DEQ

Michigan Department of Environmental Quality
Waste and Hazardous Materials Division

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: Standard Environmental Services Inc., Rockwood Landfill

LICENSEE/OPERATOR: Standard Environmental Services, Inc.

FACILITY OWNER: Standard Environmental Services, Inc.

PROPERTY OWNER: Standard Environmental Services, Inc.

FACILITY TYPE(S): Type III Construction and Demolition Landfill and Type III Industrial Waste Landfill

FACILITY ID NUMBER: 438977

COUNTY: Monroe

LICENSE NUMBER: 9200

ISSUE DATE: February 18, 2009

EXPIRATION DATE: February 18, 2014

FACILITY DESCRIPTION: The Standard Environmental Services, Inc., Rockwood landfill, a Type III Construction and Demolition Landfill and Type III Industrial Waste Landfill, consists of 229.46 acres located in the East 1/2 of Section 34, T5S, R10E, Berlin Township, Monroe County, Michigan, as identified in Attachment A and fully described in this license.

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

RESPONSIBLE PARTY: Mr. Glen Goestenkors
Standard Environmental Services, Inc., Rockwood Landfill
9450 U.S. Turnpike
Newport, Michigan 48166
734-379-4624

RENEWAL OPERATING LICENSE: This License Number 9200 supersedes and replaces Solid Waste Disposal Area Operating License Number 8998 issued to Standard Environmental Services, Inc. on February 12, 2004.

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, Storage Tank and Solid Waste Section
Waste and Hazardous Materials Division

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 Cells 7, 8, 9, 10, 11, 12, 14, and portions of 13 and 15 were authorized to receive waste by the previous license. This area's total acreage is 70.41 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 Cells 1-6, a portion of 13 and a portion of 15, and 16-20, totaling 77.33 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:

   i. **PRE-EXISTING UNIT(S):** The unit(s) identified as being within "existing" Rockwood Landfill had final closure reviewed, certified, and as indicated in the table below:

CELL	CERTIFIED DATE	ACREAGE
3	November 19, 1991	8.68
4	December 23, 1981	11.6
9	December 19, 1981	11.82
10	December 19, 1991	9.96
11	November 19, 1991	11
Old Rockwood	April 1980	41.65
Total		94.71

   However, 75.44 acres are either current overfilled or permitted to be overfilled. This area's total remain net acreage is 19.27 acres.

   ii. **EXISTING UNIT(S):** The unit(s) identified as "existing" Rockwood Cells 1 and 2 (totaling 17.75 acres) had final closure certified on April 17, 1998, and November 3, 1998, respectively. This certification was reviewed and approved by the MDEQ on June 29, 1998, and November 17, 1999, respectively. However, 16.45 acres is currently overfilled or is permitted to be overfilled. This area's total net acreage is 1.3 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 November 5, 2008, 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 Waste and Hazardous Materials Division (WHMD), 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 Standard Environmental Services, Inc., for the Rockwood Landfill, dated November 4, 2008, revised November 17, 2008, and February 10, 2009. The Application consists of the following:

   a. Application Form EQP 5507.

   b. Application fee in the amount of $2,500.00.

   c. Certification of construction by N/A.

   d. Waste Characterization: N/A.

   e. Restrictive Covenant:

      A restrictive covenant on 227.82 acres signed by the Applicant on February 9, 2009, was included in the Application and will be signed by the MDEQ and filed with the Monroe County Register of Deeds.

   f. Perpetual Care Fund Agreement, established as an escrow account, signed by Mr. Gaspare Campo, President, Standard Environmental Services, Inc. on July 23, 1997, was executed by the MDEQ on August 27, 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 $1,000,000.00.

         The Facility has provided financial assurance totaling $1,789,240.25, 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:

         (1) The amount of the required financial assurance can be reduced pursuant to Section 11524 of Part 115, if the amount of money in the Perpetual Care Fund plus the amount of the reduced financial assurance equals the amount of financial assurance required in Section 11523 of Part 115 and is approved by the MDEQ.

         (2) The Perpetual Care Fund Agreement statement showed a balance of $1,789,240.25 in the Facility's Perpetual Care Fund as of October 31, 2008. Of this amount, the MDEQ has granted the request to use $1,789,240.00 toward the total amount of financial assurance required.

      iii. Financial Assurance Provided Via Bond: N/A.

8. The following documents approved with Construction Permit Number(s) 0366 issued to Wayne Disposal on January 16, 1996, and 4063, and 4096 issued to Standard Environmental Services, Inc. on April 23, 2004, and June 20, 2008, respectively, are incorporated in this license by reference:

   a. Engineering Plans approved under the Solid Waste Management Act, 1965 PA 87, as amended, on March 27, 1976, October 1981, April 1982, and March 23, 1997.

   b. Construction Permit Application Volumes 1 and 2 Engineering Plans, dated September 1995, sheets 1 – 26. Sheet 2 of 26 revised November 1995; Sheet 24 of 26, revised December 1995.

c. Addendum No. 1, dated November 29, 1995, including the final end use plan for the site.

d. Hydrogeologic Investigation for Rockwood Landfill Expansion Volumes I and II, dated September 14, 1995.

e. Report entitled "Application for Permit Modification - Rockwood Type III Landfill," dated December 2003 and revised April 8, 2004.

f. Report entitled "Application for Permit to Construct A Solid Waste Disposal Area – Rockwood Type III Landfill," dated December 2003 and revised March 30, 2004.

g. Revised engineering plan sheets Rockwood Type III & Industrial Waste Sanitary Landfill, as follows:

- CV – Cover Sheet, dated January 12, 2004, and revised March 20, 2004;
- Property Boundary – Legal Description, dated December 22, 2003.

h. New engineering plan sheets Rockwood Type III & Industrial Waste Sanitary Landfill, numbered and described as follows:

27. General Site Plan dated December 22, 2003, and revised January 19, 2004, and March 30, 2004.
28. Existing Topography – North, dated December 22, 2003.
29. Existing Topography – South, dated December 22, 2003.
30. Overall Leachate Management Plan, dated December 22, 2003, and revised March 30, 2004.
31. Leachate Forcemain Plan and Profile – Landfill to Tank, dated December 22, 2003, and revised March 30, 2004.
32. Leachate Forcemain Details, dated December 22, 2003, and revised March 30, 2004.
33. Leachate Tank – Leachate Connection Details, dated December 22, 2003, and revised March 30, 2004.
34. Concrete Details, dated December 22, 2003, and revised January 19, 2004, and March 30, 2004.

i. Revisions to Construction Quality Assurance Plan, dated September 1995 and revised on April 2, 2004, consisting of pages 87, 91-a, 91-b, 100, 100-a, and 100-b.

j. Report entitled "Application for Permit Modification - Rockwood Type III Landfill," dated January 2008 and revised May 8, 2008.

k. Revised engineering plan sheets for the Standard Environmental Services, Inc. Rockwood Type III & Industrial Waste Sanitary Landfill, numbered, and described as follows:

1. Cover Sheet, dated January 16, 2008.
12. Base Grade Plan – Site, dated January 16, 2008.
13. Base Grade Plan – North, dated January 16, 2008.
14. Base Grade Plan – South, dated January 16, 2008.
15. Final Grade Plan – Site, dated January 16, 2008.
16. Final Grade Plan – North, dated January 16, 2008.
17. Final Grade Plan – South, dated January 16, 2008.
18. North – South Site Cross Section, dated January 16, 2008.
19. East – West Site Cross Section, dated January 16, 2008.
20. Details, dated January 16, 2008, and revised May 8, 2008.
20A. Details, dated May 8, 2008.
21. Details, dated January 16, 2008.
30. Overall Leachate Management Plan dated January 16, 2008.

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. Construction Certification Cell 7- Rockwood Type III Sanitary Landfill, Wayne Disposal, Inc., Volumes I, II, dated June 1996.

b. Request for Variance Alternate Daily Cover Material, SES Rockwood Landfill, Operational Procedures for Alternate Daily Cover Materials, dated October 20, 1997, approved with modifications November 13, 1997, and revised November 19, 1999.

c. Final Closure and Construction Certification, "existing" Cell 1 Final Cover and New Cell 8 Construction, Rockwood Type III Sanitary Landfill, Volumes I, II, dated April 1998.

d. Certification Report for Geosynthetics Repair, Rockwood Type III Landfill Cell 8, dated June 11, 1998.

e. Construction Certification "new" Cell 10, Rockwood Type III Sanitary Landfill, dated October 1998.

f. Final Closure Certification, "existing" Cell 2 Final Cover, Rockwood Type III Sanitary Landfill, dated October 1998.

g. Construction Certification Cell 12, Rockwood Landfill, dated July 2001, and revised on July 20, 2001, and August 30, 2001.

h. Cell 12 Supplemental Construction Certification, July 2002 and revised August 16, 2002 and August 30, 2002.

i. Cell 9 North Construction Certification, dated January 2003 and revised March 6, 2003.

j. Cell 9 North Construction Documentation Report, dated July 2003 and revised September 5, 2003.

k. Cell 11 Construction Documentation Report, dated September 2003 and revised November 19, 2003.

l. Fire Repair Addendum to the Construction Certification Report for the Rockwood Type III Sanitary Landfill.

m. Explosive Gas Management Plan, Rockwood Type III Landfill, dated January 2003 and revised on November 8, 2006.

n. Facility Operations Plan, revised February 10, 2004.

o. Revisions to the Construction Quality Assurance Plan (CQA Plan) for the Standard Environmental Services, Inc. Rockwood Landfill, dated July 17, 2003.

p. Cell 13 South/Cell 15 West Construction Certification for Earthwork and Geosynthetics, Rockwood Landfill, dated December 12, 2008.

q. Closure certification for Old Cell 12, dated September 2004.

r. Repair certification for a portion of Cell 8, dated October 2004.

s. Construction Quality Assurance Cell 14 Certification Report dated October 2004.

t. Construction certification for the leachate transmission system, dated November 2004.

u. Minor Plan Modification, Leachate Collection Plan for the Standard Environmental Services, Inc. Rockwood Landfill, dated January 2005

v. Closure certification for Standard Environmental Services, Inc. Rockwood Landfill, Existing Cells 5-8, dated January 7, 2005.

w. Forcemain, Pumps and Site Work for Leachate Storage Tank, dated May 2005.

x. Construction Quality Assurance Cell 9-11 Certification Report, dated October 2005.

y. Construction Quality Assurance Leachate Aboveground Storage Tank, dated May 1, 2006.

z. Cell 13 North Construction, dated September 2007.

aa. Cell 13 South/Cell 15 West Construction Certification for Earthwork and Geosynthetics, dated December 12, 2008, and approved on February 9, 2009.

10. Consent Order/Judgment Number: WHMD Consent Order Number FTO-115-19-02 and FTO-115-06-06 entered on October 25, 2002, and September 7, 2006, respectively, are incorporated into this license by reference.

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 WHMD, Jackson District Supervisor, for review and approval.

13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated June 11, 2007, and revised August 2007, and December 21, 2007. The sampling analytical results shall be submitted to the MDEQ's WHMD, Jackson District Office.

14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the WHMD, 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 Waste and Hazardous Materials Division, Jackson District Supervisor.

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 WHMD, Jackson District Supervisor.

17. Requests for alternate daily cover may be approved, in writing, by the Waste and Hazardous Materials Division, Jackson District Supervisor.

18. Leakage Control Criteria:

This Type III Facility is a monitorable unit and, therefore, does not need to be in compliance with the leakage control criteria of R 299.4422 of the Part 115 Rules.

19. **VARIANCES**: The licensee is granted the following variance(s) from Part 115 and/or the Part 115 Rules:

a. R 299.4316(2) to allow the use of a geomembrane as an alternate interim cover and to provide an increase in the maximum time allowed for placement of interim cover from three months to six months (granted on August 28, 1997).

b. R 299.4317(1) to provide an increase in the maximum time allowed for placement of final cover from six to twelve months (granted on August 28, 1997).

20. **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 WHMD, 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:

Product/Waste Material

(1) Wood chips derived from untreated wood, excluding yard clippings;

(2) Chipped tires;

(3) Bottom ash derived from the burning of wood, coal, coke, or industrial wastewater sludge;

(4) Ground or whole shingles, which do not contain asbestos, excluding those from commercial roofing;

(5) N-Viro soil;

(6) Foundry sand;

(7) Finished compost material;

(8) Auto shredder fluff; and

(9) Blast furnace wastewater filter cake.

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 written authorization on-site, from the generator of the material, to use the material as daily cover.

(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 alternate cover is not being used in accordance with the listed conditions, that the alternate cover is not providing the necessary protection, or that the process producing the waste has changed.

(6) If the material does not meet the guidelines from Attachment 2 of the WHMD's Operational Memo 115-10, Revision 1, 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 alternate cover shall expire upon the expiration of this operating license.

b. The licensee shall monitor and pump, at a minimum, the permanent leachate extraction wells located in the old Rockwood portion of the landfill on a quarterly basis during the post closure period, unless an alternative plan is submitted to and approved by the MDEQ.

c. Basic Oxygen Process (BOP) wastes or other fine particulate waste that could produce fugitive airborne emissions or trackout will not be accepted for disposal at the landfill unless the waste is either bagged or otherwise stabilized to prevent fugitive emissions or trackout.

d. The licensee shall not accept municipal wastewater treatment plant sludge for disposal unless specifically authorized by the MDEQ.

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

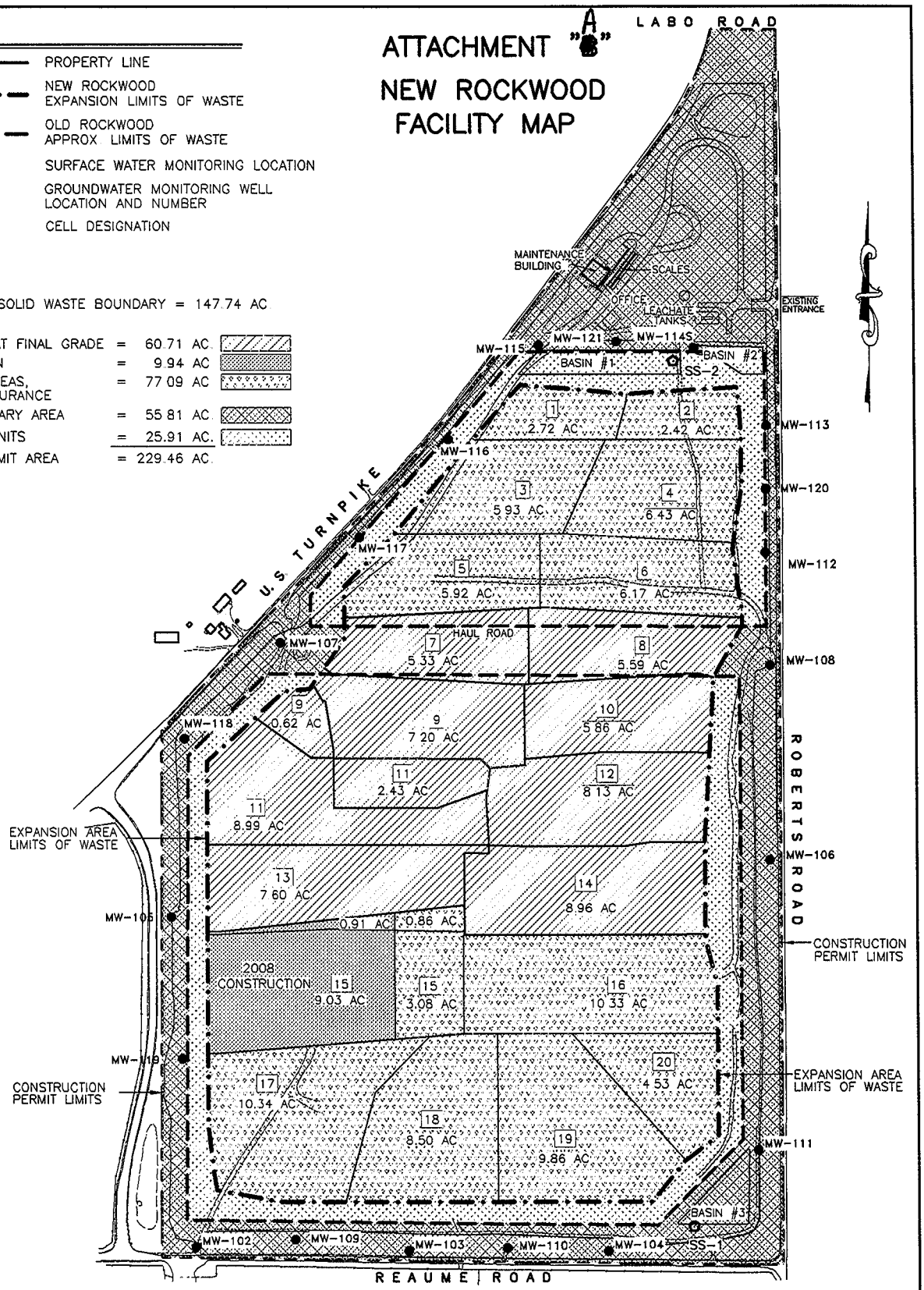
ATTACHMENT "A"
NEW ROCKWOOD FACILITY MAP

LEGEND

- PROPERTY LINE
- NEW ROCKWOOD EXPANSION LIMITS OF WASTE
- OLD ROCKWOOD APPROX. LIMITS OF WASTE
- SS-1 — SURFACE WATER MONITORING LOCATION
- MW-101 — GROUNDWATER MONITORING WELL LOCATION AND NUMBER
- 12 — CELL DESIGNATION

NEW ROCKWOOD SOLID WASTE BOUNDARY = 147.74 AC

ACTIVE AREA, NOT AT FINAL GRADE	=	60.71 AC.
2008 CONSTRUCTION	=	9.94 AC
UNCONSTRUCTED AREAS, WITH FINANCIAL ASSURANCE	=	77.09 AC
ISOLATION / ANCILLARY AREA	=	55.81 AC.
EXISTING CLOSED UNITS	=	25.91 AC.
CONSTRUCTION PERMIT AREA	=	229.46 AC.



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ROCKWOOD TYPE III LANDFILL
ATTACHMENT "A"

Revised DATE: 11/17/08 JOB NO.: **01008**

SCALE: 1"= 600'

SHEET 2 OF 2

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