



Matlock Bend Landfill
21712 Highway 72 North Loudon, Tennessee 37774
O: 865.458.2651, republicservices.com

April 29, 2024

Mr. Nick Lytle
Division of Solid Waste Management
William R. Snodgrass Tennessee Tower
312 Rosa L Parks Avenue, 14th Floor
Nashville, TN 37243

**Re: Matlock Bend Landfill – Annual Engineering Report
Loudon County, Tennessee
Facility Permit No. TNR051889**

Dear Mr. Lytle:

Enclosed, please find the Annual Engineering Report (AER) for Matlock Bend Landfill.

Please note that the Remaining Constructed Capacity (Section C.6.) and the Remaining Permitted Capacity (Section C.8) reported is based on the total available fill volumes calculated. Remaining Constructed Life (Section C.10.) and Remaining Permitted Life (Section C.12.) is calculated by reducing the volumes reported in Section C.6. and Section C.8. by the Volume of Fill Above Permitted Waste Grades (Section C.13.). Along with the reduced volumes, an anticipated tonnage of 640 tons per operational day and the Airspace Utilization Rate / Waste Density (Section C.7.) of 1,283 lbs/cy were utilized to calculate the remaining permitted and constructed years of life for the landfill.

Should you require additional information or have any questions or comments, please contact me via email at Hvankirk@republicservices.com or by phone at (615) 956-9277.

Sincerely,

Holly Van Kirk

Holly Van Kirk (Apr 30, 2024 08:50 CDT)

Holly Van Kirk
Environmental Manager
Republic Services

cc: Operating Record (Hard Copy and Electronic)
Robert Heller, HHNT (Electronic)



STATE OF TENNESSEE
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 DIVISION OF SOLID WASTE MANAGEMENT
 WILLIAM R. SNODGRASS TENNESSEE TOWER
 312 ROSA L. PARKS AVENUE, 14TH FLOOR
 NASHVILLE, TN 37243

AER REPORT YEAR

2023

CLASS I DISPOSAL FACILITY ANNUAL ENGINEERING REPORT (AER)

TO AVOID DELAYS, COMPLETE ALL SECTIONS OF THE APPLICATION. INCLUDE ALL SUPPORTING DOCUMENTATION.

A. DISPOSAL FACILITY

FACILITY NAME Matlock Bend Loudon County Landfill		PERMIT NUMBER SNL 53-0203	
MAILING ADDRESS 21712 Highway 72 North	CITY Loudon	STATE ZIP TN 37774	PHONE FAX (865) 458-2651 (865) 458-5377
TECHNICAL CONTACT NAME Holly Van Kirk	PHONE (615) 956-9277	FAX	EMAIL HVankirk@republicservices.com

B. TOPOGRAPHIC SURVEY INFORMATION

RULE 0400-11-01-.04(2)(t)1 REQUIRES ALL OPERATORS OF **CLASS I DISPOSAL FACILITIES** WITHIN THE STATE OF TENNESSEE TO FILE AN **ANNUAL ENGINEERING REPORT** WITH THE DEPARTMENT BY **MAY 1st** OF EVERY YEAR.
 A CURRENT TOPOGRAPHIC SURVEY OF THE ACTIVE PORTION OF THE DISPOSAL FACILITY (SAME SCALE AS APPROVED PERMIT PLANS) MUST BE PERFORMED BY A QUALIFIED LAND SURVEYOR DULY AUTHORIZED UNDER TENNESSEE LAW TO CONDUCT SUCH ACTIVITIES AND SHOULD BE SUPERIMPOSED ON THE APPROVED FINAL CONTOURS WITH A DELINEATION SHOWING CURRENT CONTOURS. SUBMIT THIS DRAWING ELECTRONICALLY AS A PDF CREATED DIRECTLY FROM A CAD PROGRAM AND EMAILED TO THE ENVIRONMENTAL FIELD OFFICE MANAGER.

1. DATE OF PREVIOUS AER SURVEY 12/15/2022	2. DATE OF CURRENT AER SURVEY 12/12/2023	3. WASTE RECEIVED BETWEEN SURVEY DATES (TON) 147,626	4. CAPACITY CONSUMED BETWEEN SURVEY DATES (CU. YD.) 230,162
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C. FACILITY INFORMATION

1. PERMITTED LANDFILL FOOTPRINT (ACRES) 40.70	2. PERMITTED DESIGN CAPACITY (CUBIC YARDS) 4,748,110
3. CONSTRUCTED LANDFILL FOOTPRINT (ACRES) 40.53	4. TOTAL CONSUMED CAPACITY (CUBIC YARDS) 4,372,597
5. WASTE ACCEPTED IN PREVIOUS CALENDAR YEAR (TONS) 148,757	6. REMAINING CONSTRUCTED CAPACITY (CUBIC YARDS) 291,591
7. AIRSPACE UTILIZATION RATE/WASTE DENSITY (LBS/CUBIC YARDS) 1283	8. REMAINING PERMITTED CAPACITY (CUBIC YARDS) 375,513
9. OPERATIONAL DAYS IN PREVIOUS CALENDAR YEAR (DAYS) 286	10. REMAINING CONSTRUCTED LIFE (YEARS) 0.7
11. TOTAL WASTE IN PLACE (TONS) INFORMATION NOT AVAILABLE	12. REMAINING PERMITTED LIFE (YEARS) 1.0
13. VOLUME OF FILL ABOVE PERMITTED WASTE GRADES (CUBIC YARDS) 86,129	

FD032620

D. LEACHATE REPORT

GALLONS					
MONTH	A TOTAL COLLECTED	B ON-SITE DISPOSAL	C OFF-SITE DISPOSAL	D RECIRCULATED	E OTHER
JANUARY	657,349		657,349		
FEBRUARY	1,558,590		1,558,590		
MARCH	1,323,925		1,323,925		
APRIL	548,532		548,532		
MAY	470,681		470,681		
JUNE	117,948		117,948		
JULY	610,790		610,790		
AUGUST	614,117		614,117		
SEPTEMBER	324,420		324,420		
OCTOBER	314,890		314,890		
NOVEMBER	311,671		311,671		
DECEMBER	1,187,887		1,187,887		
TOTALS	8,040,800	0	8,040,800	0	0
	A	B	C	D	E

1. DESCRIBE OTHER LEACHATE MANAGEMENT METHODS HERE:

2. LIST ALL OFF-SITE DISPOSAL AND TREATMENT FACILITIES WITH THE AMOUNT (GAL) OF LEACHATE SENT TO EACH FACILITY:

Loudon Utilities Wastewater Treatment Plant (8,040,800 gal)

3. TRANSPORT METHOD
 PUMP & HAUL
 DIRECT DISCHARGE

E. LEACHATE MANAGEMENT

1. FACILITY UTILIZES SUMP PUMPS TO CONVEY LEACHATE TO TANKS OR OTHER MANAGEMENT COMPONENTS.
 a. 1 NUMBER OF PUMPED SUMPS EMPLOYED AT THIS FACILITY

2. FACILITY UTILIZES GRAVITY DRAINS TO CONVEY LEACHATE TO TANKS OR OTHER MANAGEMENT COMPONENTS.
 a. 2 NUMBER OF GRAVITY SUMPS EMPLOYED AT THIS FACILITY

3. DESCRIBE ANY LEACHATE MANAGEMENT SYSTEM CLEANING PERFORMED IN THE PREVIOUS CALENDAR YEAR:

*4. The storage tanks are for backup only since site has direct force-main connection to WWTP.

4. LEACHATE STORAGE CONSTRUCTED AT THIS FACILITY

a. NUMBER OF LEACHATE STORAGE TANKS / VESSELS / IMPOUNDMENTS AT LOCATED AT THE FACILITY 3

b. TOTAL STORAGE VOLUME 120,000

c. IF OTHER ADEQUATE MANAGEMENT PROVISION APPROVED BY COMMISSIONER IS USED, DESCRIBE ON AN ATTACHMENT

F. SPECIAL WASTE

INCLUDE TYPES AND AMOUNTS OF SPECIAL WASTES DISPOSED RELATIVE TO NORMAL SOLID WASTE DISPOSED OF SINCE LAST AER. TYPES OF SPECIAL WASTE INCLUDE, BUT IS NOT LIMITED TO, SLUDGES, SOILS, COMBUSTION WASTES, COMMERCIAL CHEMICAL PRODUCTS OR MANUFACTURING CHEMICAL INTERMEDIATES. **DO NOT** LIST INDIVIDUAL WASTE GENERATORS. ATTACH ADDITIONAL SHEETS IF NECESSARY.

A. SPECIAL WASTE CATEGORY		B. ANNUAL TONS OF THIS TYPE	C. TOTAL WASTE PERCENT
1.	Off-Spec Material	12664.06	8.51%
2.	Tire-Shred/Quart/Pcs	7312.4	4.92%
3.	Sludge	6619.03	4.45%
4.	Sludge-WWTP-Industrial	1692.25	1.14%
5.	Sludge-WWTP-Municipal	829.63	0.56%
6.	Industrial	596.06	0.40%
7.	Asbestos-Non Friable	395.28	0.27%
8.	Dead Animals	183.55	0.12%
9.	Filter Cake	166.00	0.11%
10.	Contaminated Soil	146.52	0.10%

G. SEND COMPLETED REPORT TO:

STATE OF TENNESSEE
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 DIVISION OF SOLID WASTE MANAGEMENT
 WILLIAM R. SNODGRASS TENNESSEE TOWER
 312 ROSA L. PARKS AVENUE, 14TH FLOOR
 NASHVILLE, TN 37243

ELECTRONIC VERSIONS OF THIS REPORT
 SHOULD BE EMAILED TO THE APPROPRIATE
 ENVIRONMENTAL FIELD OFFICE MANAGER.

H. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

 30/04/24
Holly Van Kirk (Apr 30, 2024 08:50 CDT) SIGNATURE OF AUTHORIZED REPRESENTATIVE OF DISPOSAL FACILITY DATE
Holly Van Kirk **Environmental Manager**
 PRINTED NAME TITLE

TDEC USE	REVIEWER'S SIGNATURE	NOTES
	DATE	

PINNACLE Land Surveying, Inc.

212 Battle Front Trail • Knoxville, TN 37934
Phone: 865.548.2385 • www.pinnaclelandsurvey.com

April 29, 2024

Mr. Ryan Willoughby, P.E.
Hodges, Harbin, Newberry & Tribble, Inc.
12 E Grady Street, Suite B
Statesboro, GA 30458

RE: Flight Control – Matlock Bend Landfill, Loudon, TN

Dear Mr. Willoughby,

In May of 2015, Pinnacle Land Surveying (PLS) was provided certain established site control points with State Plane horizontal and vertical data. PLS then established additional control along with painting and placing aerial targets for annual aerial surveying needs.

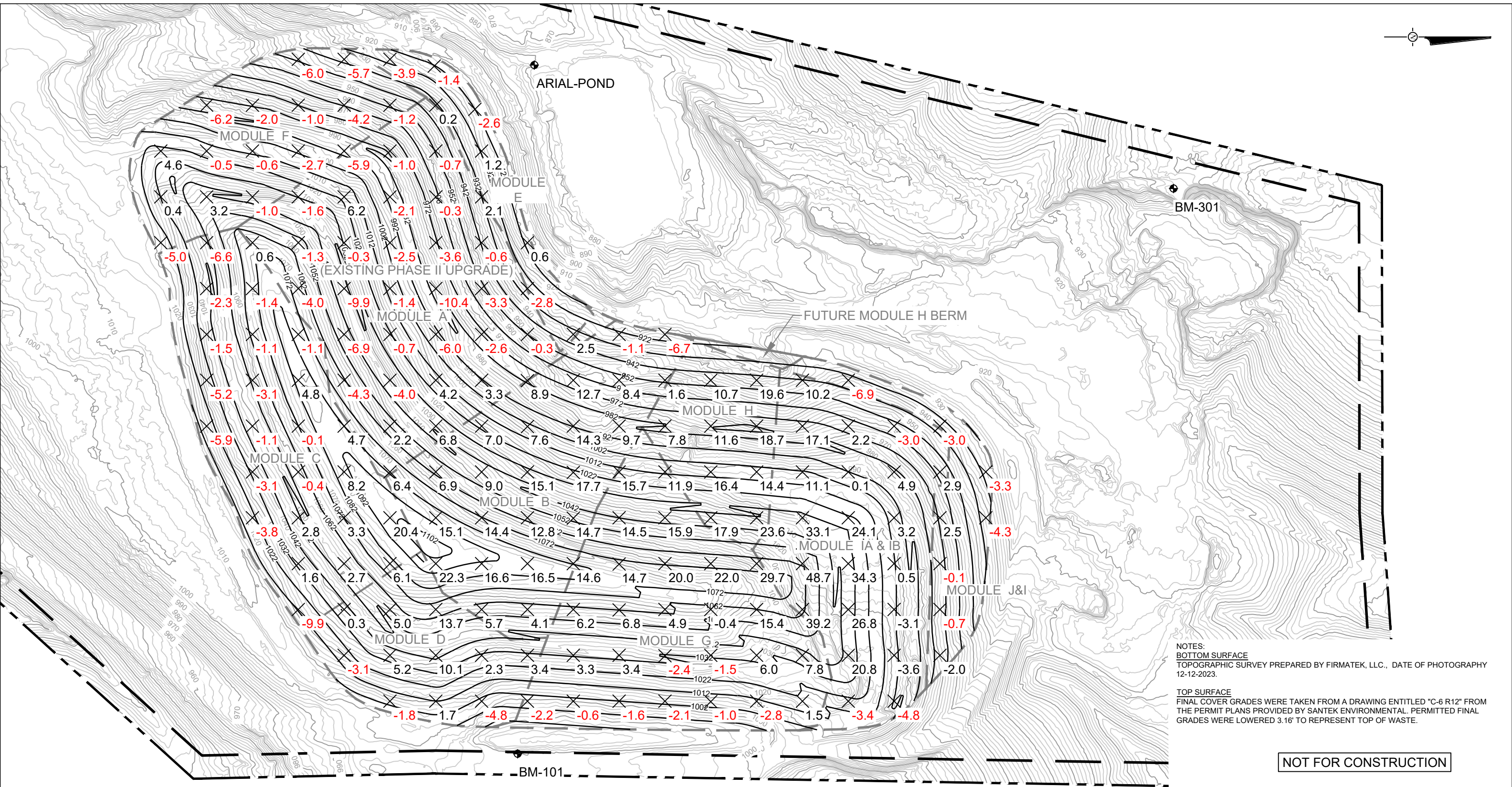
The Site Survey Control Points shown on the FIRMATEK CAD file dated December 12, 2023 are control points provided by PLS and based on the original data supplied to PLS.

Please let me know if you need anything further.

Respectfully,
PINNACLE LAND SURVEYING, Inc.



Dean M. Gerchar, RLS
President



NOTES:
 BOTTOM SURFACE
 TOPOGRAPHIC SURVEY PREPARED BY FIRMATEK, LLC., DATE OF PHOTOGRAPHY 12-12-2023.

TOP SURFACE
 FINAL COVER GRADES WERE TAKEN FROM A DRAWING ENTITLED "C-6 R12" FROM THE PERMIT PLANS PROVIDED BY SANTEK ENVIRONMENTAL. PERMITTED FINAL GRADES WERE LOWERED 3.16' TO REPRESENT TOP OF WASTE.

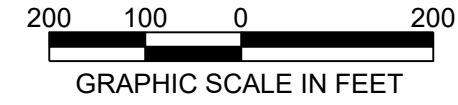
NOT FOR CONSTRUCTION

BM NO.	NORTHING	EASTING	ELEV.
BM-10	494762.279'	2469733.228'	809.176'
BM-101	497305.137'	2471805.322'	989.474'
BM-1	497449.109'	2471945.959'	997.540'
BM-201	498849.813'	2471760.232'	925.727'
BM-301	498736.134'	2470572.478'	984.987'
ARIAL-POND	497341.307'	2470303.003'	879.057'

BM-1

LEGEND

NOTES:
 PROPOSED FILL CONTOUR - 10 FT. ——— 100 ———
 EXISTING CONTOUR - 2 FT. ——— 100 ———
 EXISTING CONTOUR - 10 FT. ——— 100 ———
 EXISTING CELL BOUNDARY ——— ——— ———
 REMAINING FILL GRID POINT × 1.2
 OVERFILL GRID POINT × -3.5
 BENCH MARK ●



DECEMBER 12, 2023 TOPOGRAPHY
 BY FIRMATEK, LLC.

TICK MAP BETWEEN PERMITTED INTERMEDIATE COVER GRADES & DECEMBER 2023 AERIAL SURVEY

MATLOCK BEND LANDFILL
 FOR
REPUBLIC SERVICES, INC.
 LOUDON COUNTY, TENNESSEE
 © Republic Services, Inc. (2024)

HHNT
 HODGES, HARBIN,
 NEWBERRY & TRIBBLE, INC.
 Consulting Engineers
 3920 ARKWRIGHT RD., SUITE 101
 MACON, GEORGIA 31210

(478) 743-7175
 (478) 743-7175 (FAX)

PROJ. NO. 6703-1095-01
 SCALE 1" = 200'
 DATE APRIL 2024

DWG. MB-TDEC RC AND TICK MAP
DRAWING 1 OF 1






Lytle - Matlock Bend Landfill - Annual Engineering Report

Final Audit Report

2024-04-30

Created:	2024-04-30
By:	Avery Rogers (arogers@hhnt.com)
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"Lytle - Matlock Bend Landfill - Annual Engineering Report" History

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