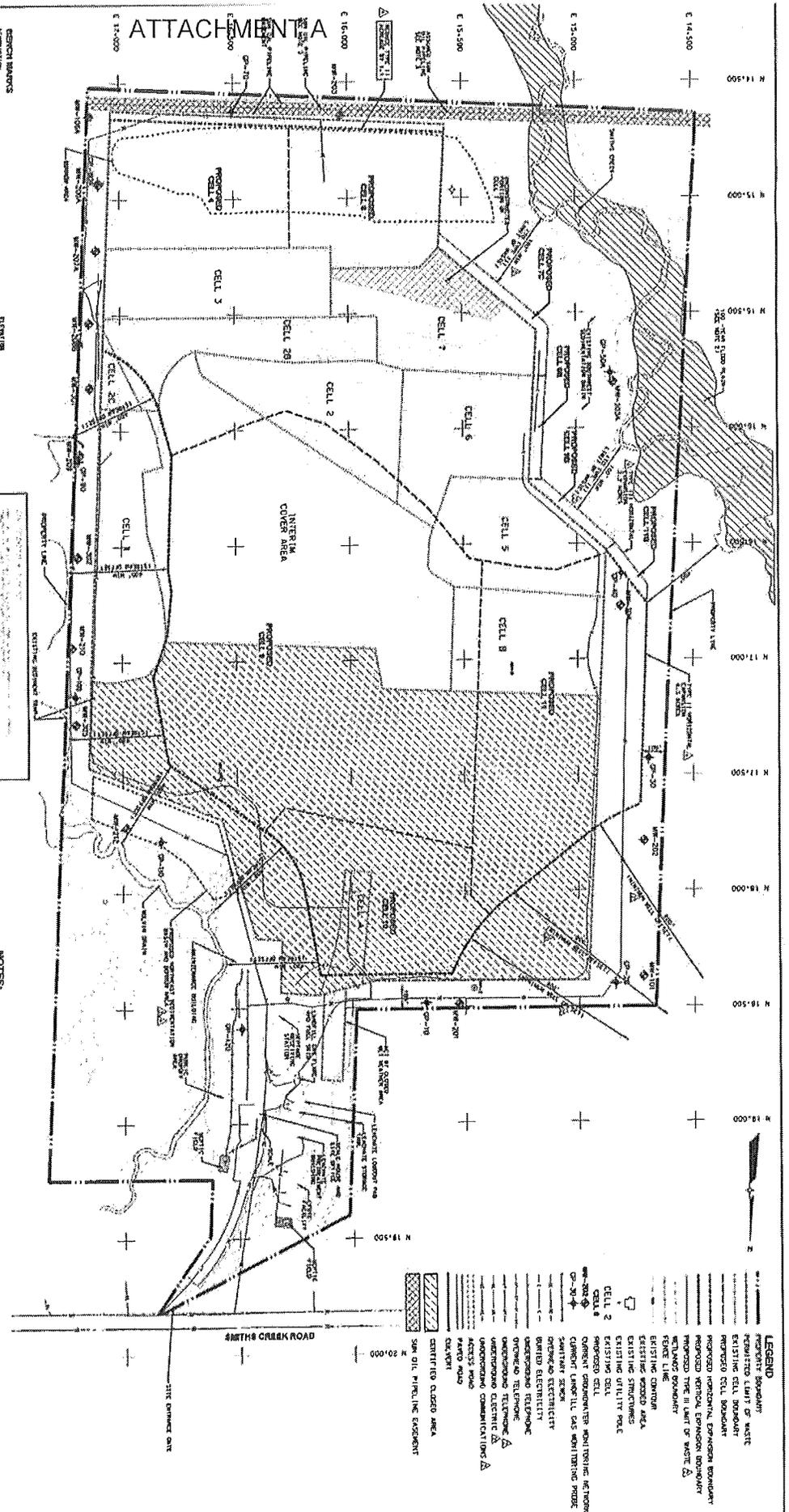
- a. The licensee is authorized to operate the RDDP in accordance with Solid Waste Disposal Area Construction Permit 4085 (Permit Number 4085) issued on February 23, 2007, until February 23, 2016, or any extension of the term of Permit Number 4085, as modified by Permit Numbers 4125 and 4137, in accordance with Section 11511b(8) of Part 115, unless the RDDP authorization is terminated in accordance with Section 11511b(8) or (9) of Part 115. Any authorization for the RDDP under this license shall remain in effect only as long as Permit Number 4085, as modified by Permit Number 4125 and 4137, remains in effect.
- b. The licensee is authorized to operate the RDDP in accordance with Solid Waste Disposal Area Construction Permit 4137 (Permit Number 4137) issued on December 13, 2013, until December 13, 2016, or any extension of the term of Permit Number 4137, in accordance with Section 11511b(8) of Part 115, unless the RDDP authorization is terminated in accordance with Section 11511b(8) or (9) of Part 115. Any authorization for the RDDP under this license shall remain in effect only as long as Permit Number 4137, remains in effect.

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- c. The active landfill gas collection system must be operational before the addition of any materials 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.
 - d. Septage waste and all other liquid waste that is beneficially added, and all other solid waste that is added to the bioreactor cells are 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.
 - e. The Septage Receiving Facility must comply with the applicable requirements of Part 117, Septage Waste Servicers, of the NREPA, as well as Part 115.
 - f. The licensee shall submit a report to the Chief of the OWMRP on the progress of the RDDP in achieving its goals. This report will be due on March 25, 2013, and each year thereafter in accordance with any extension to Permit Number 4085, as modified by Permit Number 4125. 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, a summary of the Septage Receiving Facility (SRF) operation relative to the requirements of the SRF Operation and Maintenance Plan, an assessment of the RDDP showing the progress of the RDDP in achieving its goals, and a list of problems with the RDDP's progress in resolving those problems, including the corrective measures taken or to be taken.
 - g. The licensee shall notify the OWMRP, Southeast Michigan District Supervisor, within 24 hours, of any fire event on the site. If the fire even occurs when the district office is closed, then the licensee shall report the incident to the MDEQ's 24-hour Pollution Emergency Alerting System at 800-292-4706 within 24 hours of identification.
 - h. The postclosure period for the bioreactor cells 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.
 - i. 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.
 - j. Conversion to Full Scale: The MDEQ Director may authorize the conversion of this RDDP to a full-scale operation if the licensee 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.
25. **TERM:** This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by, the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

END OF LICENSE

ATTACHMENT A



DESIGN NOTES:
 1. ALL NEW STRUCTURES SHALL BE CONSTRUCTED ON A 4% SLOPE TO THE NEAREST NEIGHBORING DRAINAGE COURSE.
 2. ALL NEW STRUCTURES SHALL BE CONSTRUCTED ON A 2% SLOPE TO THE NEAREST NEIGHBORING DRAINAGE COURSE.
 3. ALL NEW STRUCTURES SHALL BE CONSTRUCTED ON A 1% SLOPE TO THE NEAREST NEIGHBORING DRAINAGE COURSE.
 4. ALL NEW STRUCTURES SHALL BE CONSTRUCTED ON A 0.5% SLOPE TO THE NEAREST NEIGHBORING DRAINAGE COURSE.
 5. ALL NEW STRUCTURES SHALL BE CONSTRUCTED ON A 0.2% SLOPE TO THE NEAREST NEIGHBORING DRAINAGE COURSE.

NOTES:
 1. ALL UTILITIES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
 2. ALL UTILITIES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
 3. ALL UTILITIES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
 4. ALL UTILITIES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
 5. ALL UTILITIES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

PROPOSED CELL AREA (TOTAL)	PROPOSED CELL AREA (TOTAL)
CELL 1 91.7 ACRES	CELL 58 0.5 ACRES
CELL 2 85.6 ACRES	CELL 59 0.5 ACRES
CELL 3 45.0 ACRES	CELL 60 0.5 ACRES
CELL 4 10.8 ACRES	CELL 61 0.5 ACRES
CELL 5 21.1 ACRES	CELL 62 2.2 ACRES

TOTAL PROPOSED EXPANSION	TOTAL PROPOSED EXPANSION
111.1 ACRES	111.1 ACRES

SCALE: 1" = 200'

SHIELDS CREEK LANDFILL
ST. CLAIR COUNTY, MICHIGAN
2012 EXPANSION PERMIT APPLICATION
GENERAL SITE LAYOUT

City and Associates, Inc.
 61551 Westland Trail
 Westland, Michigan 48090
 734-499-4500 (Fax) 734-499-6666
 www.cityand.com

NO.	DATE	DESCRIPTION
1	11-15-11	ISSUE CELL AND RAMP ACCESS PANEL IDENTIFIER APP. 11 AND 111
2	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
3	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
4	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
5	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
6	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
7	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
8	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
9	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
10	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
11	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
12	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
13	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
14	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
15	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
16	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
17	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
18	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
19	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION
20	1-14-12	ISSUE REVISIONS TO CELL IDENTIFICATION