



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: Vienna Junction Industrial Park Sanitary Landfill

LICENSEE/OPERATOR: Allied Waste Systems of Michigan, LLC

FACILITY OWNER: Allied Waste Systems of Michigan, LLC

PROPERTY OWNER: Allied Waste Systems of Michigan, LLC

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 470393

COUNTY: Monroe

LICENSE NUMBER: 9476

ISSUE DATE: June 13, 2016

EXPIRATION DATE: June 13, 2021

FACILITY DESCRIPTION: The Vienna Junction Industrial Park Sanitary Landfill, a municipal solid waste landfill and Municipal Solid Waste Landfill, consists of 226.3 acres located in parts of Section 5 and 6, T9S, R8E, and parts of Sections 31 and 32, T8S, R8E, Erie Township, Monroe County, Michigan, as identified in Attachment A (Sheets 1 and 2) and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: As identified in Item 2 of this license.

RESPONSIBLE PARTY: Mr. Chris Jones
Allied Waste Systems of Michigan, LLC
6196 Hagman Road
Toledo, Ohio 43612
734-848-5216

RENEWAL OPERATING LICENSE: This License Number 9476 supersedes and replaces Solid Waste Disposal Area Operating License Number 9312 issued to Allied Waste Systems of Michigan, LLC on June 29, 2011.

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.

Carrie Hardigan, Acting Chief, Solid Waste Section
Office of Waste Management and Radiological Protection

Licensee: Allied Waste Systems of Michigan, LLC
Facility Name: Vienna Junction Industrial Park Sanitary Landfill
Operating License Number: 9476
Issue Date: June 13, 2016

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 a portion of Area 6 Cell 1 Phase 1 (7.85 acres), a portion of Area 6 Cell 2 (12.65 acres), Area 6 Cell 3 (12.8 acres), Area 6 Cell 4 (11.1 acres), a portion of Area 5 Cells 1 & 2 (11.75 acres), a portion of Area 4 (4.6 acres), a portion of Area 6 Cell 1 Phase 2 (3.5 acres), and a portion of Area 7 Cells 1&5 (2.0 acres) were authorized to receive waste by the previous license. This area's total acreage is 66.25 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 Area 7 Phase 1, totaling 13.4 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:

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:

EXISTING UNIT(S): The unit(s) or portion(s) of unit(s) identified as Area 1-2, Portions of Area 4, Portions of Area 5, and Portions of Area 6 had final closure certified on June 1994, April 29, 1996, December 3, 1998, January 30, 1998, March 3, 2000, December 2005, and May 2007. This certification was reviewed and approved by the MDEQ on February 23, 2006, and November 23, 2006. This area's total acreage is 65.53 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 March 3, 2016, 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), Jackson District Supervisor, of any inaccuracies in the information in the Application upon discovery.
7. This license is issued based on the MDEQ's review of the Application, submitted by Allied Waste Systems of Michigan, LLC, for the Vienna Junction Landfill, dated February 29, 2016, and revised May 16, 2016. The Application consists of the following:
 - a. Application Form EQP 5507.
 - b. Application fee in the amount of \$20,000.00.
 - c. Certification of construction by N/A.
 - d. Waste Characterization: N/A.

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e. Restrictive Covenant:

The declaration of a restrictive covenant on 226.31 acres is on file at the Monroe County Register of Deeds recorded on January 4, 2001, as Liber 1970 pages 0678. A copy is on file with the MDEQ.

f. Perpetual Care Fund Agreement, established as a standby trust account, signed by Ms. Marsha Lacy, Assistant Treasurer, Allied Waste Systems of Michigan, LLC, on September 24, 2014, and was executed by the MDEQ on October 30, 2014.

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 \$10,586,314.59.

The Facility has provided financial assurance totaling \$10,586,315.58, 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 and iii, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

The Perpetual Care Fund Agreement statement showed a balance of \$2,118,000.00 in the Facility's Perpetual Care Fund as of October 14, 2015. Of this amount, the MDEQ has granted the request to use \$2,118,000.00 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:

Surety Bond	\$8,468,315.58
Total Amount Received:	\$8,468,315.58

iv. 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 June 13, 2017, and each year thereafter.

8. The following documents approved with Construction Permit Number(s) 0249 and 0328 issued to the Browning-Ferris Industries of Ohio and Michigan, Inc. and Construction Permit Number 4146 issued to Allied Waste Services, LLC on September 6, 1991, September 14, 1995, and July 2, 2015, are incorporated in this license by reference:

- a. The Hydrogeology of the BFI Vienna Junction Landfill, dated April 1991.
- b. The Master Soil Boring Plan for the BFI Vienna Junction Industrial Park Landfill dated April 1991 and revised July 1991.
- c. The Design, Construction and Operations Report, dated April 1991.

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- d. The Quality Assurance/Quality Control Procedures for the Composite Liner in the Area 5 Lateral Expansion, dated April 1991.
- e. The Leachate Outbreak Contingency Plan, dated August 1991.
- f. The Yard Waste Compost Facility Design Considerations, dated August 1991.
- g. Hydrogeologic Investigation, dated May 1995, and revised August 1995.
- h. Hydrogeologic Monitoring Plan dated December 2004, and revised May 2006, March 2007, January 2008, August 2009, April 2010, June 6, 2012, July 1, 2015, and September 5, 2015.
- i. Environmental Assessment, dated May 1995 and revised as a part of Construction Permit 4146, dated February 9, 2015.
- j. Design, Construction, and Operations Report Volumes I and II, dated May 1995. The Operations Plan was revised November 2004 and again as a part of Construction Permit 4146, dated February 2015.
- k. Construction Quality Control/Construction Quality Assurance Plan, Area 6, dated May 1995 and revised August 12, 2004, October 5, 2004, February 17, 2005, June 2, 2005, and June 17, 2005.
- l. Engineering Plans, dated May 1995, Sheets 1-36; and revised Plan Sheets 11, 20, 21, 23, and 24.
- m. Additional submittals/amendments to original submittals:
 - i. Additional checklists to accompany the Area 6 Expansion Permit, dated May 24, 1995.
 - ii. Attachments A-1 through A-4, B-1 through B-6, C-1, and D-1 through D-4, received by the Department on August 16, 1995.
 - iii. Letter from Monroe County Board of Commissioners, dated August 8, 1995.
 - iv. Appendix B, to be added to the QA/QC Plan, received by the Department on August 16, 1995.
 - v. Universal Soil Calculations, received by the Department on August 16, 1995.
 - vi. Landfill Gas Monitoring Plan, dated December 1994, and revised May 1995, October 2004, and February 2015.
 - vii. Post-closure Plan, dated December 1994 and February 2015.
 - viii. Closure Plan, dated December 1994, and revised May 1995 and February 2015.
 - ix. BFI Construction Permit Application response to comments, received by the Department on August 16, 1995.
 - x. Transmittal of additional information - construction permit application package, received by the Department on August 16, 1995.
 - xi. Letter and attachment from Hull & Associates, Inc., on design of leachate collection piping system, dated September 8, 1995.
 - xii. Minor Modification to Construction Permit No. 0328 including changes to the Cell 4 liner grading, received on November 22, 2015, and approved on February 9, 2016.
 - xiii. Landfill Gas Collection and Control Plan, dated March, 2014.

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- n. Engineering Plans for 2015 Vertical Expansion dated February 9, 2015, Sheets 1-23; revised Plan Sheets 3, 4, 15 and 16.
 - o. Engineering Report for 2015 Vertical Expansion, dated February 9, 2015.
 - p. Geotechnical/Slope Stability report for 2015 Vertical Expansion, dated February 9, 2015.
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. Details (Phase I) and Temporary Berm and Temporary Force Main Plan and Leachate Collection Details Plan, dated March 1994.
 - b. Area 6 Leachate Collection System Piping Detail, dated October 13, 1995.
 - c. Construction Documentation Report, Area 1-2 Composite Cap System for the Browning-Ferris Industries of Ohio-Michigan, Inc., Vienna Junction Industrial Park Sanitary Landfill, Erie Township, Monroe County, Michigan, dated June 1994.
 - d. BFI-Vienna Junction Industrial Park Landfill, Erie, Michigan, Construction Documentation Report, 1995 Final Cover Construction, Area 1-2 and Area 4 North Volumes I and II, dated April 29, 1996.
 - e. Browning-Ferris Industries of Ohio-Michigan, Inc., 6233 Hagman Road, Erie, Michigan 48133, Vienna Junction Industrial Park Landfill, Areas 1-2, and 4, Final Cover, Construction Documentation Report, Erie Township, Monroe County, Michigan, Volumes I and II, dated February 4, 1998.
 - f. BFI-Vienna Junction Industrial Park Sanitary Landfill, completed closure of Area 1-2 and Area 4, Construction Documentation Report, dated May 1999.
 - g. Construction Certification for final cover placement in Area 1-2 at the Vienna Junction Industrial Park Landfill, Erie Township, Monroe County, Michigan, dated March 1990.
 - h. Allied Waste Industries, Inc., 5011 South Lilley, Canton, Michigan 48818, Vienna Junction Industrial Park Sanitary Landfill, Erie, Michigan, Construction Documentation Report, 1999 Final Cover Construction, Closure of Area 4 and Partial Closure of Area 5, dated March 6, 2000.
 - i. Drawing entitled: Vienna Junction Industrial Park Landfill Overall Site Leachate Management Plan, dated October 17, 2000.
 - j. Vienna Junction Industrial Park Sanitary Landfill Area 6, Cell 1 West Construction Documentation Report, dated November 17, 2000, revised January 15, 2001, and September 24, 2002.
 - k. Supplemental Environmental Project Work Plan Consent Order WMD 115-06-00, dated October 2000, and revised October 2001.
 - l. Leachate Collection Systems Operations and Maintenance Plan for Vienna Junction Industrial Park Sanitary Landfill, dated October 2000, and revised October 2001, and April 2002.
 - m. Primary Leachate Collection System and Secondary Collection System Engineering Analysis for Vienna Junction Industrial Park Sanitary Landfill, dated October 2000, and revised April 2002.
 - n. Request to Amend Engineering Plans For Cells 3 and 4 of Area 6 Pump and Sump Associated With Primary Leachate Collection System for BFI Vienna Junction Industrial Park Sanitary Landfill, dated December 6, 2002 and revised April 24, 2003.

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- o. Request To Amend Engineering Plans For Final Cover for BFI Vienna Junction Industrial Park Sanitary Landfill, dated July 1, 2003
 - p. Solidification Plan for Vienna Junction Landfill, by Golder Associates dated September 8, 2003 and revised March 1, 2004.
 - q. Revised Area 4 Vertical Expansion Liner, dated May 12, 2004, and Revised Sheet 11, Area 4 Vertical Expansion Leachate Collection Plan and Details, dated May 12, 2004, as approved in Department letter dated August 13, 2004.
 - r. Landfill Gas Monitoring Plan, Revised October 2004.
 - s. Area 4 Overliner Construction Quality Assurance Report dated December 2004.
 - t. Request for Approval of a Minor Plan Modification, dated June 2, 2005, and revised on June 16, 2005.
 - u. Construction Certification for Vienna Junction Industrial Park Sanitary Landfill Area 6 Cell 1 East, dated October 2005, and revised on December 2, 2005, and December 8, 2005.
 - v. Area 5-6 North and South Final Cover Project Construction Quality Assurance Report, dated December 2005.
 - w. Request for Minor Plan Modification, Cells 3 and 4 of Area 6, dated January 12, 2007, and revised March 8, 2007, and May 30, 2007, including revised sheets 9, 27, 28, and 29.
 - x. 2006 South Slope Final Cover Construction Quality Assurance Report, dated May 2007.
 - y. Area 6, Cell 3 North Construction Certification for Earthwork and Geosynthesis Volumes 1&2, date November 8, 2007, revised January 4, 2008 and approved January 10, 2008.
 - z. Area 6, Cell 3 South Construction certification for Earthwork and Geosynthesis, dated August 27, 2009 and approved on October 28, 2009.
 - aa. Area 6, Cell 4 North Construction Documentation Report, dated July 26, 2011, revised September 15, 2011 and approved September 20, 2011.
 - ab. Area 6, Cell 4 South Construction Certification, received August 20, 2012, revised October 15, 2012 and approved on October 23, 2012.
10. Consent Order/Judgment Number: N/A.
11. 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.
12. 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, Jackson District Office Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated December 2004, and revised May 2006, March 2007, January 2008, August 2009, April 2010, June 6, 2012, and September 5, 2015 . The sampling analytical results shall be submitted to the MDEQ's OWMRP, Jackson District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the OWMRP, Jackson District Supervisor. Proposed revisions must be submitted in a format specified by the MDEQ.
15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the OWMRP, Jackson District Supervisor.

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- 16. 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, Jackson District Supervisor.
- 17. Requests for alternate daily cover may be approved, in writing, by the OWMRP, Jackson District Supervisor.
- 18. Leakage Control Criteria:

The active portions of the unit(s) authorized to receive waste by this license is a monitorable unit(s) designed with a double-liner system that is in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that is capable of detecting and collecting leakage through the primary composite liner. The action flow rate for each unit containing a secondary collection system is 200 gallons/acre/day.

19. **VARIANCES:** The licensee is granted the following variance(s) from Part 115 and/or the Part 115 Rules: None.

20. **SPECIAL CONDITIONS:**

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.

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

<u>Product/Waste Material</u>	<u>Source</u>	<u>Monthly Volume</u>
(1) Covertch	Variable	Variable
(2) Night Cap	Variable	Variable
(3) Fabrisoil	Variable	Variable
(4) Auto Shredder Fluff	Variable	Variable

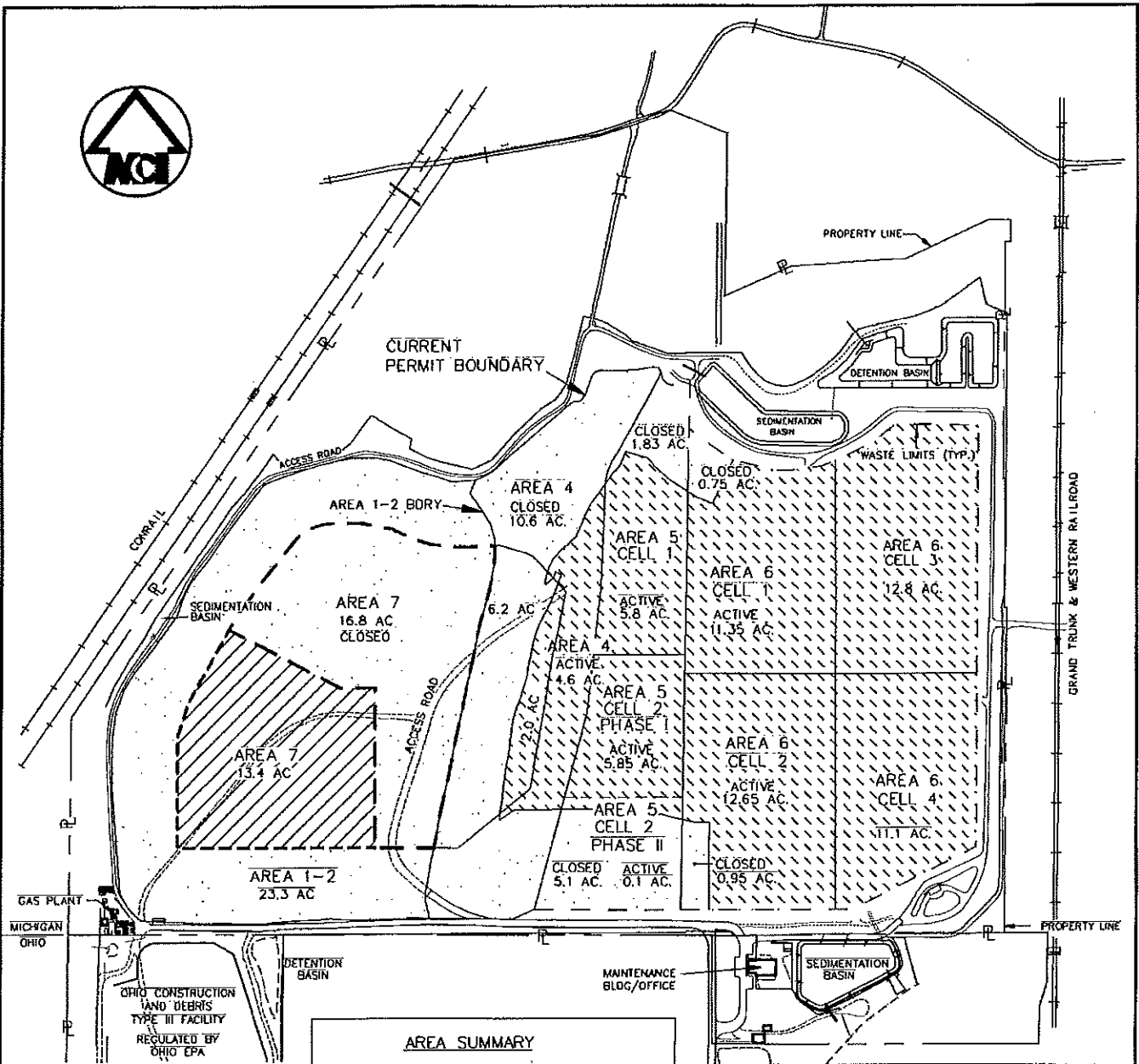
- ii. The above materials are approved for daily cover when used in the following manner:
 - (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
 - (2) The licensee shall maintain copies of the 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.

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- (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.

21. **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



AREA SUMMARY		
AREA 1-2	23.3 AC.	CERTIFIED PARTIALLY CLOSED AREA
AREA 4	4.6 AC. 10.6 AC. 15.2 AC.	ACTIVE AREA NOT AT FINAL GRADE CERTIFIED PARTIALLY CLOSED AREA
AREA 5	11.75 AC. 6.93 AC. 18.68 AC.	ACTIVE AREA NOT AT FINAL GRADE CERTIFIED PARTIALLY CLOSED AREA
AREA 6	47.9 AC. 1.7 AC. 49.6 AC.	ACTIVE AREA NOT AT FINAL GRADE CERTIFIED PARTIALLY CLOSED AREA
AREA 7	2.0 AC. 13.4 AC. 23.0 AC. 38.4 AC.	ACTIVE AREA NOT AT FINAL GRADE UNCONSTRUCTED AREA W/FIN. ASSUR. CERTIFIED PARTIALLY CLOSED AREA

LEGEND	
	65.53 AC. CERTIFIED PARTIALLY CLOSED AREA
	66.25 AC. ACTIVE AREA NOT AT FINAL GRADE
	0.0 AC. UNCONSTRUCTED AREA WITHOUT FINANCIAL ASSURANCE
	13.4 AC. UNCONSTRUCTED AREA WITH FINANCIAL ASSURANCE

OWNER: ALLIED WASTE SERVICES OF MICHIGAN, LLC

MIDWESTERN CONSULTING



Civil, Environmental and Transportation Engineers
Planners, Surveyors
Landscape Architects

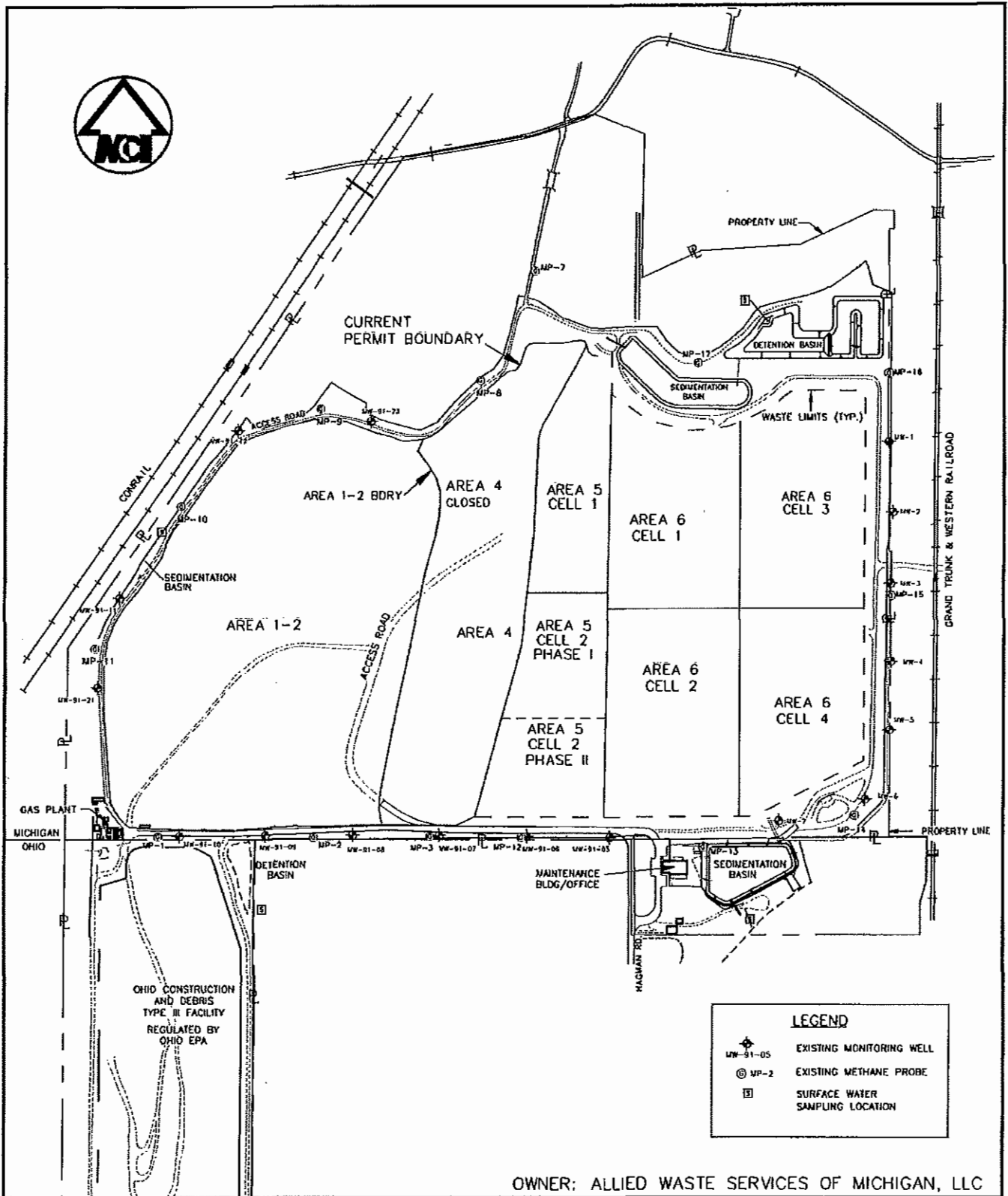
3815 Plaza Drive
Ann Arbor, Michigan 48108
Phone: 734.995.0200
Fax 734.995.0599

VIENNA JUNCTION LANDFILL ATTACHMENT A

DATE: 5/6/16 JOB NO.: **00011**

SCALE: 1" = 600'

SHEET 1 OF 2



LEGEND

- MW-91-05 EXISTING MONITORING WELL
- MP-2 EXISTING METHANE PROBE
- SURFACE WATER SAMPLING LOCATION

OWNER: ALLIED WASTE SERVICES OF MICHIGAN, LLC

MIDWESTERN CONSULTING



Civil, Environmental and Transportation Engineers
 Planners, Surveyors
 Landscape Architects

3815 Plaza Drive
 Ann Arbor, Michigan 48108
 Phone: 734.995.0200
 Fax 734.995.0599

VIENNA JUNCTION LANDFILL ATTACHMENT A

DATE: 2/18/16 JOB NO.: **00011**

SCALE: 1" = 600'

SHEET 2 OF 2