



La Crosse Disposal System

A Responsible Resource



GREEN TIER

Report

2014 Annual Report

La Crosse County Landfill Complex and Disposal Facility

La Crosse County Solid Waste Department

La Crosse, Wisconsin

Submitted March 2015



From Left to Right: Brady Jackson-SEH, Ethan Engle-Riverview Construction, Brian Kent-SEH, Hank Koch-La Crosse County Solid Waste - Inspecting Liner Side Slope Failure and Under Drain Remediation. Picture by Jadd Stillwell, La Crosse County Solid Waste.



Department of Solid Waste
County of La Crosse, Wisconsin

6500 State Road 16
La Crosse, Wisconsin 54601
Telephone: (608) 785-9572 • Fax: (608) 785-6160
www.co.la-crosse.wi.us



La Crosse Disposal System

A Responsible Resource

March 15, 2015

Mr. Marty Herrick
Wisconsin Department of Natural Resources
3550 Mormon Coulee Road
La Crosse, WI 54601

Dear Mr. Herrick:

Re: 2014 Annual Report
La Crosse County Landfill Complex and Disposal Facility, La Crosse, Wisconsin
WDNR License Nos. 2637, 3253, 3846, and 4317

The La Crosse County Solid Waste Department is submitting this annual report to the Wisconsin Department of Natural Resources (WDNR) for your review and approval. This report summarizes the following:

- ◆ 2014 Beneficially Reused Materials Report (Appendix A)
- ◆ 2014 Leachate Recirculation Report Including Organic Stability Plan Information (Appendix B)
- ◆ 2014 Solid Wastes Tonnages Report (Appendix C)
- ◆ 2014 Reporting Requirements for Biopiles for Contaminated Soil (Appendix D)
- ◆ 2014 MSW Landfill Gas Information Report (Appendix E)
- ◆ Anticipated Construction Events for 2015 (Appendix F)
- ◆ 2014 Special Waste Report (Appendix G)
- ◆ 2014 Shingle Processing (Appendix H)

This information is being provided in general conformance with the following WDNR Plan of Operation Approval Letters for each facility and NR500 of the Wisconsin Admin. Code:

- ◆ Condition No. 11 of the February 10, 2006 Plan of Operation Approval from the WDNR;
- ◆ The Special Waste Management Plan presented as Appendix Z of the Plan of Operation Report for the La Crosse County Landfill North Expansion, dated September

Mr. Marty Herrick
Wisconsin Department of Natural Resources
March 15, 2015
Page 2

2005, and Condition No. 3 of the August 14, 1996 Waste Acceptance Plan Modification Approval from the WDNR; and

- ◆ Treatment of Contaminated Soil Approval, dated August 14, 1996.
- ◆ Condition No. 10 in the January 24, 2008 Low Hazard Exemption and Condition No. 9 in the February 4, 2008 Approval for Exemption from Solid Waste processing rules pertaining to residential asphalt shingles. Note: Both of these conditions are identical.
- ◆ Conditional Approval of the Organic Stability Plan Dated September 10, 2012.
- ◆ Conditional Modification to the Exemption from Solid Waste Processing Rules for Recycling Asphalt Shingles dated January 17, 2013.

Please contact the undersigned if you have any questions regarding this report.

Sincerely,



Henry A. Koch, P.E., Director
La Crosse County Landfill

HAK: jms

Enclosures

cc: Sharon Davidson, La Crosse County
Brian Kent, SEH
Jason Todaro, Blue Ridge Services, Inc.

2014 Annual Report
La Crosse County Landfill Complex and Disposal Facility
WDNR License Nos. 2637, 3253, 3846, and 4317

Distribution

<u>No. of Copies</u>	<u>Sent To</u>
1	Marty Herrick Wisconsin Department of Natural Resources 3550 Mormon Coulee Road La Crosse, WI 54601
1	Brian Kent SEH 312 South 3 rd Street La Crosse, WI 54601
1	Sharon Davidson La Crosse County 400 4 th Street North La Crosse, WI 54601
1	Jason Todaro, Solid Waste Operations Consultant Blue Ridge Services, Inc. PO Box 2212 Atascadero, CA 93423-2212

2014 Annual Report
La Crosse County Landfill Complex and Disposal Facility
WDNR License Nos. 2637, 3253, 3846, and 4317

Prepared by
La Crosse County Solid Waste Department

6500 State Highway 16
La Crosse, WI 54601

March 2015

Appendices

Appendix A	2014 Beneficially Reused Materials Report
Appendix B	2014 Leachate Recirculation Report and Organic Stability Plan
Appendix C	2014 Solid Wastes Tonnages Report
Appendix D	2014 Reporting Requirements for Biopiles for Contaminated Soil
Appendix E	2014 MSW Landfill Gas Information Report
Appendix F	Anticipated Construction Events for 2015
Appendix G	2014 Special Waste Report
Appendix H	2014 Shingle Recycling and Reuse

Appendix A

2014 Beneficially Reused Materials Report

La Crosse County Landfill Complex and Disposal Facility

MSW Landfill (Active – License No. 3253)

Prepared by

La Crosse County Solid Waste Department
La Crosse County, Wisconsin

March 2015

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Attachment A-1	Street Sweepings, Foundry Sand, Car Wash Grit, Sandblasting Sand, Storm Sewer Collection System Waste
Attachment A-2	Petroleum Impacted Soil, Other Contaminated Soil, Ash

1 Purpose

This report summarizes the quantities of approved beneficially reused materials used in landfill construction and operation at the La Crosse County Municipal Solid Waste Landfill (License No. 3253) during 2014, and includes:

- ◆ The types of materials applied and the respective generators;
- ◆ The volumes and tonnages used;
- ◆ Estimated density of the daily cover materials;
- ◆ Coverage ratio;
- ◆ Alternate applications such as dikes, berms, or other structures in the landfill;
- ◆ The ratio of waste to alternative daily cover (ADC) by volume for 2014;
- ◆ Discussion of problems encountered and recommendations.

This report has been prepared to satisfy Condition No. 11 of the February 10, 2006 Plan of Operation Approval from the WDNR.

2 Quantities of Approved Beneficially Reused Materials Used in Landfill Construction and Operation

In addition to those items listed below, a minimum amount of (<100 cubic yards) course ground shingles were used in the landfill roads.

2.1 Types of Materials and Respective Generators

- ◆ Street Sweepings. See Attachment A-1.
- ◆ Foundry Sand. See Attachment A-1.
- ◆ Car Wash Grit. See Attachment A-1.
- ◆ Sandblasting Sand. See Attachment A-1.
- ◆ Storm Sewer Collection System Waste. See Attachment A-1.
- ◆ Petroleum Impacted Soil. See Attachment A-2.
- ◆ Other Approved ADC. See Attachment A-2.
- ◆ Ash. See Attachment A-2.

2.2 Volumes and Tonnages Used

◆ Street Sweepings	3,993.20 tons	(2,954.97 cubic yards)
◆ Foundry Sand	9,112.97 tons	(6,743.60 cubic yards)
◆ Bottom Ash	2,838.02 tons	(2,100.13 cubic yards)
◆ Car Wash Grit	472.52 tons	(349.66 cubic yards)
◆ Petroleum Impacted Soil (accepted in 2014)	618.55 tons	(835.88 cubic yards)
◆ Petroleum Impacted Soil (released from biopile)	1,520.74 tons	(1,125.35 cubic yards)
◆ Other Approved ADC	6,579.75 tons	(4,869.02 cubic yards)
◆ Coal/wood Ash	211.13 tons	(156.24 cubic yards)

Totals:	25,564.21 tons	18,917.52 (cubic yards)
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2.3 Estimated Density of the Daily Cover Materials

2,700 lbs/cubic yard

2.4 Coverage Ratio for 2014

Waste (MSW + C&D + Category 4, 5&6)/(Daily cover + Alternative Daily cover)
= cover ratio.

108,648 cubic yards Waste / (DC * + 18,917.52 cubic yards ADC)

= 108,648 cubic yards / 18,918 cubic yards

= **6.11:1 or 17.4%**

*No clean material was used for DC in 2014.

2.5 Alternate Applications of Cover Type Soils

The alternative daily cover materials were used for daily and intermediate cover internal to the landfill, construction of containment berms, dikes to confine working areas, road base for internal access roads, and subbase for turnaround and unloading areas.

2.6 Ratio of Waste to Alternative Daily Cover by Volume for 2014

The total tonnage of waste disposed in the site in 2014 was 68,637 tons. Assuming a waste conversion figure of 1.5 CY/ton, the total volume of waste disposed in 2014 was approximately *108,648 CY. The total amount of ADC (by volume) used in 2014 was 18,918 CY. Therefore, the waste to ADC ratio was approximately 6.11:1 or 17.4%

*Category 4 material used a conversion figure of 0.74 CY/ton.

2.7 Problems Encountered and Recommendations

Controlling dust in loads of special waste continues to be a point of emphasis. After working with the area foundries the amount of dust in foundry sands was greatly reduced. There is greater scrutiny of potentially dusty wastes in the approval process. Wind speed and direction are monitored closely and dusty wastes are not allowed when wind conditions are outside of the set parameters.

Attachment A-1

Generators/Haulers of Beneficially Reused Material

Street Sweepings

City of La Crosse	City of Onalaska
Hilltopper Refuse & Recycling	Beck's Sweeping
La Crosse Co. Highway Dept.	Harter's Trash and Recycling
Midwest Roll-Off	Town of Campbell

Foundry Sand

Alliant Casting	Midwest Metal Products
NRB Metal Prod.	Torrance Casting Inc.

Car Wash Grit

A-1 Advanced Pumping	Bill's Pumping Service
Holmen Pumping	Hoffman's Construction

Sandblasting Sand

Mid City Steel Fabricating	Hilltopper Refuse & Recycling
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Storm Sewer Collection System Waste

City of La Crosse	Waste Management
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Attachment A-2

Petroleum Impacted Soil Used Directly as Daily Cover

Xcel	Terry's Auto Body
VEH Properties	Ft. McCoy
Norm Kane Oil Site	Benson Properties
METCO	

Other Contaminated Soil Used as Daily Cover

MnDOT	Canadian Pacific RR
Arcadia Coop	WTC
WDOT	Onalaska School District
Northside Molzahn	Chart
La Crosse County Highway Dept.	

Ash

Bureau of Engineering-State of Wisconsin	La Crosse Co. Facilities Department
Gundersen Health System	

Appendix B

2014 Leachate Volumes, Recirculation Report and Organic Stability Plan Information

La Crosse County Landfill Complex and Disposal Facility

MSW Landfill (Active – License No. 3253)
C & D Landfill (License No. 3846), and
Ash Monofill (License No. 4317)

Prepared by
La Crosse County Solid Waste Department
La Crosse County, Wisconsin

March 2015

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Attachments

Attachment B-1 2014 Leachate Recirculation by Quarter
Attachment B-2 2014 Leachate Totals by Station
Attachment B-3 2014 Leachate Line Jetting Reports
Attachment B-4 2014 Leachate Televising Reports

1 Purpose

This report summarizes the volumes of leachate removed for recirculation and volumes sent to treatment for the La Crosse County Landfills during 2014. This report has been prepared to satisfy Condition No. 11 of the February 10, 2006 Plan of Operation Approval from the WDNR which requires the following:

Volumes of leachate removed for recirculation, listed by month and liner phase where recirculation was performed;

Volumes of leachate sent to treatment, by month.

Additionally, based on a March 30, 2009 telephone conversation between Mr. Marty Herrick of the WDNR and Foth, leachate jetting and televising information is included herein.

Information in Section 5 addresses approval of the organic stability plan and annual reporting requirements. The Plan date is April 2012 and the required 5 year evaluation will take place in 2017.

2 Leachate Volumes

2.1 Volumes of Leachate Removed for Recirculation

Leachate was removed out of the main 40,000 gallon storage tank for recirculation. The SCADA system allows for isolation and control of the ash monofill and closed C&D site thus preventing blending of leachate with the MSW landfill. Total volume of leachate recirculated, over Phases VI and VII, during 2014 was 224,500 gallons.

2.2 Volumes of Leachate Sent to Treatment

The quantity of leachate produced and sent to treatment in 2014 was 8,187,430 gallons or a 17.3% increase over 2013. 50% of the overall annual increase can be attributed to the construction of Phase VIII A during 2014.

3 Leachate Line Jetting and Televising

Leachate lines were jetted in 2014 and are reported in Attachment B-2. Televising was required on the MSW site Phases I – IV and Phase VII. Additional information can be found below.

Required televising of the leachate lines was last performed as indicated in the below table and, in accordance with NR 506.07(5)(e) requiring televising the leachate lines at 5 year intervals, the next televising event will be performed as shown.

Site	Date of Latest Televising of Lines	Due Date of Next Line Televising Event
MSW Site (License No. 3253):	2014	2019
Phase V	2010	2015
Phase VI	2012	2017
Phase VII	2014	2019
Phase VIII	2014 (Construction)	2019
C & D Landfill	Not Applicable	Not Applicable
Ash Monofill (License No. 4317)	2010	2015

4 Summary of Inspections, Jetting and Televising

4.1 Inspections

Small items were identified during 2014 MH inspections, such as, replacement of hardware and general maintenance on the MH covers. These items were corrected when found. Additionally, some manholes had jetting/rain/surface water runoff that had accumulated at the bottom of the manholes. A pump truck was brought in to remove liquid from the affected manholes and then they were re-inspected to confirm the source was not internal from the collection lines. After re-inspection all sources appeared to be external.

Speedy Clean vacuum/washed all solids from bottom of tank using a Jet Vac truck with 8" vacuum tubes to move sludge into truck tank. Tank condition and surface protective coating were in good condition with no signs of deterioration. Both main tank leachate pumps have been pulled, cleaned and overhauled in the past 2 years (Pump 1 in 2013, Pump 2 in 2014).

4.2 Issues

No new issues arose in 2014. All leachate collection systems are operating as designed. All side slope riser pumps were pulled and overhauled in 2014. See televising below.

4.3 Jetting

In 2011 La Crosse County completed an RFP process and contracted for leachate line jetting, televising and tank cleaning services. Speedy Clean was awarded the 5 year contract and 2014 was the fourth year. All line jetting went well.

4.4 Televising

Speedy Clean televised with a unit called The Jet-cam. This unit can travel up to 800' in lines as small as 2" up to 12". The water jet will propel the camera down the line providing safer travel in landfill atmospheres. They were able to televise 5,449 ft of leachate lines in 2014 and written reports, along with photos and video are available. Towards the end of televising Speedy Clean lost the ability to record images. Due to the long lead time for repairs on this specialized equipment written correspondence was had with the WDNR in regards to this problem and the following steps were put in place. Televising would continue and be monitored by County and Contractor personnel. Unrecorded lines would be televised again in 2015 to maintain video/photo records.

4.5 Next Steps for 2015

Continue preventative maintenance on MH 8 leachate line to prevent additional build up.

5 Organic Stability Plan

As part of the organic stability plan, as stated in Section 2.1, La Crosse County initiated leachate recirculation in 2012. In order to improve efficiency, reduce cost and increase recirculation volumes sufficient enough to help achieve organic stability, the Solid Waste Department will need to add leachate from the 40,000 gallon tank for recirculation beginning in 2013. The separation and control of the leachate within the collection tank will be accomplished through Supervisory Control and Data Acquisition (SCADA) system installed January 2013. This system will allow collection and recirculation of leachate from the entire MSW landfill while controlling the discharge of leachate from the Ash Monofill and Closed C&D sites into the collection system. As stated above, 224,500 Gallons of leachate were re-circulated during 2014 on Phases VI and VII of the MSW landfill from January 2014 – October 2014.

Attachment B-1

2014

Volumes of Leachate Re-circulated by Quarter

Jan – Mar	Apr - June	July - Sept	Oct - Dec	Total
4500	51,000	149,000	20,000	224,500

Attachment B-2

2014

Leachate Totals by Station

Month	Construction & Demolition (#3846 / 420)	MSW Exfiltrate (MH-7) (#3253 / 557)	MSW Phase I,II,III (#3253 / NR)	MSW Phase IV (#3253 / 456)	MSW Phase V (#3253 / 458)	MSW Phase VI (#3253 / 460)	MSW Phase VII (#3253 / 462)	MSW Phase VIII (#3253 / 000)	Ash Monofill (#4317 / 460)
Jan.	7,000	0	72,694	12,976	16,328	57,302	11,857	N/A	66,553
Feb.	4,500	0	92,945	13,114	16,274	110,672	9,539	N/A	33,446
Mar.	6,500	0	104,048	26,288	20,920	211,861	46,661	N/A	86,682
Apr.	2,736	0	91,640	50,427	31,443	362,452	303,427	N/A	174,565
May.	4,788	0	136,296	45,656	39,287	603,323	122,856	N/A	117,034
June.	2,280	0	87,773	30,282	20,747	406,869	134,140	N/A	102,789
July.	2,244	0	75,547	41,237	27,788	391,068	64,054	N/A	117,562
Aug.	1,824	0	108,624	26,271	18,766	197,187	37,262	N/A	123,496
Sept.	1,596	0	116,718	16,287	14,213	220,061	30,253	131,813	102,759
Oct.	2,736	0	193,718	28,700	21,986	388,413	94,979	429,832	121,806
Nov.	1,824	0	132,078	27,944	15,967	163,146	23,985	36,778	116,538
Dec	2,508	0	138,122	26,641	16,737	195,335	45,901	82,410	113,746
Total	40,536	0	1,350,203	345,823	260,456	3,307,689	924,914	680,833	1,276,976

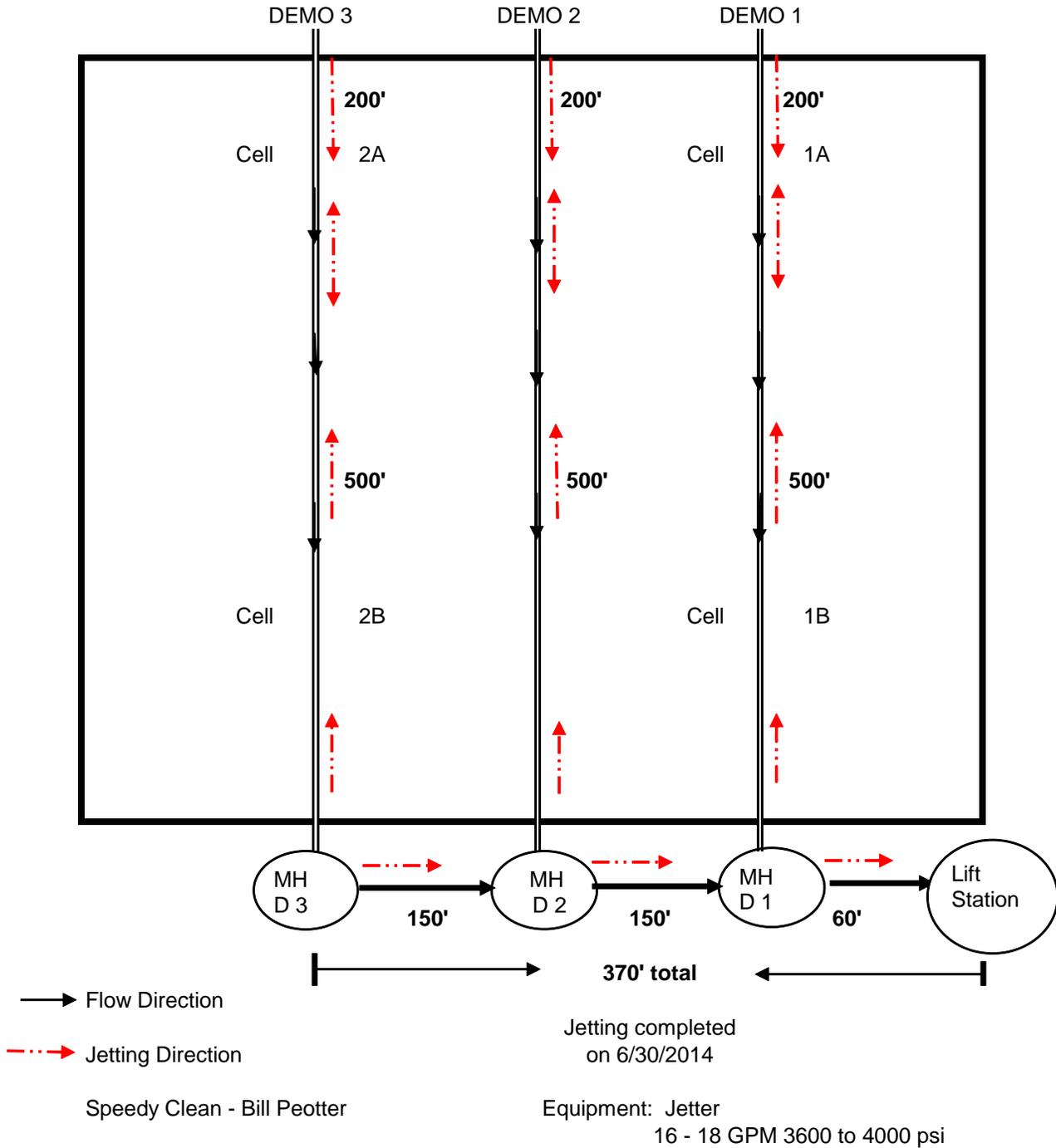
N



Attachment B-3

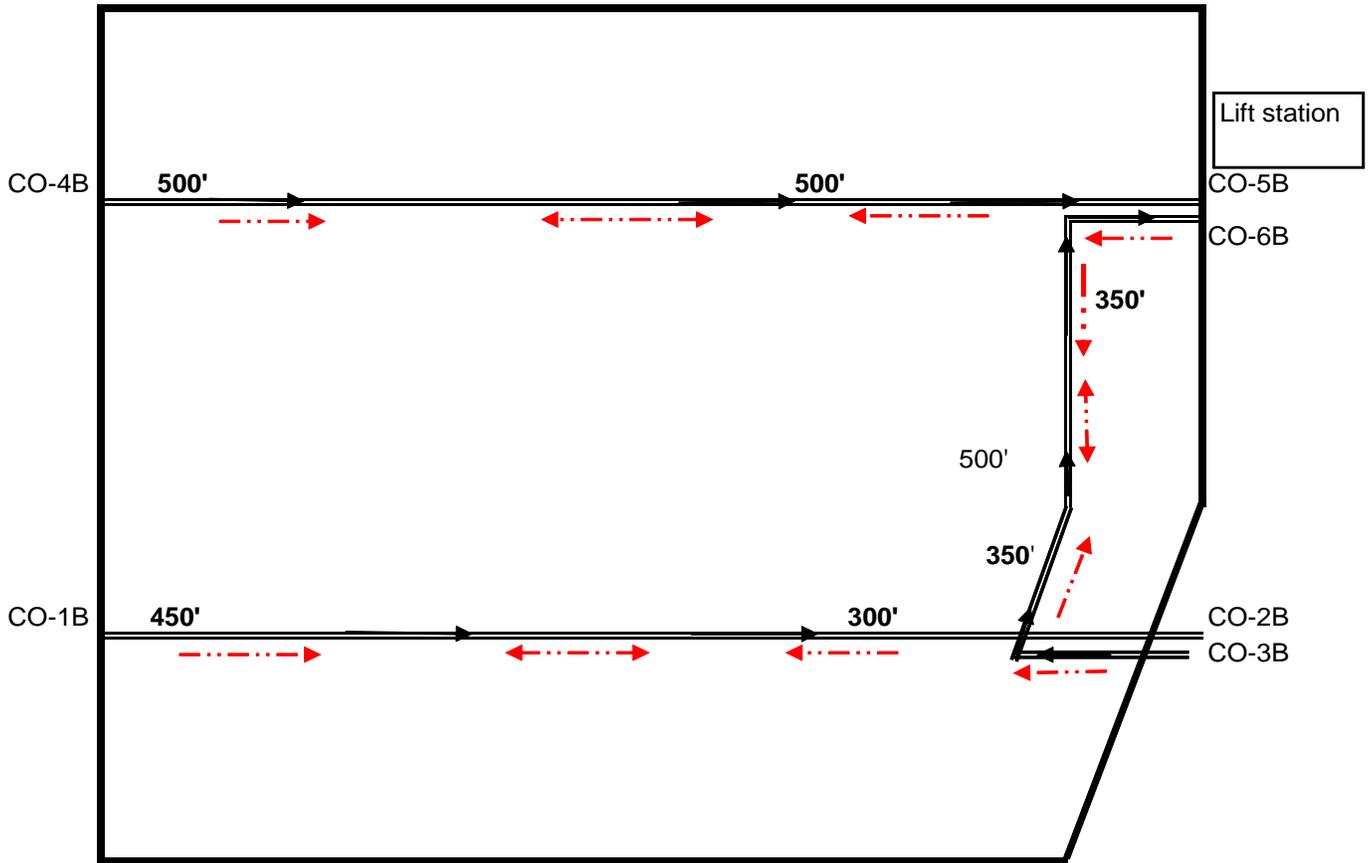
2014 Leachate Line Jetting Reports

Demo Leachate Line Jetting



Attachment B-2

2013 Leachate Line Jetting Reports



→ Flow Direction

---→ Jetting Direction

Jetting completed
on 6/30/2014

Speedy Clean - Bill Peotter

Equipment: Jetter

16 - 18 GPM 3600 to 4000 psi

All 6" PVC perforated pipe

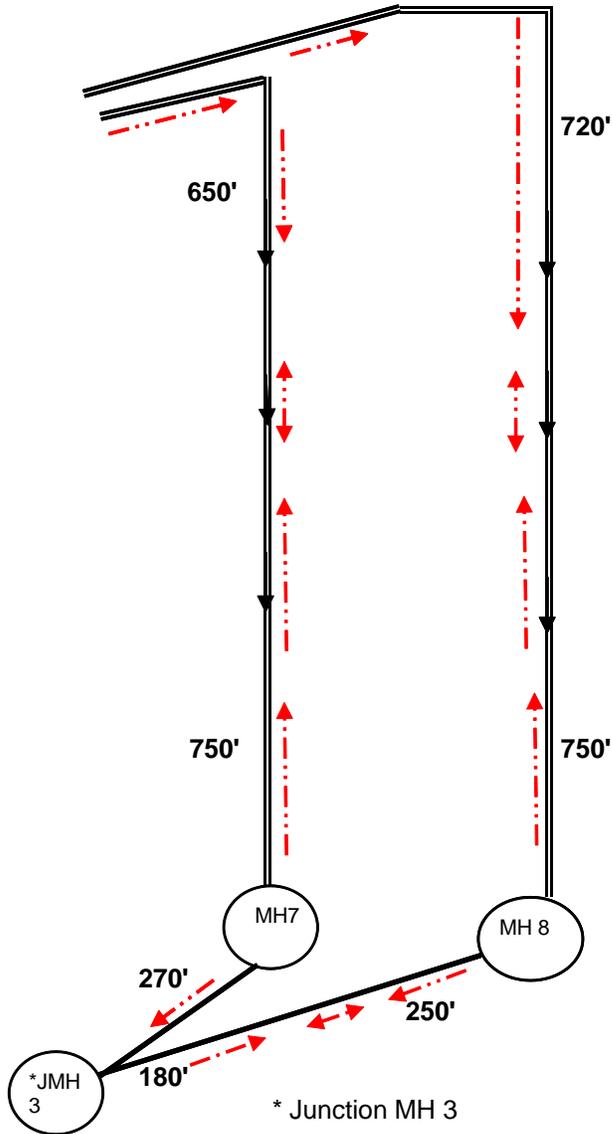
Monitored by: Paul Schwartz

Attachment B-2

2013 Leachate Line Jetting Reports



Phases I & II Exfiltrate MSW Landfill



Flow Direction
 Jetting Direction

Jetting Completed
6/30/2014

Speedy Clean - Bill Peotter
Monitored by: Paul Schwartz

Equipment: Jetter
16 - 18 GPM 3600 to 4000 psi

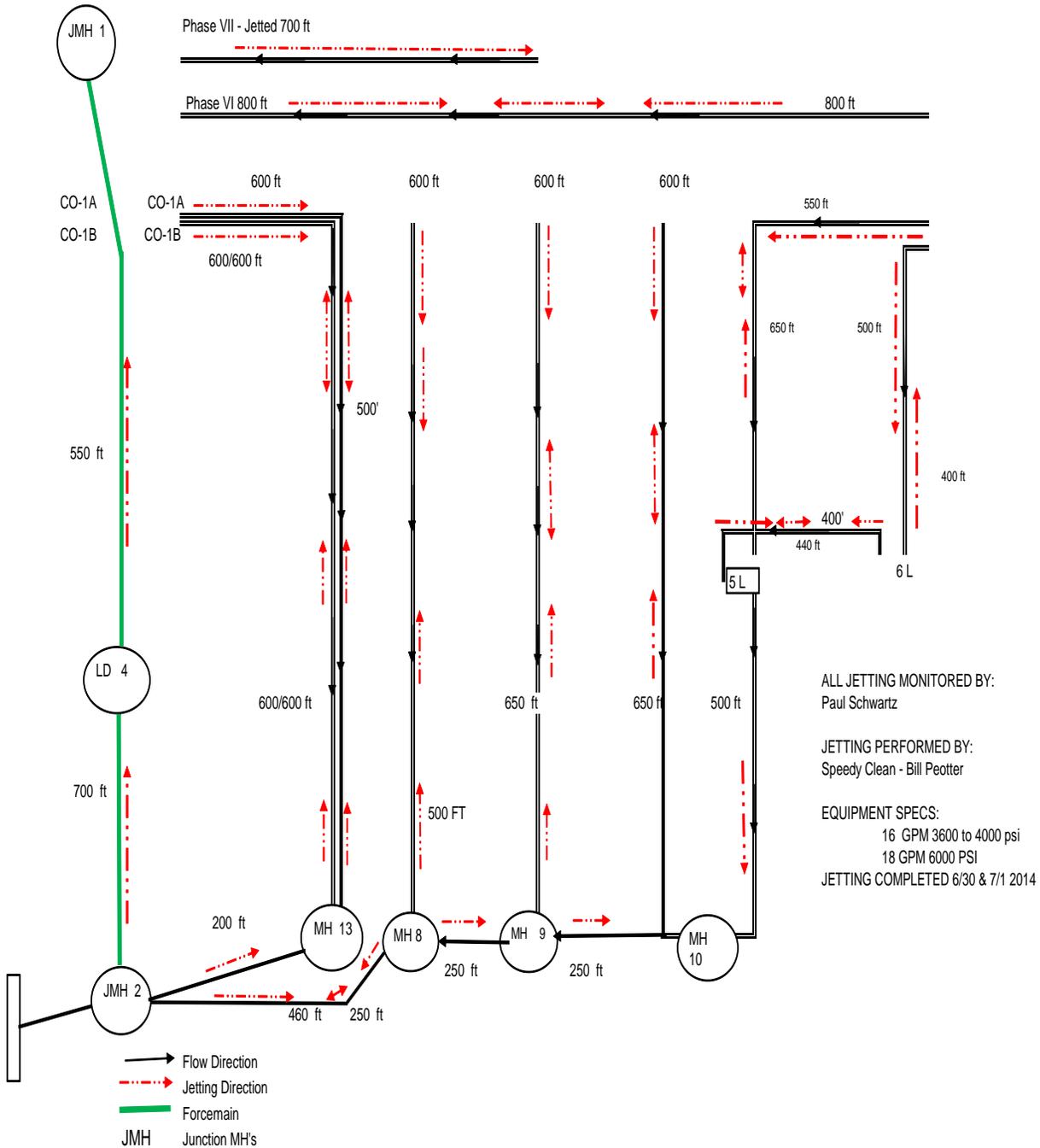
Attachment B-3

2014 Leachate Line Jetting Reports

N



MSW Landfill Leachate Lines



Attachment B-4
2014 Leachate Televising Reports



1380 Earl Street
Menasha, WI 54952
920.734.4707

TELEVISION INSPECTION REPORT

LaCrosse Landfill

June 30, 2014

Job Summary Report

Name: Landfill 2014

Start Date: 01/01/00 Completion Date: 01/01/00 Job ID: 477

Notes:

#	Section Name	Start MH	End MH	Street	Size	Length
1	01 CO-3B	MSW CO-3B			6.0'	605.00 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
2	02 CO-3L	MSW CO-3L			6.0'	251.80 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
3	03 CO-4B	MSW CO-4B			6.0'	500.00 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
4	04 CO-5A	MSW CO-5A			6.0'	535.00 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
5	05 CO-5B	MSW CO-5B			6.0'	400.40 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
6	06 CO-5C	MSW CO-5C			6.0'	453.60 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
7	07 CO-5D	MSW CO-5D			6.0'	401.90 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
8	08 CO-5E	MSW CO-5E			6.0'	400.30 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
9	09 CO-6A	MSW CO-6A			6.0'	501.00 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
10	10 CO-8A	MSW CO-8A			6.0'	700.00 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			
11	11 CO-8A Phase 7	MSW CO-8A			6.0'	700.00 ft.
	Inspection :	Date	Operator	Score		
	1	06/30/14	Dylan Peotter			

Section Totals: 5449.00 ft.

Customer:
 County of LaCrosse
 8500 State Road 16
 LaCrosse, WI 54601

Contractor:
 Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

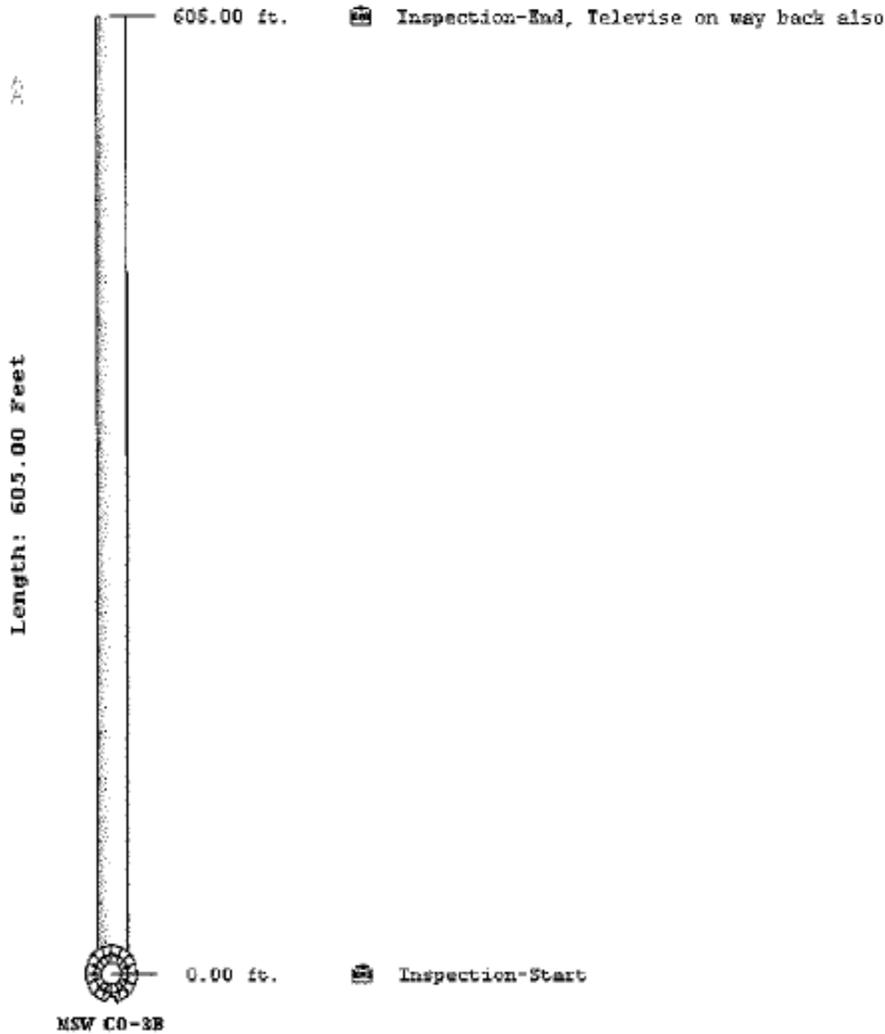
Inspection Report for 01 CO-3B in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 8:19am	Dylan Pectter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-3B				8 in.		605 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 01 CO-3B in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 8:19am	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-3B				6 in.		605 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22186.jpg



Observation:	Inspection-End
Distance:	605.00 ft.
Position:	
Severity:	
Notes:	Televise on way back also
File Name:	C:\vp_media\22187.jpg

Customer:
 County of LaCrosse
 6500 State Road 16
 LaCrosse, WI 54601

Contractor:
 Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

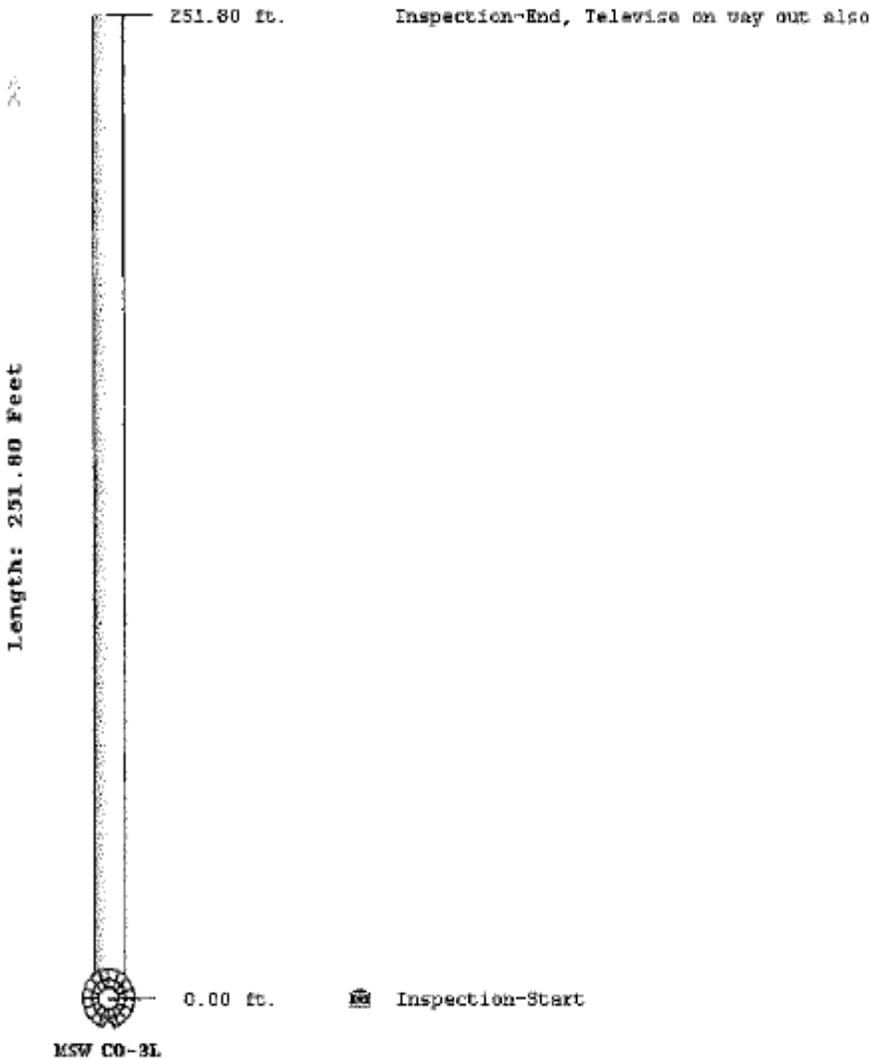
Inspection Report for 02 CO-3L in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 1:27pm	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-3L				6 in.		251.8 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 02 CO-3L in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 1:27pm	Dylan Peotter		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-3L				6 in.		251.8 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Observation: Inspection-Start

Distance: 0.00 ft.

Position:

Severity:

Notes:

File Name: C:\wp_media\22188.jpg



Observation: Inspection-End

Distance: 251.80 ft.

Position:

Severity:

Notes: Televis on way out also

File Name: C:\wp_media\22190.jpg

Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

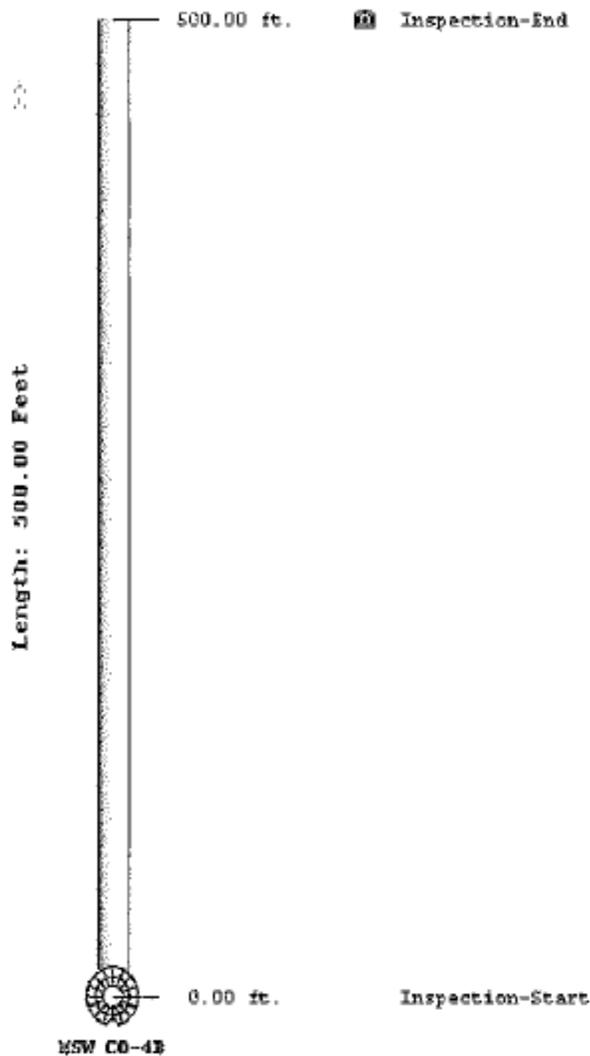
Inspection Report for 03 CO-4B in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 1:46pm	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-4B				6 in.		500 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 03 CO-4B in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 1:46pm	Dylan Peotler		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-4B				6 in.		500 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							
Notes							



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22193.jpg



Observation:	Inspection-End
Distance:	500.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22191.jpg

Customer:
 County of LaCrosse
 6500 State Road 16
 LaCrosse, WI 54601

Contractor:
 Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

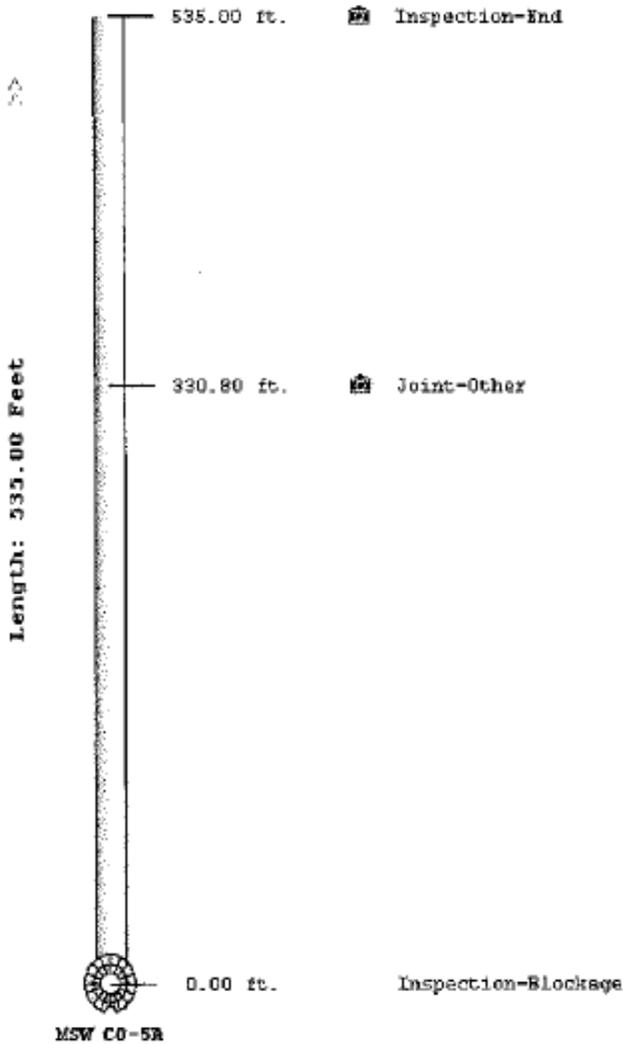
Inspection Report for 04 CO-5A in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 2:19pm	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5A				6 in.		535 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 04 CO-5A in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 2:19pm	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5A				6 in.		535 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Observation:	Inspection-Blockage
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22197.jpg



Observation:	Joint-Other
Distance:	330.80 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22195.jpg



Observation:	Inspection-End
Distance:	535.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22194.jpg

Customer:
 County of LaCrosse
 8500 State Road 16
 LaCrosse, WI 54601

Contractor:
 Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

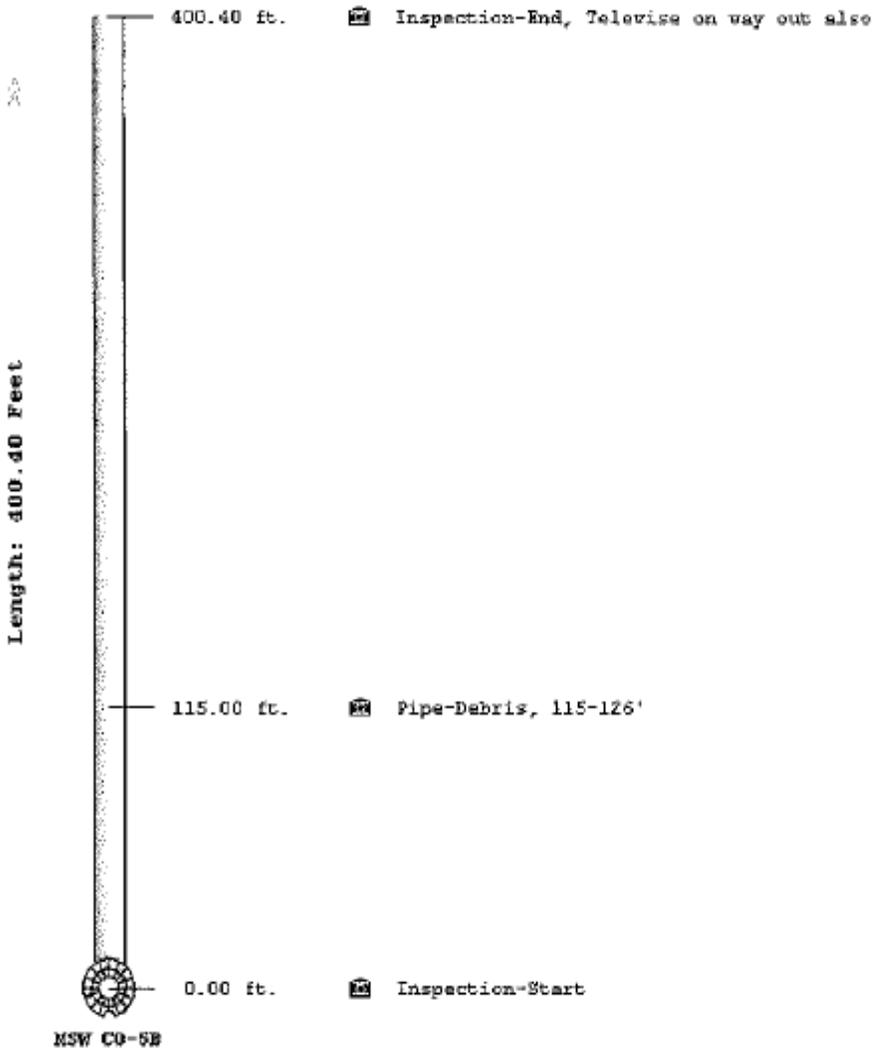
Inspection Report for 05 CO-5B in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 2:42pm	Dylan Pectter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5B				6 in.		400.4 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 05 CO-5B in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 2:42pm	Dylan Peotier		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-5B				6 in.		400.4 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Observation: Inspection-Start

Distance: 0.00 ft.

Position:

Severity:

Notes:

File Name: C:\wp_media\22198.jpg



Observation: Pipe-Debris

Distance: 115.00 ft.

Position:

Severity:

Notes: 115-126'

File Name: C:\wp_media\22199.jpg



Observation:	Inspection-End
Distance:	400.40 ft.
Position:	
Severity:	
Notes:	Televis on way out also
File Name:	C:\vp_media\22200.jpg

Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

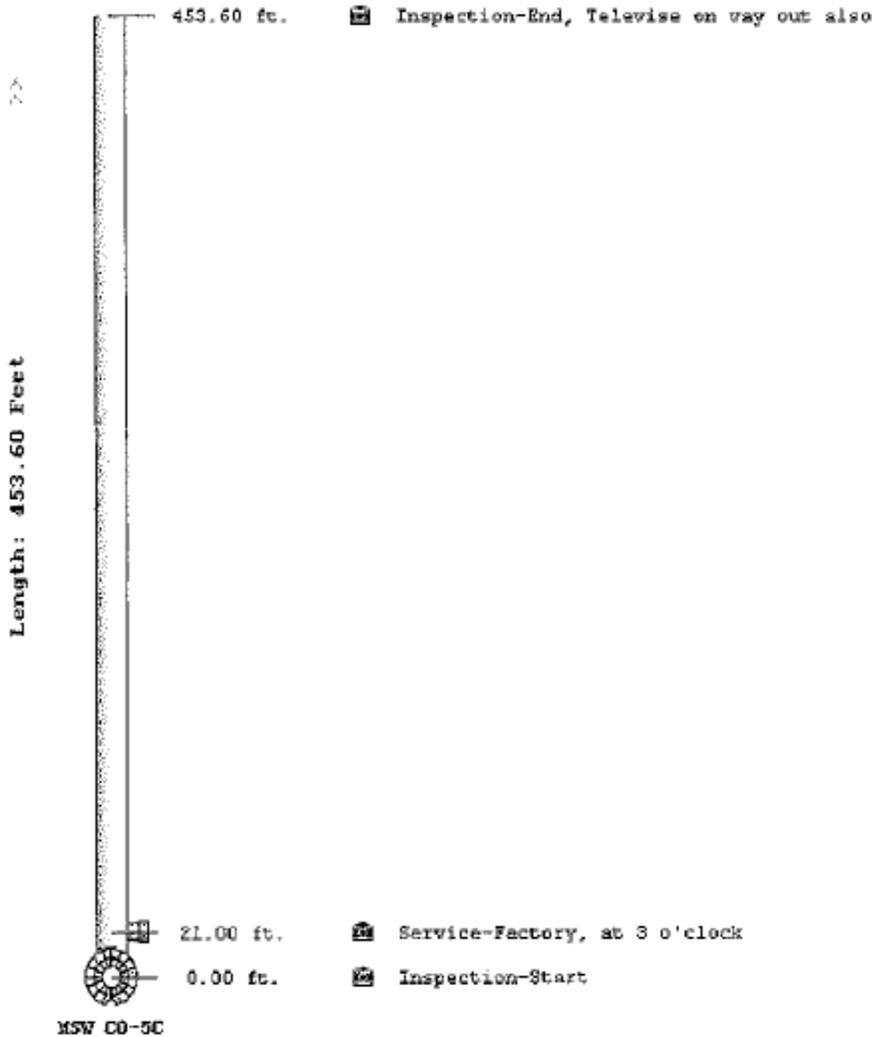
Inspection Report for 06 CO-5C in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
08/30/14 8:18am	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5C				6 in.		453.6 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 06 CO-5C in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 8:18am	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5C				6 in.		453.6 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

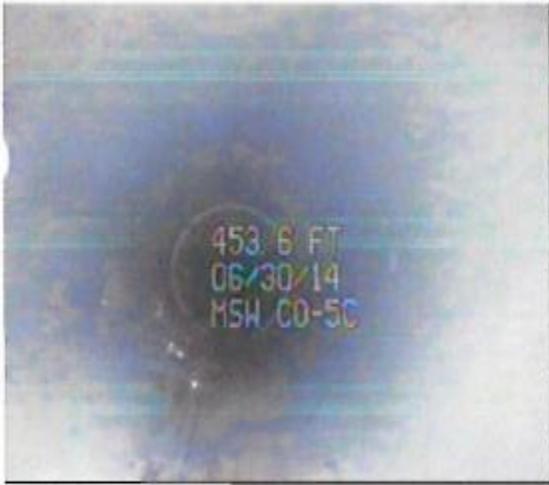
Notes



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22201.jpg



Observation:	Service-Factory
Distance:	21.00 ft.
Position:	At 3 o'clock
Severity:	
Notes:	
File Name:	C:\wp_media\22202.jpg



Observation:	Inspection-End
Distance:	453.60 ft.
Position:	
Severity:	
Notes:	Televise on way out also
File Name:	C:\vp_media\22203.jpg

Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

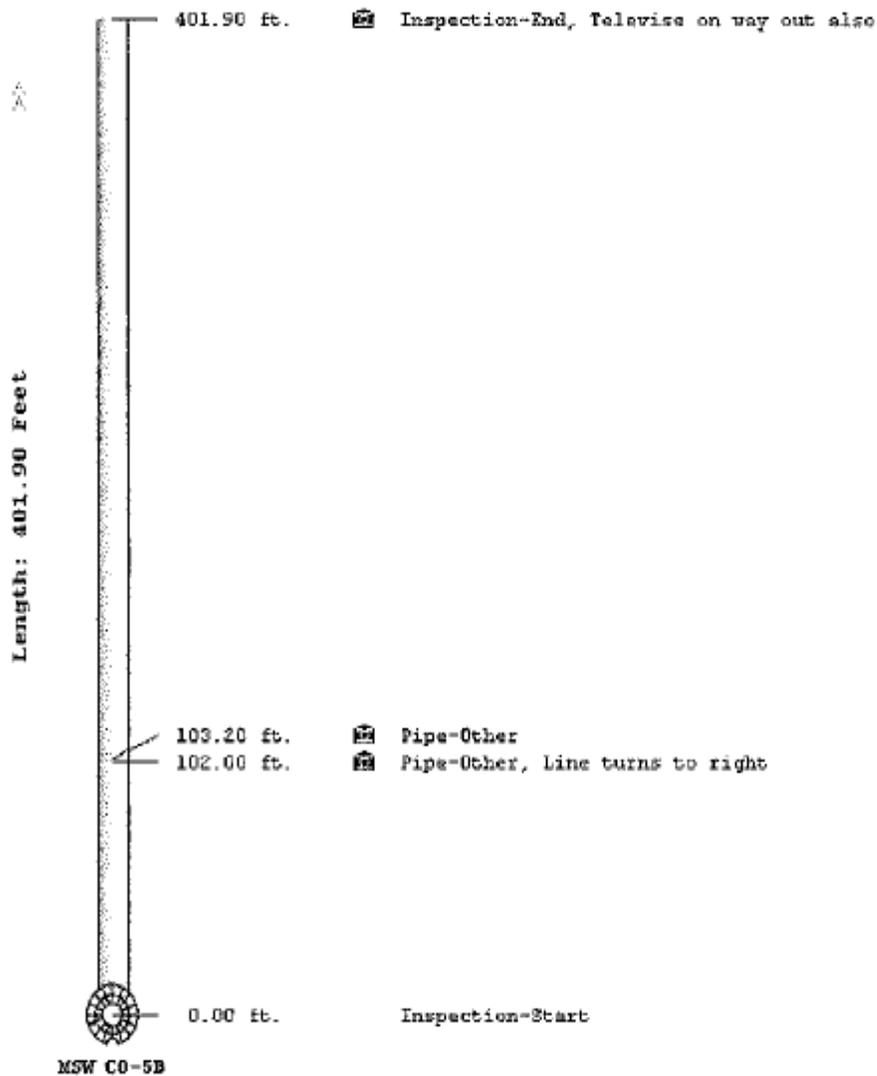
Inspection Report for 07 CO-5D in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 9:18am	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5D				6 in.		401.9 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 07 CO-5D in Landfill 2014

Date / Time	Operator	Street		City	Work Order No.	
06/30/14 9:18am	Dylan Peotter			LaCrosse		
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5D				6 in.		401.9 ft.
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File
Other						
Notes						



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22205.jpg



Observation:	Pipe-Other
Distance:	102.00 ft.
Position:	
Severity:	
Notes:	Line turns to right
File Name:	C:\wp_media\22205.jpg



Observation:	Pipe-Other
Distance:	103.20 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22207.jpg



Observation:	Inspection-End
Distance:	401.90 ft.
Position:	
Severity:	
Notes:	Televise on way out also
File Name:	C:\vp_media\22208.jpg

Customer:
 County of LaCrosse
 6500 State Road 16
 LaCrosse, WI 54601

Contractor:
 Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

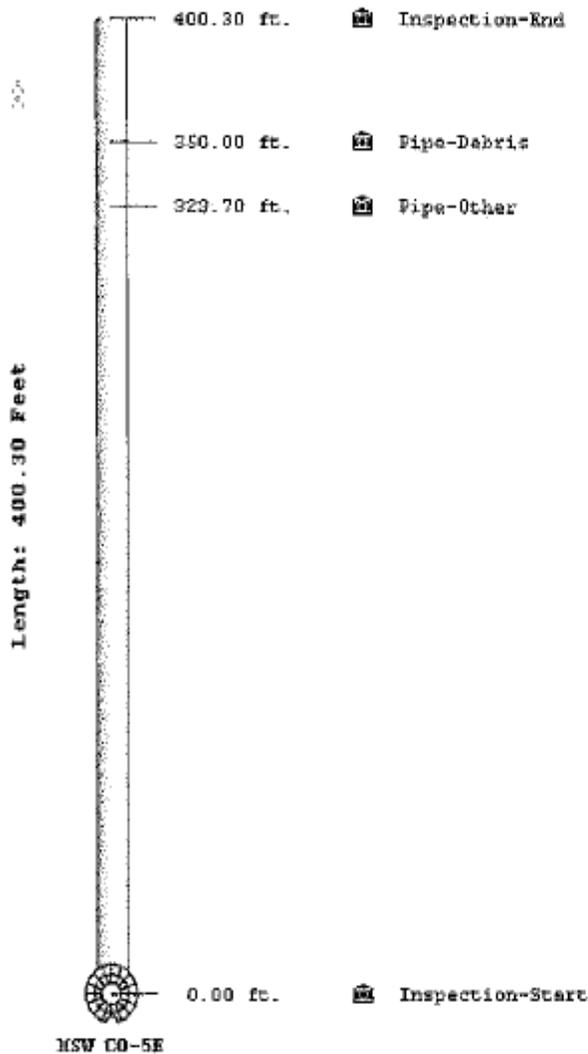
Inspection Report for 08 CO-5E in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
08/30/14 9:48am	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-5E				6 in.		400.3 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
 6500 State Road 16
 LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

Inspection Report for 08 CO-5E in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 9:48am	Dylan Peotter		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-5E				6 in.		400.3 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							
Notes							



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22209.jpg



Observation:	Pipe-Other
Distance:	323.70 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22212.jpg



Observation:	Pipe-Debris
Distance:	350.00 ft
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22210.jpg



Observation:	Inspection-End
Distance:	400.30 ft
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22211.jpg

Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

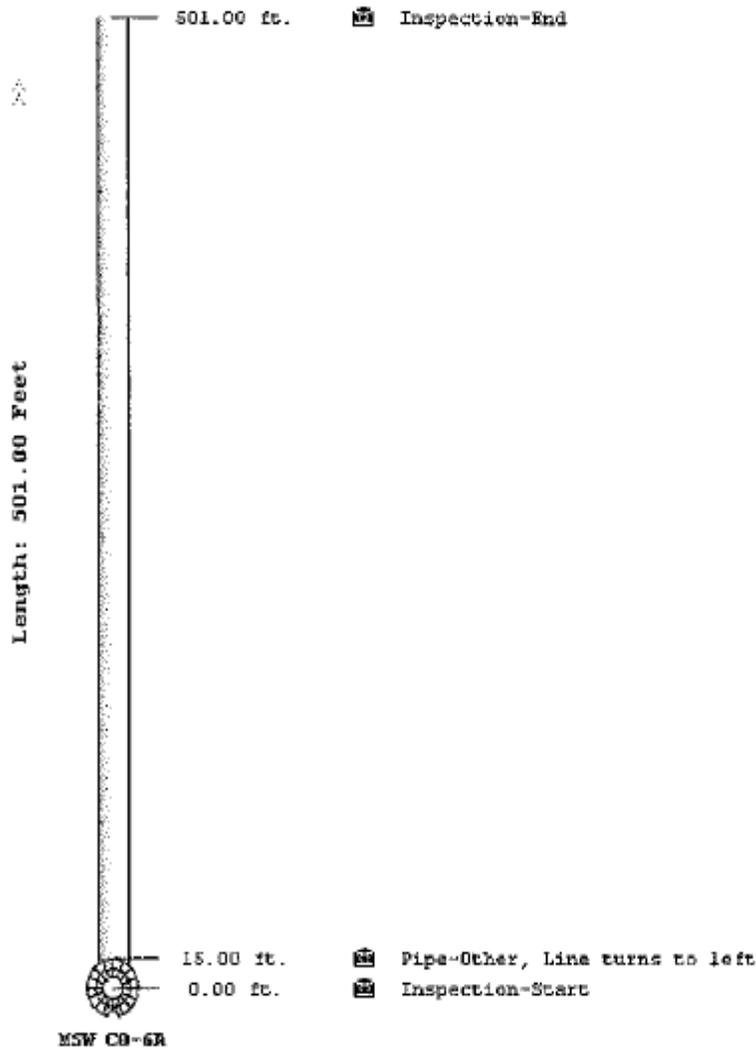
Inspection Report for 09 CO-6A in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
08/30/14 11:06am	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-6A				6 in.		501 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 09 CO-6A in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 11:06am	Dylan Peotter		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-6A				6 in.		501 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							
Notes							



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22213.jpg



Observation:	Pipe-Other
Distance:	15.00 ft.
Position:	
Severity:	
Notes:	Line turns to left
File Name:	C:\vp_media\22214.jpg



Observation:	Inspection-End
Distance:	501.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22215.jpg

Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

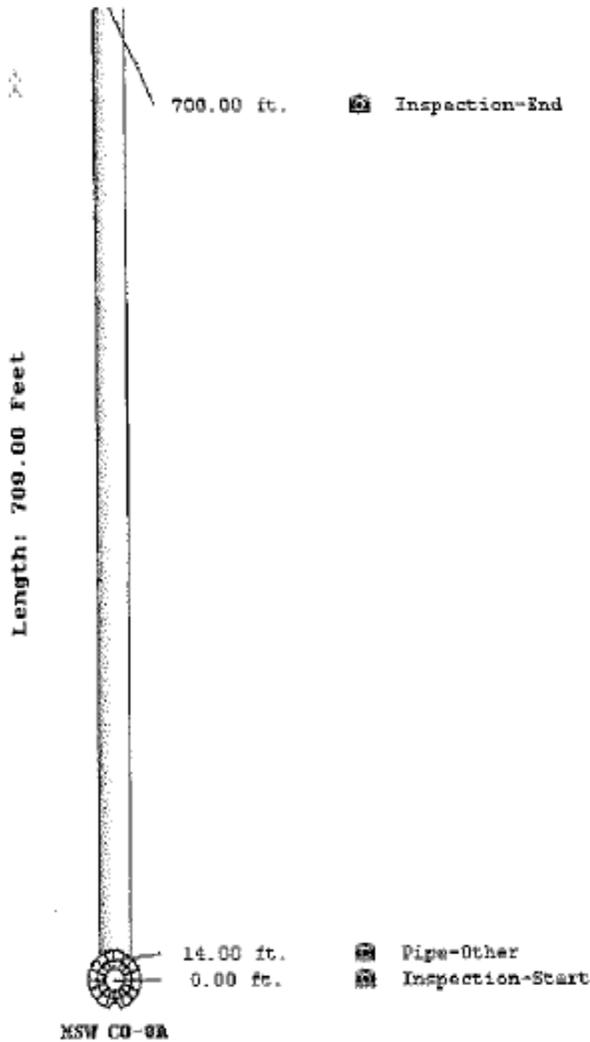
Inspection Report for 10 CO-8A in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.
06/30/14 12:49pm	Dylan Peotter		LaCrosse	

Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length
MSW CO-8A				6 in.		700 ft.

Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

Inspection Report for 10 CO-8A in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 12:49pm	Dylan Peotter		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-8A				6 in.		700 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

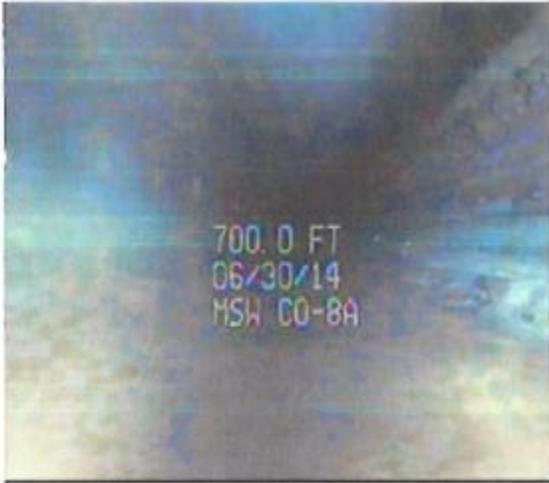
Notes



Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22216.jpg



Observation:	Pipe-Other
Distance:	14.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22217.jpg



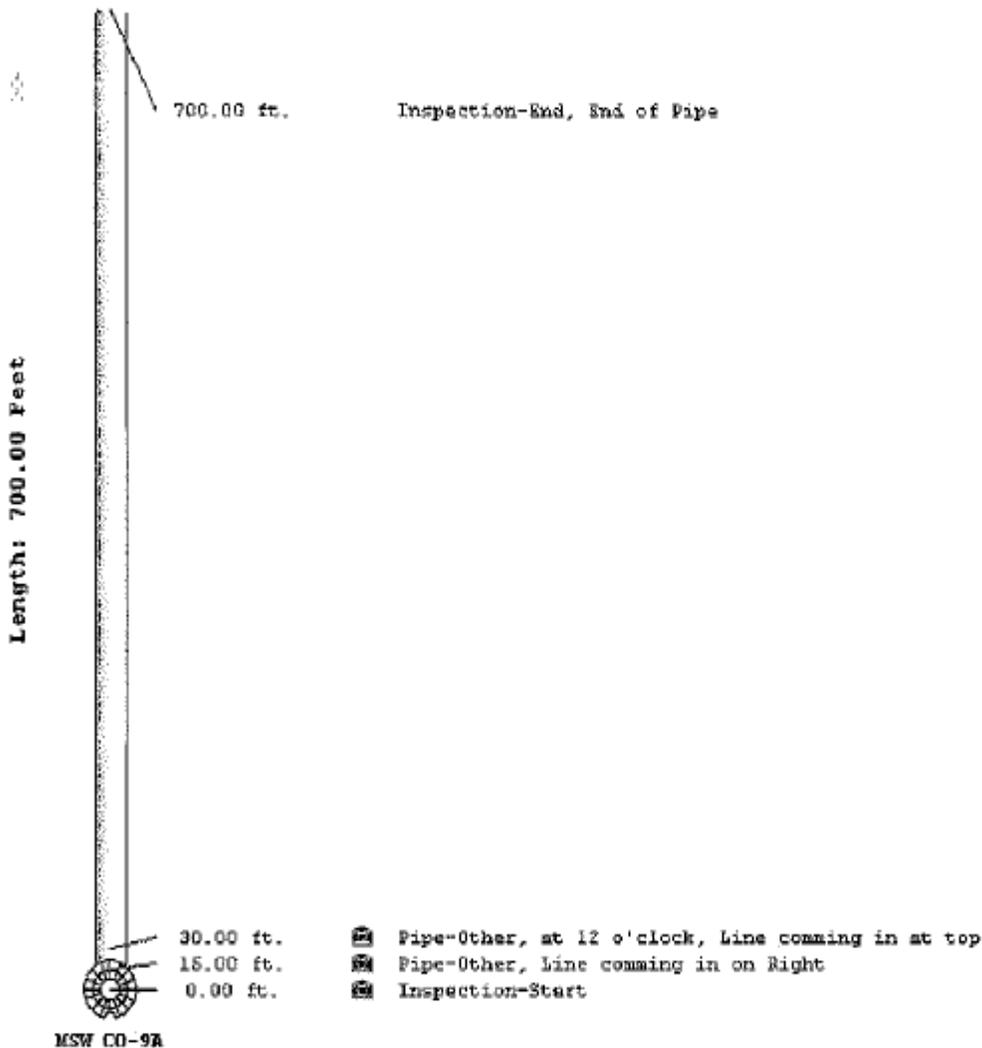
Observation:	Inspection-End
Distance:	700.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\wp_media\22218.jpg

Customer:
 County of LaCrosse
 6500 State Road 16
 LaCrosse, WI 54601

Contractor:
 Speedy Clean Inc.
 1380 Earl Street
 Menasha, WI 54952
 920-734-4707

Inspection Report for 11 CO-9A Phase 7 in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 9:02am	Dylan Peotter		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-9A				8 in.		700 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							
Notes							



Customer:

County of LaCrosse
6500 State Road 16
LaCrosse, WI 54601

Contractor:

Speedy Clean Inc.
1380 Earl Street
Menasha, WI 54952
920-734-4707

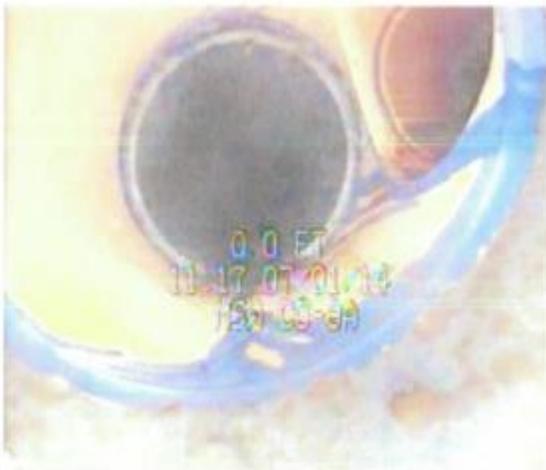
Inspection Report for 11 CO-9A Phase 7 in Landfill 2014

Date / Time	Operator	Street	City	Work Order No.			
06/30/14 9:02am	Dylan Peotter		LaCrosse				
Start Manhole	Depth	End Manhole	Depth	Pipe Size	Pipe Material	Total Length	
MSW CO-9A				6 in.		700 ft.	
Section Type	Direction	Pre-Cleaning	Weather	Vehicle	Score	Video File	Tape ID / Start Time
Other							

Notes



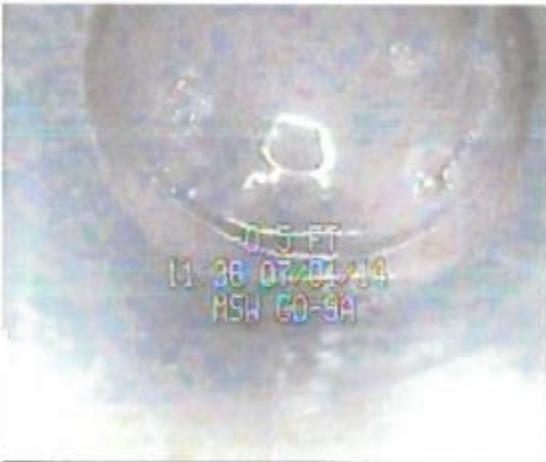
Observation:	Inspection-Start
Distance:	0.00 ft.
Position:	
Severity:	
Notes:	
File Name:	C:\vp_media\22223.jpg



Observation:	Pipe-Other
Distance:	15.00 ft.
Position:	
Severity:	
Notes:	Line coming in on Right
File Name:	C:\vp_media\22224.jpg



Observation:	Pipe-Other
Distance:	30.00 ft.
Position:	At 12 o'clock
Severity:	
Notes:	Line coming in at top
File Name:	C:\wp_media\22225.jpg



Observation:	Inspection-End
Distance:	700.00 ft.
Position:	
Severity:	
Notes:	End of Pipe
File Name:	C:\wp_media\22227.jpg

Appendix C

2014 Solid Waste Tonnages Report

La Crosse County Landfill Complex and Disposal Facility

MSW Landfill (License No. 3253)

Ash Monofill (License No. 4317)

Prepared by

La Crosse County Solid Waste Department

La Crosse County, Wisconsin

March 2015

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Sanitary Landfill – License No. 3253.....	2
Ash Monofill – License No. 4317	2

Attachments

Attachment C-1	La Crosse County Landfill Tonnages (2 pages)
Attachment C-2	2014 Waste Disposal Tonnage/Capacity Certification (1 page)
Attachment C-3	2014 Landfill Capacity Calculations Letter from SEH

1 Purpose

This report summarizes the tonnages of solid waste received for disposal at the La Crosse County Landfill during 2014. This report has been prepared to satisfy Condition No. 11 of the February 10, 2006 Plan of Operation Approval from the WDNR. Also attached is Tonnage Information for 2014 (Attachment C-1), Waste Disposal Tonnage/Capacity Certification information (Attachment C-2) as reported to the WDNR, and the 2014 Landfill Capacity Calculations letter from Short Elliot Hendrickson (SEH).

Sanitary Landfill – License No. 3253

Waste Category	Type of Waste	Tons
1	Municipal Waste	56,545.49
2	Utility Ash/Sludges	211.13
3	Pulp/Papermill Mfg Waste	0.00
4	Foundry Waste	0.00
5	POTW Sludges	27.36
6	All other SW (Not HW)	1,854.16
19	Fee Exempt waste used for dikes, berms, etc	13,893.67
20	Energy Recovery Incinerator Ash	0.00
21	High Volume Industrial used for daily cover, etc	9,112.97
22	Shredder Fluff used for daily cover	0.00
23	Treated Contaminated used for daily cover	825.70
24	Exempt Unusable Paper Making Materials	0.00
25	Construction & Demolition	14,005.27
Total Waste Tons:		96,475.75

Ash Monofill – License No. 4317

Waste Category	Type of Waste	Tons
20	Energy Recovery Incinerator Ash	9,482.73
Total Waste Tons:		9,482.73

La Crosse County Landfill
2014 Tonnages
All Sites

CATEGORY*	MUNICIPAL SOLID WASTE			OTHER WASTE		MSW LANDFILL	ASH MONOFILL 20	COMBINED LANDFILLS	RECYCLING & OTHER R	ALTERNATIVE DAILY COVER (ADC) RATIO			
	1	1	25	19	18					0.74	1.5	0.74	1.5
MONTH	XCEL (LANDFILL)	DIRECT LANDFILL	CONST & DEMO	XCEL BOTTOM ASH	SPECIAL WASTE	SUBTOTAL	XCEL WTE ASH **	TOTAL	TOTAL	TOTAL ADC IN CUBIC YARDS CATs 2,19,21-23	TOTAL ADC RATIO TO MSW	PETRO IMPACT SOIL CUBIC YDS	PETRO IMPACT SOIL DC TO MSW
JANUARY	719.65	3,946.86	639.71	215.31	1,213.60	6,736.93	675.12	7,412.05	405.17	861.33	10.30%	0.16	0.00%
FEBRUARY	777.37	2,216.14	430.18	163.92	1,118.31	4,727.92	765.02	5,492.94	144.58	892.23	16.89%	28.70	0.40%
MARCH	1,067.68	2,549.34	802.50	175.87	1,242.90	5,838.29	834.73	6,673.02	309.27	920.43	13.36%	0.00	0.00%
APRIL	1,258.60	3,089.24	1,191.78	201.42	3,145.87	8,896.91	804.95	9,701.86	865.93	2,377.05	27.88%	185.65	1.39%
MAY	1,367.63	3,502.90	1,721.72	282.15	3,827.94	10,702.34	908.60	11,610.94	1,907.72	2,947.00	28.24%	0.00	0.00%
JUNE	1,565.87	3,527.50	1,665.58	307.94	1,680.09	8,646.98	913.32	9,560.30	1,861.73	1,373.97	13.49%	2.59	0.02%
JULY	1,375.62	3,520.08	1,656.11	304.74	1,927.62	8,784.17	1,001.49	9,785.66	1,862.19	1,517.54	15.02%	40.24	0.31%
AUGUST	1,270.33	3,084.41	1,216.34	251.37	1,837.95	7,660.40	801.40	8,461.80	1,303.87	1,426.72	16.59%	66.82	0.57%
SEPTEMBER	524.35	5,635.94	1,514.45	298.75	1,237.75	10,211.24	672.94	10,834.18	1,161.22	1,015.67	7.66%	0.00	0.00%
OCTOBER	515.92	6,487.67	1,407.85	133.21	3,418.13	11,962.78	417.42	12,380.20	1,362.24	2,513.47	19.56%	26.88	0.15%
NOVEMBER	1,047.26	2,639.07	879.28	217.90	1,332.41	6,115.82	793.88	6,909.80	699.45	1,042.33	14.76%	260.98	2.84%
DECEMBER	1,039.70	2,812.56	979.77	265.44	1,094.40	6,191.87	843.86	7,135.73	498.78	904.52	12.13%	0.00	0.00%
Actual YTD Tonnage	12,519.98	44,025.51	14,005.27	2,838.02	23,086.97	96,475.75	9,482.73	105,958.48	12,382.15	17,792.17	16.38%	611.02	0.56%
% MSW Landfill	12.96%	45.63%	14.52%	2.94%	23.93%	100%			2013 Carry- Over	1,495.35	1.38%	1495.35	1.38%
% Combined Landfills	11.82%	41.55%	13.22%	2.68%	21.79%	91.05%	8.95%	100%	ADC RATIO YTD	19,287.52	17.76%	2106.37	1.94%
Carry-over Petro Impacted Soil from 2013 in tons: 2,020.74													
Annual Budgeted Tonnage	18,000	31,480	14,330	2,500	18,550	84,860	9,600	94,460					
% of Budget Achieved	69.56%	139.85%	97.73%	113.52%	124.46%	113.69%	98.78%	112.17%					

**La Crosse County Landfill
2014 Special Waste Tonnages**

CATEGORY	2	4	5	6	6	6	6	6	6	19	19	19	21	23	SPECIAL WASTE TOTAL
MONTH	COAL/ WOOD ASH	FOUNDRY WASTE	POTW SLUDGES	ASBESTOS (FRIABLE)	ASBESTOS (NON-FRIABLE)	ASBESTOS TOTAL	SLUDGE	MISC. SPECIAL WASTE	CAR WASH GRIT-DC	OTHER APPROVED DC	STREET SWEEPINGS-DC	HV/IND WASTE-DC	PETROLEUM IMPACTED SOIL-DC		
JANUARY	74.89	0.00	0.00	9.31	145.09	154.40	108.38	2.17	23.23	63.53	0.00	788.79	0.21		1,213.60
FEBRUARY	33.76	0.00	0.00	1.83	3.25	5.08	89.80	1.63	32.92	46.77	0.00	889.54	38.79		1,118.31
MARCH	8.46	0.00	0.00	12.22	54.07	66.29	106.71	1.94	42.94	65.43	57.50	893.63	0.00		1,242.90
APRIL	44.17	0.00	0.00	1.74	32.72	34.46	95.57	5.03	91.35	131.16	1,666.49	824.74	250.88		3,145.87
MAY	10.96	0.00	0.00	12.09	20.29	32.38	84.53	10.75	25.52	2,287.12	652.50	724.18	0.00		3,827.94
JUNE	2.51	0.00	0.00	15.61	7.12	22.73	110.64	7.94	24.54	186.33	467.04	854.86	3.50		1,690.09
JULY	2.74	0.00	0.00	12.45	24.34	36.79	141.26	3.58	16.01	462.98	453.57	756.31	54.38		1,927.52
AUGUST	6.34	0.00	9.58	25.88	5.61	31.49	116.14	2.11	28.50	667.26	186.31	697.26	88.94		1,837.95
SEPTEMBER	3.17	0.00	8.83	33.38	10.19	43.57	107.96	3.75	12.66	351.54	79.97	626.30	0.00		1,237.75
OCTOBER	6.16	0.00	8.95	6.55	15.16	21.73	103.03	21.05	121.98	1,923.87	392.94	782.10	36.32		3,418.13
NOVEMBER	9.99	0.00	0.00	10.92	0.21	11.13	125.56	5.06	11.94	169.97	16.44	630.64	352.68		1,332.41
DECEMBER	9.96	0.00	0.00	10	2.66	12.66	122.90	1.96	40.93	233.93	16.44	656.62	0.00		1,094.40
Actual YTD Tonnage	211.13	0.00	27.36	151.98	320.73	472.71	1,314.48	66.97	472.52	6,593.93	3,993.20	9,112.97	824.70		23,066.97

% Special Waste	0.91%	0.00%	0.12%	0.66%	1.39%		5.69%	0.29%	2.05%	28.54%	17.30%	39.47%	3.58%		100%
			% Asbestos		32%	68%	100%								

Annual Budgeted Tonnage	300	0	350			300	1000	150	450	2500	3500	9000	1000		18550
% Of Budget Achieved	70.38%	#DIV/0!				157.57%	131.45%	44.65%	105.00%	263.60%	114.09%	101.26%	82.57%		124.46%

DC=Daily Cover

2014 Waste Disposal Tonnage/Capacity Certification
Supplemental Data Table A.

Name of Landfill: La Crosse MSW/Landfill/Ash Monofill
Landfill License Number: 3253
Landfill PID Number: 632063630

Est. Capacity Jan. 2014: 2,670,793

Category Number	Waste Type - Category Name	Total 2014 Tonnages	Conv. Factor (See Instructions for Conversion Factors)	Volume-CU Yds
1	MUNICIPAL SOLID WASTE (Household and Commercial Sources)	59,545.49	1.500	84,818.24
2	ASHES AND SLUDGES FROM ELECTRIC AND PROCESS STEAM GENERATING FACILITIES - EXEMPT FROM RECYCLING FEE	211.13	0.740	156.14
3	PULP OR PAPERMILL SLUDGES PRODUCED BY WASTE TREATMENT OR MFG PROCESSES - EXEMPT FROM RECYCLING FEE	0.00		0.00
4	MANUFACTURING SOLID WASTE PRODUCED FROM FOUNDRIES - EXEMPT FROM RECYCLING FEE	27.36	1.500	6.00
5	SLUDGES PRODUCED BY MUNICIPAL WASTEWATER TREATMENT PLANTS			40.60
6	ALL OTHER SOLID WASTES NOT DESIGNATED AS HAZARDOUS WASTE AND DO NOT FIT INTO CATEGORY 1 THROUGH 5 OR CATEGORY 19 THROUGH 29	1,694.16	1.500	2,781.00
19	WASTE USED AS DAILY COVER, BERMS, DIKES, ETC. - EXEMPT FROM ALL ENVIRONMENTAL FEES	13,883.67	0.740	10,281.56
20	ASH FROM INCINERATION FOR ENERGY RECOVERY - EXEMPT FROM RECYCLING FEE	9,482.73	1.215	11.53
21	HIGH VOLUME WASTE USED AS DAILY COVER, BERMS, DIKES, ETC - EXEMPT FROM ALL ENVIRONMENTAL FEES	9,112.97	0.740	6,743.62
22	SHREDDER FLUFF USED AS DAILY COVER, BERMS, DIKES, ETC - EXEMPT FROM ALL ENVIRONMENTAL FEES	0.00		0.00
23	PETROLEUM CONTAMINATED SOILS USED AS DAILY COVER, BERMS, DIKES, ETC - EXEMPT FROM ALL ENVIRONMENTAL FEES	625.70	0.740	811.24
24	WASTE MATERIAL THAT IS REMOVED FROM RECYCLED MATERIALS INTENDED FOR USE AS RECYCLED FIBER BY A PERSON THAT MAKES PAPER, PULP, OR PAPERBOARD FROM WASTEPAPER, IF THE WASTE MATERIAL CANNOT BE USED TO MAKE PAPER, PULP, OR PAPERBOARD - EXEMPT FROM RECYCLING FEE	0.00		0.00
25	CONSTRUCTION & DEMOLITION (C&D) WASTE - SUBJECT TO ALL THE SAME FEE CATEGORIES AS CATEGORY 1 WASTE	14,005.27	1.500	21,007.50
26	SEDIMENTS CONTAMINATED WITH PCBs THAT MEET THE CRITERIA IN s. 389.64(4)(b), & s. 389.67(1)(a), WIS. STATS.	0.00		
27	WASTE GENERATED BY A NONPROFIT ORGANIZATION THAT MEETS THE CRITERIA IN s. 389.64(4)(b), WIS. STATS.	0.00		
28	SOLID WASTE MATERIALS GENERATED AS A RESULT OF A NATURAL DISASTER THAT MEET THE CRITERIA IN s. 389.63(9)(B), 389.64(3)(D), 389.64(4)(F), & 389.67(1)(PM), WIS. STATS. - EXEMPT FROM ALL ENVIRONMENTAL FEES. (EFFECTIVE JULY 1, 2011)	0.00		
29	WASTE REMOVED AT THE REQUEST OF THE DNR IN ORDER TO MITIGATE POTENTIAL ENVIRONMENTAL IMPACTS IN ACCORDANCE WITH S. 389.675, WIS. STATS. (EFFECTIVE APRIL 25, 2014)	0.00		
Totals				126,451.33

Est. Remaining Site Life in Years: 27 Years

Est. Capacity Jan. 2016: 2,544,341.68



Building a Better World
for All of Us®

January 27, 2015

RE: La Crosse County Landfill
2014 Landfill Capacity Calculations
SEH No. LACSW 126887 14.00

Mr. Henry A. Koch, PE
Director of Solid Waste Department
La Crosse County Landfill
6500 State Road 16
La Crosse, WI 54601

Dear Mr. Koch:

We have completed an evaluation of the remaining air space in the Ash Monofill and Phase I through Phase VIII of the municipal solid waste (MSW) landfill as of December 31, 2014. The purpose of this letter is to present this information which will assist with solid waste management planning and reporting by the County.

ASH MONOFILL

2014 Air Space Consumption

A topographic survey of the Ash Monofill was completed by Paragon Associates, Inc. (Paragon) on November 24, 2014 to document the existing grades. Topographic data obtained from this survey is provided in Figure 1 and Figure 2. Figure 1, which also includes the topography from the November 4, 2013 survey performed by Paragon, shows the amount of ash placed between November 4, 2013 and November 24, 2014. Using Civil 3D software, and subtracting intermediate cover added in 2014, the volume of fill placed during this time was calculated as 9,394 CY.

To determine the amount of fill placed from January 1, 2014 to December 31, 2014, two adjustments were made:

1. According to the landfill scale records 1,240 tons of ash was placed between November 4, 2013 and December 31, 2013. Using a density of 1,625 lb/CY for ash (2013 density), this weight equates to 1,526 CY. This volume was subtracted from the volume generated by Civil 3D.
2. Landfill scale records show that 1,161 tons of ash was placed from November 24, 2014 to December 31, 2014. Using a density of 2,036 lb/CY (calculated using 2014 scale records), this weight equates to 1,140 CY of material. This volume was added to the volume generated by Civil 3D.

The amount of air space consumed from January 1, 2014 and December 31, 2014 is 9,008 CY. With scale records showing 9,483 tons of ash placed in 2014, the density is approximately 2,105 lb/CY.

Remaining Air Space

Figure 2 shows the existing grades and the approved top of waste grades based on the Plan of Operations drawings. Figure 2 also identifies the area which currently has 12 inches of intermediate cover. The remaining air space, calculated using Civil 3D software, as of November 24, 2014 is 26,203 CY. This volume assumes that approximately 1,000 CY of intermediate cover will be removed with waste filling to create waste air space. After subtracting the volume of fill added between November 24, 2014 and December 31, 2014 (1,140 CY), the remaining ash waste air space as of December 31, 2014 is 25,063 CY. With an annual filling rate of 9,008 CY, the remaining site life is approximately 2.8 years. If the prior three years filling rates of 11,729 CY and 10,415 CY and 11,476 CY are averaged with this years' rate; approximately 2.4 years of site life remain.

MSW LANDFILL

Phase VIII Module 1 was constructed this year. Construction of the new cell added approximately 350,000 CY of air space that can be used prior to additional cell construction.

2014 Air Space Consumption

A topographic survey of the MSW Landfill was completed by Paragon Associates, Inc. on November 24, 2014 to document the existing grades. Topographic data obtained from this survey is provided in Figures 3 through 6, which also includes the topography from the November 4, 2013 survey performed by Paragon, shows the amount of waste placed between November 4, 2013 and November 24, 2014. Figure 3 also shows an area where 18 inches of intermediate cover was placed in 2014 and an area where intermediate cover was removed. All areas outside of the center open area are assumed to have 18 inches of intermediate cover within the active landfill limits.

Using Civil 3D software, the volume of fill placed between November 4, 2014 and November 24, 2014, excluding intermediate cover which was placed during 2014, was calculated as 123,911 CY.

To determine the amount of fill placed from January 1, 2014 and December 31, 2014, two adjustments were made:

1. According to the landfill scale records, 12,337 tons of waste was placed between November 4, 2013 and December 31, 2013. Using last years' density of 1,830 lb/CY, this weight equates to 13,483 CY. This volume was subtracted from the volume generated by Civil 3D.
2. Landfill scale records show that 7,496 tons of MSW was placed from November 24, 2014 to December 31, 2014. Using a density of 1,635 lb/CY (calculated using 2014 scale records), this weight equates to 9,169 CY of material. This volume was added to the volume generated by Civil 3D.

The amount of air space consumed from January 1, 2014 and December 31, 2014 is 119,597 CY. With scale records showing 96,476 tons of waste placed in 2014, the density is approximately 1,613 lb/CY. Density from the previous two years has averaged 1,826 lb/CY and the 2011 density was 1,625 lb/CY. Some of the decrease in 2014 density may be attributed to placing waste in a new cell similar to 2011 when filling in Phase VII Module 1 was in its early stages. Densities for previous years are presented in a table below.

Remaining Constructed Air Space (Using Maximum 3:1 Grades)

Constructed air space is that portion of the fill volume that is available with the existing constructed footprint considering access, road alignments and slope limitations. Figures 5 and 6 show the existing grades and the top of waste grades based on the maximum fill grades. Figures 4 and 5 also show an area which does not have intermediate cover. The rest of the site (within the active landfill limits) is assumed to have 18 inches of intermediate cover, which will be removed prior to placing waste and

therefore does not consume available air space. The remaining constructed air space, calculated using Civil 3D software, as of November 24, 2014 is 677,302 CY. Separating the remaining air space between disposal locations, there are approximately 357,906 CY remaining in Phases I – VII and approximately 319,396 CY remaining in the Phase VIII location. The remaining volumes assume that approximately 18,461 CY of intermediate cover will be removed with waste filling to create waste air space. After subtracting the volume of fill added between November 24, 2014 and December 31, 2014 (9,169 CY), the remaining constructed air space as of December 31, 2014 is 668,133 CY. This air space provides approximately 6 years of remaining life, but we recommend planning for construction of Phase VII Module in 2018. Construction in four years is advised so that favorable routes and locations for waste disposal operations can be maintained as well as ensuring sufficient fill space. Future filling could vary from historical rates.

Remaining Permitted Air Space

Permitted air space is the air space currently allowable by the Plan of Operation. Plan of Operation development volumes were obtained from the January 31, 2011 Foth letter to Hank Koch and are presented in the table below. The remaining volume in Phase VIII – Module 1 has been corrected by subtracting the current available and constructed air space in Phase VIII Module 1 from the permitted development volume. The air space of future cells is as follows (assuming maximum filling for each cell):

Permitted Vol. by Phase	Permitted Volume (CY)
Phase VII - Module 2	797,000
Phase VIII - Module 1	67,249 ¹
Phase VIII - Module 2	981,000
Total	1,845,249

1 – permitted volume less constructed waste air space

Adding the constructed air space for Phase I through Phase VIII Module 1 to the remaining permitted volume provides the total remaining permitted waste air space for Phases I through VIII Module 2. The total remaining permitted waste air space of the MSW Landfill is 2,513,382 CY. This years' filling rate was atypical because additional waste was received during maintenance shut down at the Xcel plant. Taking the average fill volumes of three years prior to 2014; the remaining permitted site life for Phases I through VIII is 27 years. If this years' filling rate by itself is used for calculating remaining site life a value of 21 years is obtained. Fill rates and volumes for the MSW location for previous years are presented in the table below.

Year	M SW Landfill Volume Used (CY)	Density (lb/CY)
2011	94,468	1,666
2012	78,817	1,821
2013	105,109	1,830
Average	92,798	1,772

Remaining Closure Costs

As of December 31, 2014 there are approximately 23.68 acres of constructed landfill footprint that have not received final cover. Refer to the attached Figure 7 for the outline of the landfill footprint that has been constructed but has not received final cover. The cost for placing final cover over the remaining unclosed area in today's dollars is \$2,889,409.88 (ie. 23.68 acres x \$122,019 cost/acre) These costs are based on costs presented on Table 8 of the SEH April 9, 2013 Updated Capital Cost Estimates and

Mr. Henry A. Koch, PE
January 27, 2015
Page 4

Remaining Air Space - 2013 Memo. Please note that the April 9, 2013 capital cost estimates are current for costs associated with 2014. During 2015 the County will be updating the capital cost estimates

It should be noted that in the future, ash currently disposed at the Ash Monofill facility will also be disposed within the MSW disposal area. Whatever volume of ash is placed in the MSW area will correspondingly decrease the site life of the MSW area.

Because Phase VIII Module 1 was not constructed in accordance with the sequencing outlined in the Plan of Operation, a revised phase development plan will be completed in 2015. A revised plan is needed because sequencing and phase volumes are different than those presented in the Plan of Operations. The development plan would allow re-calculation of remaining permitted air space in each phase and provide a more accurate estimation of when the next construction sequence will be required. These values may differ some from those being used from the Plan of Operation. As part of this work, we also recommend that all areas that do not have final cover be re-surveyed in 2015. The survey would provide information to use to evaluate settlement and to re-calculate the total remaining air space within permitted grades for Phases I through VIII. If you have any questions about the information presented herein, please call me at 651.490.2163 or Brian Kent at 608.498.4844

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.



Darryl R. Heaps, PE
Senior Project Manager

ah

Attachment

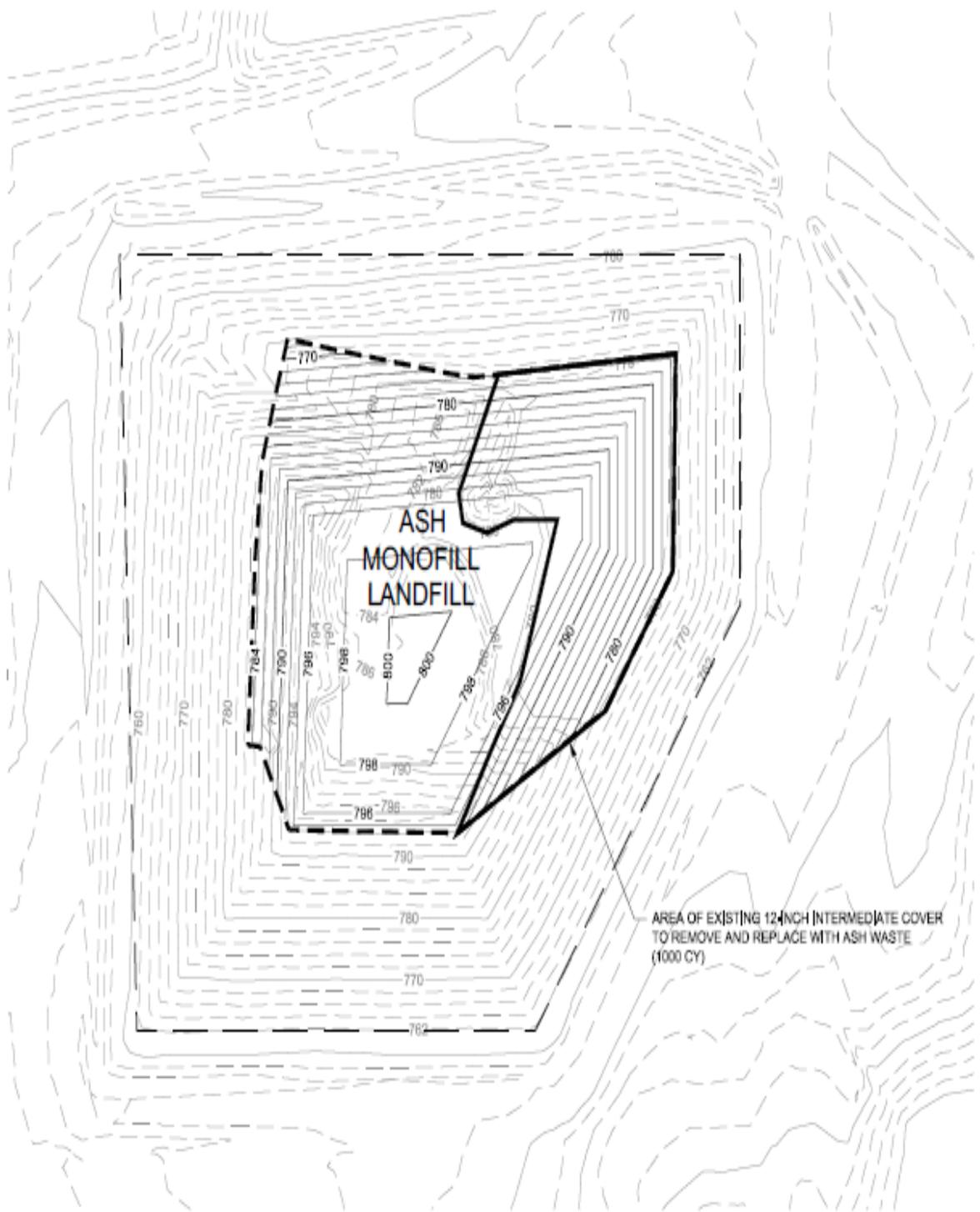
c: Sharon Davidson, La Crosse County Finance Director

Brian Kent, SEH

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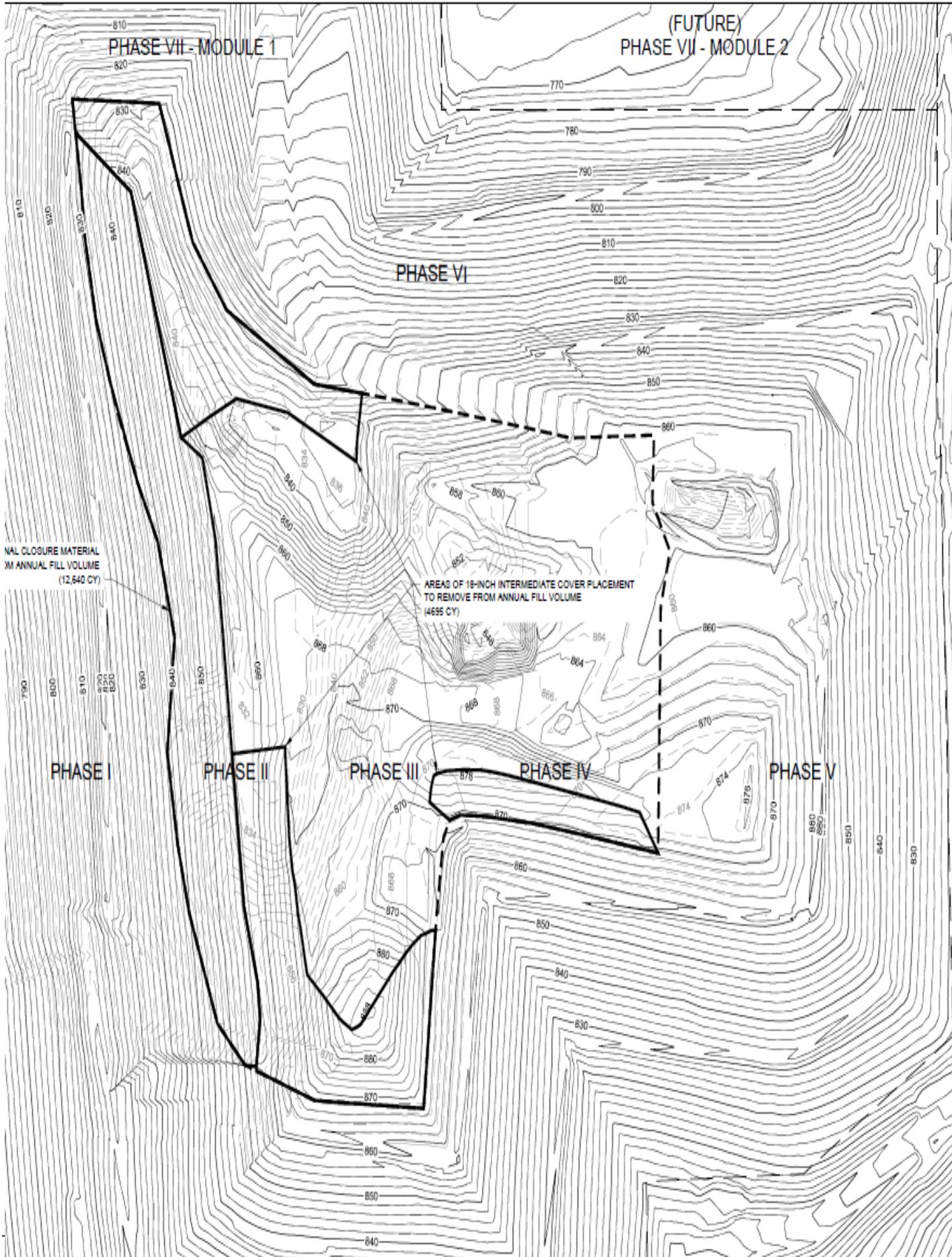
AREAS OF 12-INCH INTERMEDIATE COVER PLACEMENT
TO REMOVE FROM ANNUAL FILL VOLUME
(612 CY)





**ASH
MONOFILL
LANDFILL**

AREA OF EXISTING 12-INCH INTERMEDIATE COVER
TO REMOVE AND REPLACE WITH ASH WASTE
(1000 CY)



PHASE VII - MODULE 1

(FUTURE)
PHASE VII - MODULE 2

PHASE VI

ANNUAL CLOSURE MATERIAL FROM ANNUAL FILL VOLUME (12,640 CY)

AREAS OF 18-INCH INTERMEDIATE COVER PLACEMENT TO REMOVE FROM ANNUAL FILL VOLUME (4695 CY)

PHASE I

PHASE II

PHASE III

PHASE IV

PHASE V

810

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850

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880

890

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910

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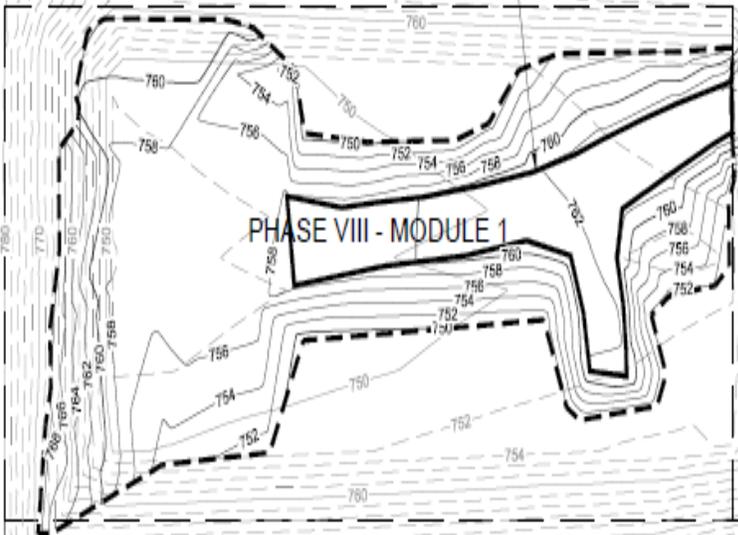
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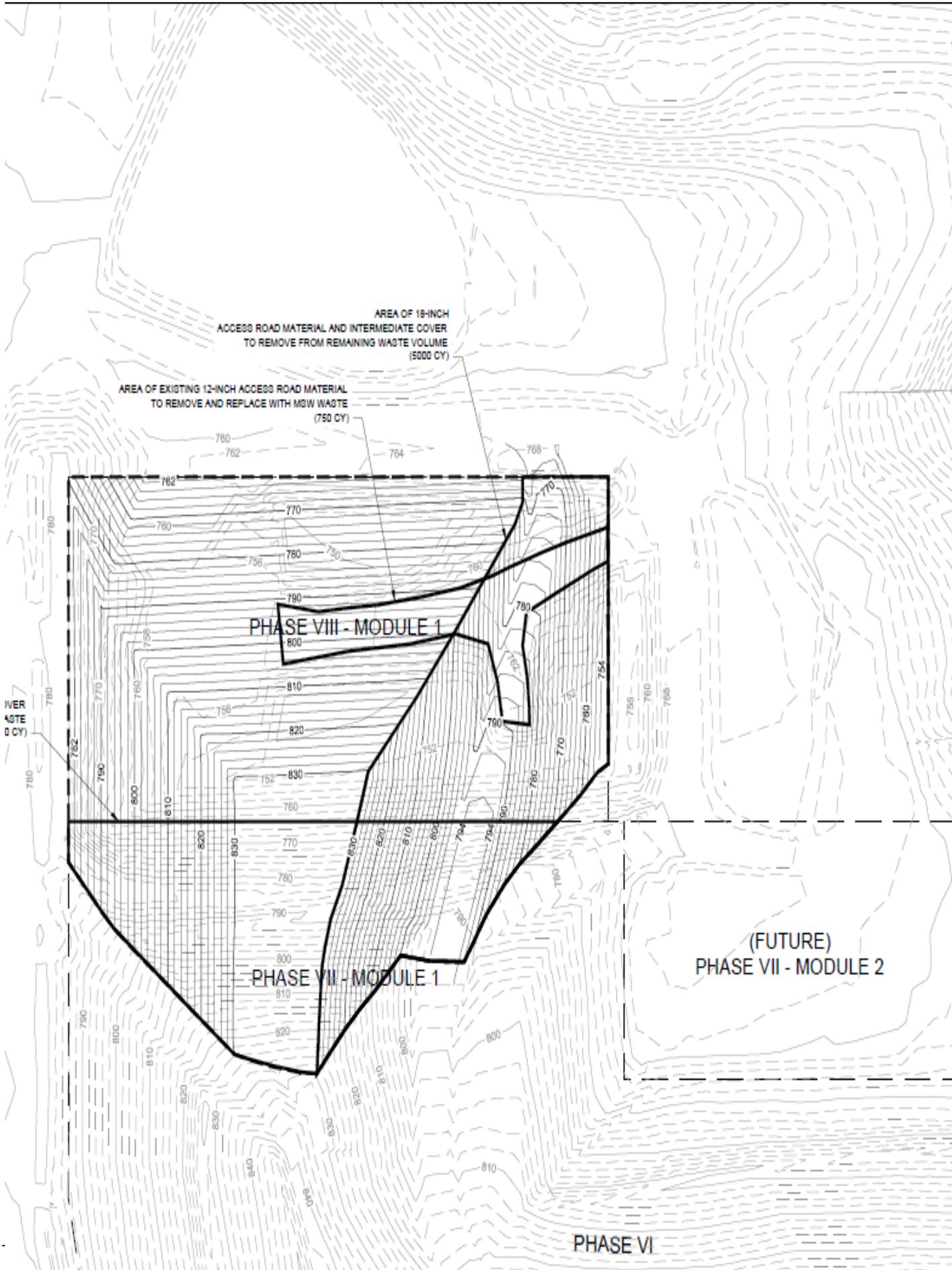
AREA OF 12-INCH ACCESS ROAD MATERIAL
TO REMOVE FROM ANNUAL FILL VOLUME
(750 CY)



PHASE VII - MODULE 1

(FUTURE)
PHASE VII - MODULE 2

PHASE VI





Appendix D

2014 Reporting Requirements for Biopiles for Contaminated Soil

La Crosse County Landfill Complex and Disposal Facility

MSW Landfill (Active – License No. 3253)

Prepared by

La Crosse County Solid Waste Department

La Crosse County, Wisconsin

March 2015

Contents

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Attachments

None

1 Purpose

This report summarizes the annual bioremediation activities conducted at the La Crosse County Landfill during 2014. Condition No. 10 of the August 14, 1996 Plan of Operation for the Solid Waste Processing Facility Approval, Treatment of Contaminated Soil, outlines the requirements for annual reporting of bioremediation activities that are required to be included in the annual report.

Petroleum contaminated soils that were received in the later portion of 2010 and thru 2014 were separated in an area located on the north eastern portion of Phase V in the MSW landfill. This area of Phase V was designated and prepared for bioremediation in the spring of 2011 using berms and drainage sumps to control contact water. 156 tons of contaminated soil that was removed during the demolition of the old maintenance shop was the first material placed in this area and the only material accepted during 2010. Additional soils were received in 2011 thru 2014 from outside the site with combined GRO+DRO greater than 2000 for bioremediation. The acceptance of those materials and their bioremediation will be contained within this report. For the remainder of the report this material will be referred to as biopile 13 A/B.

The sections below address the analysis of data, a record of operation, tabulation of gas concentration data, etc.

2 Report Requirements for Annual Bioremediation Activities

Condition No. 10 of the August 14, 1996 Plan of Operation for the Solid Waste Processing Facility Approval, Treatment of Contaminated Soil, requires reporting of the following information. Additionally, Condition No. 11d of the February 10, 2006 Plan of Operation Approval for the North Expansion, requires reporting requirements for biopiles; however, these requirements are redundant with the 1996 approval requirements and therefore will be fully addressed under the 1996 approval.

2.1 Analysis of Data

This sub-condition requires analyses of data from pretreatment and post-treatment samples of each soil pile, assessment of the reduction of concentration of contaminants in the soil, and length of time used in the processing of each pile.

<u>Pretreatment</u>	<u>Post Treatment</u>
GRO 0-110000 PPM	All Tests under 780
DRO 0-206000 PPM	All Tests under 390

Total time in active and passive processing = 4-50 months

2.2 Description of Source and Tonnage of Soils

This sub-condition requires a description of the source and tonnage of soils contributed to each pile, nature of contamination and causative activity for the contamination in soil from each source, and concentrations of petroleum contaminants and contaminants other than petroleum contaminants. All soils accepted for bioremediation where the result of clean-up of contaminated soils.

Year	Generator	Tons	DRO	GRO
2010	La Crosse County Solid Waste	156.0	1,880 average	
2011	Kwik Trip	17.5	Local spill assumed >2,000	
2011	La Crosse County Facilities	83.3	206,000	
2011	Nelson Agra Business	15.4	Local spill assumed >2,000	
2011	Dairyland Power	6.7	Calculated >2,000, negative for PCB's	
2011	St. Joseph Equipment	136.7	<3,400	
2011	Crawford County Highway Dept.	431	<5,000	
2011	Canadian Pacific RR	0.7		5,400
2011	City of La Crosse	1.6	Local spill assumed >2,000	
2011	Kwik Trip	17.7		110,000
2012	Kwik Trip	2.6	Local spill assumed >2,000	
2012	City of La Crosse Public Works Dept.	5.8	Local spill assumed >2,000	
2012	Dairyland Power	0.6	Local spill assumed >2,000	
2012	Hoffman Construction	75.5	Wash basin with small amounts of oil, assumed >2,000	
2012	Kwik Trip	46.2		<63,000
2012	McHugh Excavating	52.2	Petroleum tank removal assumed >2,000	
2012	Kwik Trip	0.5		25,000
2012	Kwik Trip	6.1	Local spill assumed >2,000	
2012	Railroad Specialties	0.5	Local spill assumed >2,000	
2012	Wisconsin DOT	80.7		3,930
2012	Xcel Energy	12.1	Calculated >2,000, negative for PCB's	
2012	Ft. McCoy	79.6	530	
2013	Arcadia Coop	137.2	<20,00 total organic compounds	
2013	SCS Consulting Engineers	33.0	3,300	
2013	Dairyland Power	17.5	Calculated >2,000, negative for PCB's	
2013	US Silica	52.5	Local spill 30 gals. Hydraulic oil, assumed >2,000	
2013	Ames Construction	7.6	Local spill assumed >2,000	
2013	La Crosse Co. Hwy Dept.	58	Soil from removal of LUST assumed >2,000	
2013	City of La Crosse POTW	27	Local spill 30 gals. Hydraulic oil, assumed >2,000	
2013	City of Onalaska	105.1	25,100	
2013	Hoffman Construction	41.7	Wash basin with small amounts of oil, assumed >2,000	
2013	Kwik Trip	120.6	<1,200 total organic compounds	
2014	Hoffman Construction	41.7	Wash basin with small amounts of oil, assumed >2,000	
2014	Kwik Trip	1.8	Local spill assumed >2,000	
2014	Berkle	3	Local spill assumed >2,000	
2014	Dairyland Power	4	Local spill calculated >2,000, negative for PCBs	

2014	Kaylan Evenson	4.1	Local spill assumed >2,000, had WDNR pre-approval certificate	
2014	Kwik Trip	0.2	Local spill assumed >2,000	
2014	SCS (McGregor)	54	11,000	
2014	B & R Excavating	21	<2,000 total organic compounds, analysis on file	
2014	VEH Properties	66	2,300	
2014	Arcadia Coop	121	Local spill calculated >2,000	
2014	Midwest Fuels	9	Local spill calculated >2,000	
2014	City of La Crosse	2	Local spill assumed >2,000	
2014	METCO	19	<30,000	
2014	Ft. McCoy	140	14,500	
2014	Dairyland Power	1	Local spill calculated >2,000, negative for PCBs	
2014	Arcadia Coop	76	25,000	
2014	METCO	8	9,220	
2014	Midwest Industrial Fuels	28	138	

2.3 Record of Operation

This sub-condition requires a record of operation of each soil pile, including total tonnage treated, total time of active operation, and any noticeable effects of temperature and seasonal conditions on the time period used for processing.

Total tons accepted and year soil was received by La Crosse County Solid Waste Department can be viewed in Section 2.2.

Biopile 13A (2100 tons) was prepared for cleaning starting in November of 2012 and the recirculation system was operated from April to November 2013. Recirculation resumed in the spring of 2014 and soils were tested in 6/12/2014. Biopile 13B (500 Tons) will be prepared for treatment in the summer/fall of 2015.

2.4 Description of the Disposition of Soil Used in the Processing Operation

This sub-condition requires a description of the disposition of the soil used in the processing operation, whether by disposal or reuse, including any soil sent to an alternative disposal or treatment facility and disposition of any material rejected from the processing operation or subjected to additional treatment.

Biopile 13A was used as ADC within the MSW landfill (License No. 3253) to complete the installation of the LFG closed loop header berm.

2.5 Tabulation of Gas Concentration and Ambient Air Data

This sub-condition requires a tabulation of gas concentration data, tabulation of ambient air data, summary of the amount of time soil air was handled by recycle mode and by direct discharge to the atmosphere, and tabulation of any data from testing air discharged to the carbon canisters and atmosphere.

Biopile 12 was handled exclusively under recycle mode from April 2013 – June 2014.

2.6 Carbon Canister Data

This sub-condition requires information on service life and disposal of spent carbon from the carbon canisters

Carbon canisters are not fully utilized.

2.7 Tabulation of Soil Pile Grids

This sub-condition requires tabulation of soil pile grids selected randomly for post treatment sampling and tabulation of post treatment soil testing data.

BIOPILE No. 12										
Sampling Block Layout										
Top		1	2	3	4					North  South
Middle		5	6	7	8	9	10			
		11	12	13	14	15	16			
Bottom		17	18	19	20	21	22	23	24	
		25	26	27	28	29	30	31	32	
		33	34	35	36	37	38	39	40	
	West							East		
	Randomly selected blocks for sampling									
	1) S - 1 Block 34									
	2) S - 2 Block 8									
	3) S - 3 Block 23									
	4) S - 3 Block 17									

Soil Sample GRO/DRO Analytical Summary
La Crosse County Solid Waste Department
BIOPILE No. 12

Sample Location	GRO	DRO	Total GRO + DRO
Base 34	<620	230	850
Middle 8	<630	230	860
Base 23	<590	390	980
Base 17	780	280	1060

2.8 Summary of Problems Encountered/Deviations from the Approved Plan

This sub-condition requires a summary of any problems encountered with the soil processing equipment or operation, proposed or implemented solutions to the problems, and any deviations from the approved plan.

No problems were encountered or were any deviations from the plan required.

2.9 Source and Tonnage of Oil Dry Materials

This sub-condition requires a description of the source and tonnage of oil dry materials accepted for treatment and a description of the petroleum products which the oil dry materials were applied to.

A small amount of oil dry material was accepted into Biopile 13 A/B; less than 1 ton.

2.10 Summary of Operational Changes

This sub-condition requires a summary of any changes to the mechanical equipment, operating controls, or methods of operation due to operator experience and technical advance and any plan modifications necessary to incorporate long-term or permanent changes to the plan of operation or approval conditions.

None required in 2014.

3 5-Year Reporting Requirements

Condition No. 11 of the aforementioned 1996 approval requires that every fifth annual report shall assess the bioremediation process in comparison to recent technical literature regarding aerobic degradation of petroleum hydrocarbons, list the relevant technical references, summarize experience and data from operation of this facility, and propose any changes necessary to incorporate changes into the plan of operation. This information will be presented in the next 5-year reporting period, which is 2017; therefore, no information regarding this requirement is included in the 2014 Annual Report.

Appendix E

2014 MSW Landfill Gas Information Report

La Crosse County Landfill Complex and Disposal Facility

MSW Landfill (Active – License No. 3253)

Prepared by

La Crosse County Solid Waste Department

La Crosse County, Wisconsin

March 2015

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Attachment E-1	2014 Monthly Landfill Gas Flow Summary
Attachment E-2	Drawing of Gas Wells 1-11, 13-17, 20-22 and 33
Attachment E-3	Drawing of STOC's

1 Purpose

This report summarizes the volumes of landfill gas extracted from the MSW landfill (License No. 3253), as recorded at the blower or compressor and converted from recorded flow rates, on a monthly basis, and volumes of landfill gas beneficially used. This report has been prepared to satisfy Condition No. 11 of the February 10, 2006 Plan of Operation Approval from the WDNR.

1.1 Landfill Gas Volume

The landfill gas extraction systems extracted gas volumes for 2014 of just under 9.8 million cf/month, and a total annual landfill gas volume of 118,335,224 scfm (See Attachment E-1). Of this volume 6,038,458 cf was sent to the flare and 112,296,766 cf was used to power the gas to energy and thermal recovery project with Gunderson Lutheran.

1.2 Landfill Gas Re-use

La Crosse County completed construction on the joint gas to energy and thermal recovery project in January of 2012. With oversight from the PSC the pipeline was purged and filled with clean compressed landfill gas on January 13, 2012. Commissioning of the engine, located on the Gunderson Lutheran Onalaska Campus, was completed on February 28th, 2012 and the system was brought on-line February 29th, 2012. Attachment E-1 also shows total landfill gas used per month and the gas to energy system % run time.

1.3 Monitoring of Additional Gas Wells

La Crosse County continues to monitor and control the landfill gas field to maximize gas collection while maintaining environmental requirements. The gas field consists of 20 vertical wells, 4 connections to the leachate clean out system, 6 temporary horizontal gas collection systems and 1 temporary vertical well as identified in attachments E-2 and E-3. La Crosse County is reviewing its options for additional horizontal wells in 2015.

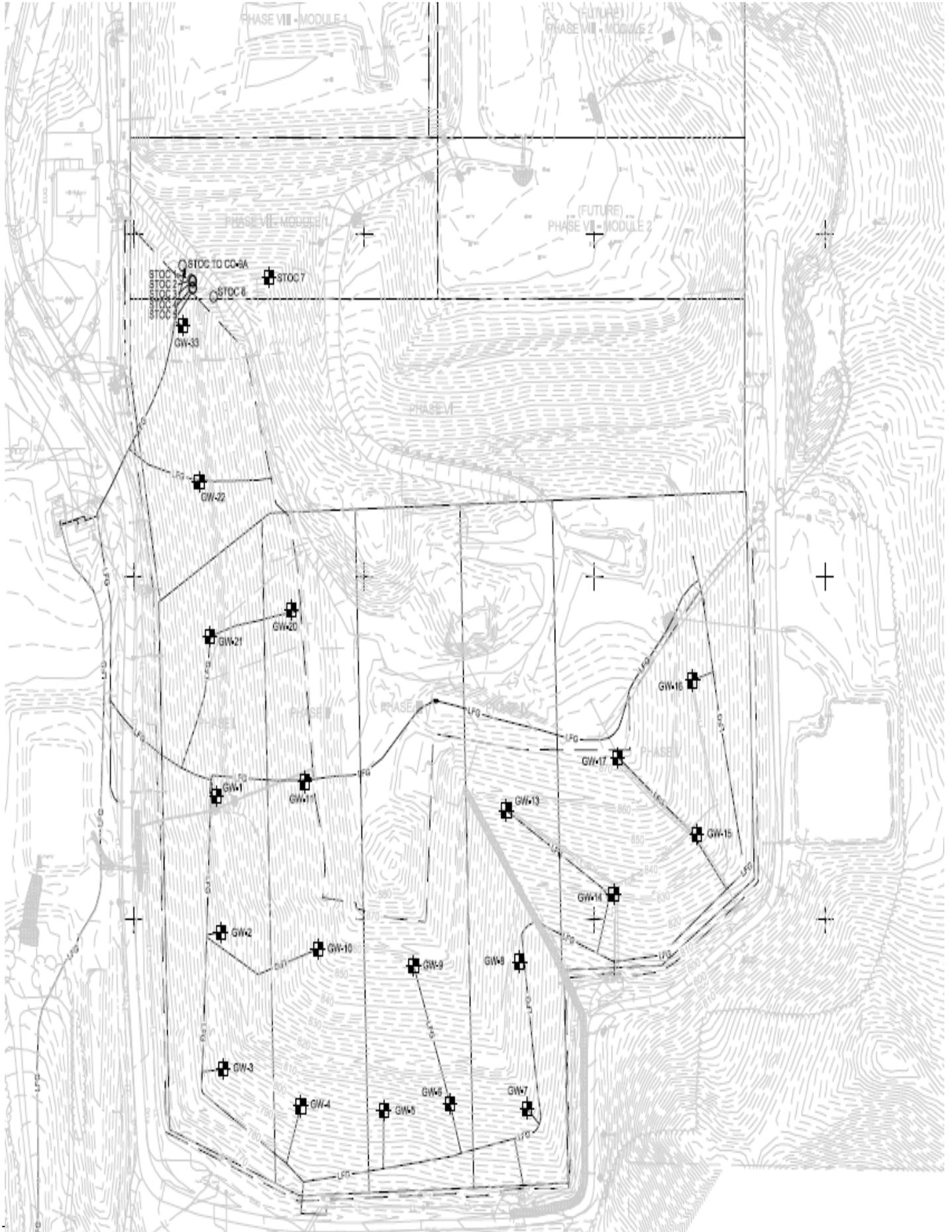
Attachment E-1

2014 Monthly Landfill Gas Flow Summary

Date	SCF to Flare	SCF To Pipeline	Combined SCF	% Flow Time to Engine
January, 2014	73,591	10,059,913	10,133,504	91.80%
February, 2014	30,493	6,694,728	6,725,221	71.11%
March, 2014	49,500	7,958,843	8,008,343	72.88%
April, 2014	305,826	6,345,802	6,651,628	58.99%
May, 2014	0	11,390,677	11,390,677	100.00%
June, 2014	2,376,000	5,976,837	8,352,837	54.50%
July, 2014	2,092,939	5,974,267	8,067,206	54.05%
August, 2014	51,357	9,052,736	9,104,093	84.23%
September, 2014	104,133	10,410,852	10,514,985	91.16%
October, 2014	942,871	11,817,628	12,760,499	87.41%
November, 2014	0	13,439,773	13,439,773	100.00%
December, 2014	11,748	13,174,710	13,186,458	99.10%
<i>Monthly Averages</i>		9,358,064	9,861,269	80.44%
<i>Annual Total</i>		112,296,766	118,335,224	

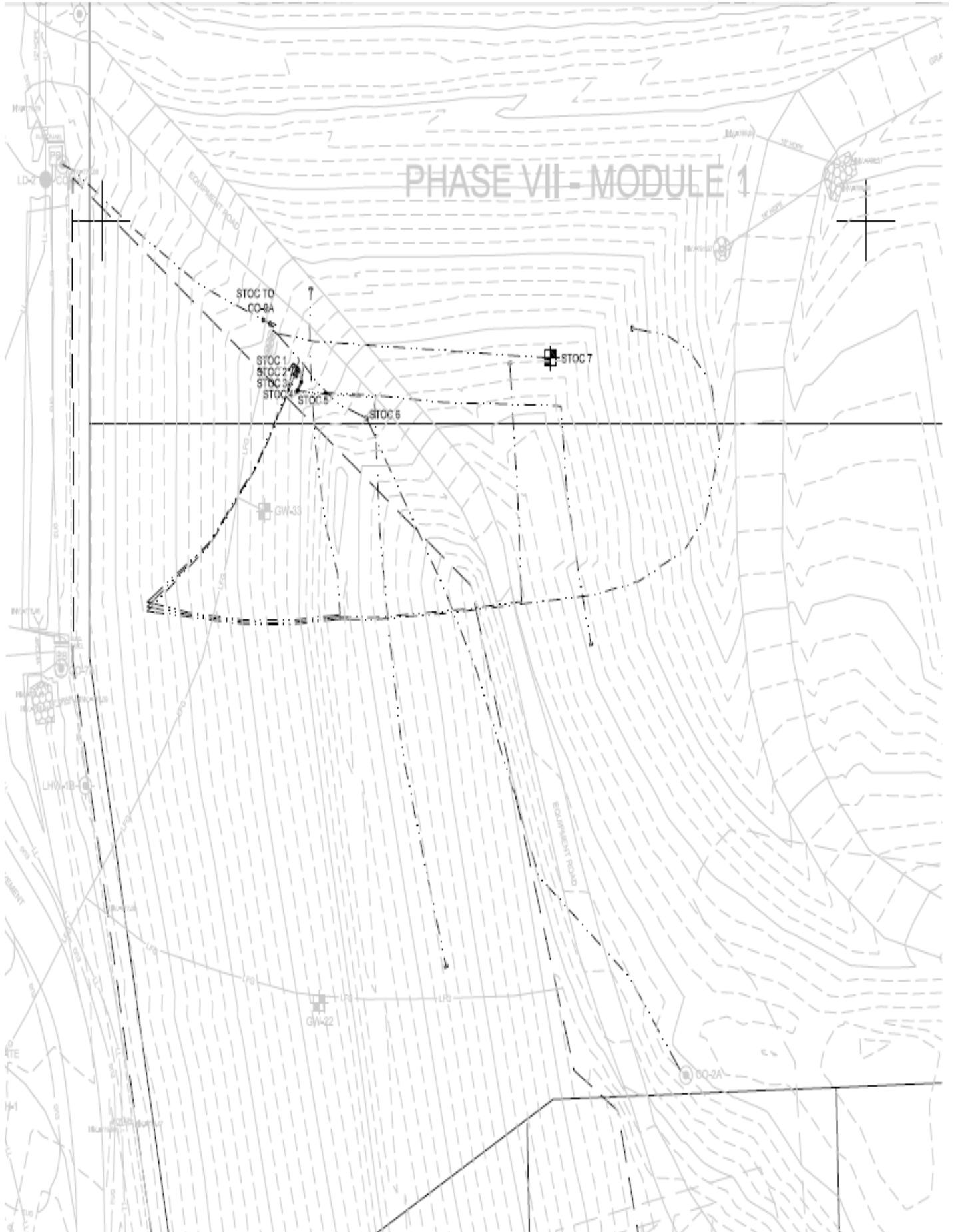
Attachment E-2

Drawing of Gas Wells 1-10 and 13-17



Attachment E-3
STOC's (Horizontal Wells)

PHASE VII - MODULE 1



Appendix F
Anticipated Construction Events for 2015
La Crosse County Landfill Complex and Disposal Facility
MSW Landfill (Active – License No. 3253)
Old Landfill (License No. 2637)

Prepared by
La Crosse County Solid Waste Department
La Crosse County, Wisconsin

March 2015

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Attachments

Attachment – F1 Summary of 01-20-2015 DNR Meeting

Purpose

This report summarizes the anticipated construction events for the La Crosse County Complex during 2015. This report has been prepared to satisfy Condition No. 11 of the February 10, 2006 Plan of Operation Approval from the WDNR.

Attachment F-1 are notes from the January 20, 2015, meeting summarizing anticipated construction events for 2015. The major construction projects that are anticipated at the landfill complex in 2015 are as follows:

- ◆ Extensions of trails along the west perimeter of the landfill property and in the community forest on the east perimeter
 - ◆ Miscellaneous grading and vegetation restoration associated with soil stock piles
 - ◆ Minor road improvements
 - ◆ Minor improvements of the processing pad
 - ◆ Construction of a boardwalk through the wetlands southwest corner of the property
-

Attachment F-1

Meeting Notes La Crosse County Solid Waste Department and Wisconsin DNR Annual Meeting January 20, 2015

Attendees:

Jill Schoen, Marty Herrick, Brian Kalvelage - DNR

Hank Koch, Randy Nedrelo, Danielle Meiners, Linda Bettin – La Crosse County Landfill

Brian Kent – SEH

Item 1: Household Hazardous Waste - Randy

The total users for 2014 were almost 11,000 and total users since HHM opened is 70,082. Total weight for 2014 was 766,718 lbs.

Randy provided an overhead graph that gave an overview of 2014 Wisconsin Clean Sweep Summary run by La Crosse County Household Hazardous Waste Program. The clean sweep program was held with neighboring counties to include 9 events and 7 counties (Monroe, Crawford, Vernon, Jackson, Adams, Monroe and Trempealeau); 53,313 pounds of waste collected at those events and 1,843 Users. This was down 1,097 total weight collected and 158 users down from 2013.

HHM celebrated its 10,000th customer/user on November 19th, 2014 which was posted on Facebook.

A Customer Service Survey was done in HHM with the results showing that the citizens would like us to be open more hours and citizens would like more clean sweeps.

Item 2 – Wastes Accepted - Danielle

Danielle presented a table showing the La Crosse County Landfill 2014 Tonnages for all sites. The total tonnage for Xcel was 12,520, Direct Landfill 44,026, Construction/Demo 14,005, Xcel Bottom Ash 2,838, Special Waste 23, 086, Ash Monofill 9,483, and 105,958 for the total combined landfill tonnage.

Xcel had their shut down in 2014 to perform maintenance in their facility which affected tonnage.

Item 3 - Financial Assurance – Danielle

Danielle presented a Table showing the Market Value as of 12/31/14 and WDNR Funding required 12/31/14 and that we are over-funded by \$156,324.67 for the end of 2014.

Item 4 – Special Waste - Randy

The landfill's ADC use and ratio was discussed. The dusty Foundry Sand this year went elsewhere, total soils were down. We will be taking in soil now from the old Trane Company site, a cindy material which is being used as daily cover in Phase 8A and any excess will go to the top of the site in a stockpile.

Item 5 – 2014 Landfill Projects Completed - Hank

Approval on Phase VIII was obtained in September of 2014.

There was a west side liner slope failure which was resolved and corrected in 2014. July 11th – 18th washed rock was removed from around the shop, installed drain tile for shop and rain gutters and installed compacted limestone around the shop.

August 1-21 – 4th and 5th liner repair completed/dewatering pump installed, 10” dewatering pipe was removed/hole backfilled, manually operating dewatering pump (4-5x’s/day) and trench cut from west to east.
September to present – shop parking lot paved, trench backfilled, drain tile (fabric and rock) installed, hydro seeded.

Updating construction certification, closed 6 acres of the west slope, went well in early November 2014. Vegetation in Spring.

Gas header pipe and loop was completed in November. Wells and header are performing well.

Used clay stockpile for top cover that was rocky – reduced clay inventory – future clay for 5 to 7 years.

Pedestrian Bridge was installed and finished by the Boy Scouts.

St. Joseph Construction had a local farmer harvest the grass on the premises.

Half mile of trail completed on west side and in the forest.

Item 6 – Gas-to-Energy Operation (Jadd):

Jadd presented a graph showing the 2014 LFG Data, target was 90% and we came in at 80.4% for 2014. Volume for 2014 increased at the end of the year. For 2015 we are looking to exceed our target.

Item 7 – Compliance/Auditing (Brian Kent):

Surface Air Emissions went well, a few low readings, corrected well, boot slipped down a little overall, capturing gas, collection system performing very good.

Wells were discussed, ground water sampling was successful, sampling for the small closed C/D landfills was changed from quarterly to semi-annual via plan modification approval.

Leachate data-analysis was a good job for department – want to have SCADA system, IPAD at home and at work and can share with Onalaska so they can see the data.

Organic stability – 40,000 gallon tank close to the working area, not a big working area, is a challenge and slow process – we are doing what we can. Vernon County LF – looking into potential – use their leachate for recirculation – Jadd and Brian state leachate re-circulation is expensive.

Item 8 – Operational Activities:

Current contract is with St. Joe’s. Brian Korth is the project manager on site. Their contract is up December 2014; therefore we went to Policy Board and asked for 2.5 year extension based on improvements. Contract includes site, shredding shingles/wood until July 2017.

Hank stated that we will be having an independent analysis done by Neal Bolton from Blue Ridge Services. He will be our guest speaker at our June 19, 2015 Annual Meeting.

2016 updating NMOC System report – adn - air permit renewal.

Host Agreement, La Crosse and Onalaska – in compliance.

Item 9 – 2015 Major Construction Projects: (Hank)

No major construction projects for 2015.

New site entrance will probably take three years until start.

Some trail work and minor road improvements.

Item 10 – Pending Submittals/Approvals (Brian Kent):

Brian spoke briefly regarding plan update.

Discussed City of La Crosse and Vernon County Leachate recirculation.

Solid Waste Plan update was discussed to be completed by end of 2015.

Kenworth/Robinson property was discussed – want to put trail onto site with trail and parking.

Item 11 – Green Tier (Randy):

Randy presented table – objectives and targets - construction was challenging, Jadd worked hard.

Specific proposals - already doing a lot of them.

Ventilation system is working well.

Discussed trying removing metal and wood for recycling but was expensive, not feasible.

Put into place operational procedures/ventilation for handling dangerous chemicals and materials.

Randy talked about EMS Audit, was in conformance and done in one day which was excellent.

Item 12 – Community Outreach (Hank):

This year in 2014 we achieved the SWANA Bronze Public Education Award.

We gave over 1,000 tours and presentations to the public.

We will continue the newsletter as quarterly for 2015.

Complaints/Compliments for the year we had 33 compliments and 30 complaints.

Discussed working with Ho Chunk regarding Indian Bear Mounds.

Had to put in wire fence regarding Pedestrian Bridge to keep citizens off the premises until the future trail is extended.

Our Facebook/Website will be completely redone in 2015.

For our open house and Annual Meeting for 2015 we will be having Neal Bolton as our guest speaker, he will also be here to analysis our landfill as to whether to internalize landfill operations or continue with St. Joseph Construction.

Item 13 - Xcel (Danielle):

Xcel had a planned outage during the year where they do maintenance to their boilers, turbines etc., this is done about every 5 years.

The County Board is considering approving negotiations with Xcel for a contract extension.

Our single stream recycling including La Crosse and Onalaska increased about 3,000 Tons for the year which dropped our Xcel revenue for the year.

Item 14 – Miscellaneous (Hank):

Discussed Xcel compliance audit for 2014.

Discussed the north side Phase 8 Interim slope 3 to 1.

Appendix G

2014 Special Waste Report

La Crosse County Landfill Complex and Disposal Facility

MSW Landfill (Active – License No. 3253)

Prepared by

La Crosse County Solid Waste Department

La Crosse County, Wisconsin

March 2015

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1 Purpose

This report has been prepared to address the Special Waste Management Plan (Appendix Z of the Plan of Operation Report for the La Crosse County Landfill North Expansion, dated September 2005) containing information that is required to be included in the annual report regarding special waste reporting. Although the Special Waste Management Plan was not addressed by a specific approval condition, it was submitted as Appendix Z of the September 2005 Plan of Operation Report for the La Crosse County Landfill North Expansion, which was approved by the WDNR's February 10, 2006 Plan of Operation Approval. Therefore, the information as presented in Appendix Z is approved, including the annual reporting requirements described in Section 7 of Appendix Z.

The special waste reporting information to be included in the annual report follows:

Total volume and tonnage by waste category and name for each type of special waste accepted for disposal accepted during 2014.

Computation of the quantities by volume and weight of waste disposal and proportion of special waste to total quantities of waste landfilled.

List of wastes failing to meet the acceptance criteria but which were accepted for disposal (include reason(s) for acceptance).

List of wastes rejected and the reasons for each rejection.

Deviations from the approved acceptance criteria and disposal methods and reasons for deviation.

Problems encountered when implementing this Special Waste Management Plan and their resolutions.

1.1 Total Volume and Tonnage of Special Waste

Category Number	Waste Type	Volume (cubic yards)	Tonnage
2	Coal/Wood Ash	156	211
4	Foundry Waste	0	0
5	Waste Water Sludge	41	27
6	Asbestos (Friable/Non-Friable)	709	473
6	Sludge	1,972	1,314
6	Miscellaneous Special Waste	100	67
19	Car Wash Grit	350	473
19	Other Approved ADC	4,869	6,580
19	Street Sweepings	2,955	3,993
19	Bottom Ash	2,100	2,838
21	Foundry Sand - DC	6,744	9,113
23	Petroleum Impacted Soils	619	836
Totals:		20,615	25,925

1.2 Proportions of Special Wastes to Total Municipal Waste

This section provides computations of the quantities by volume and weight of waste disposal and proportion of special waste to total quantities of waste landfilled:

By volume:

Special Waste (cy) / Total Waste (cy) =

$$20,615 \text{ CY} / 126,441 \text{ CY} = 16\%$$

By weight:

Special Waste (tons) / Total Waste (tons) =

$$25,925 \text{ tons} / 96,476 \text{ tons} = 27\%$$

1.3 Waste Failing to Meet Acceptance Criteria Disposed of at Site

None delivered to the landfill.

1.4 Rejected Wastes

No applications were rejected. On two occasions there were inquires regarding industrial special waste that were not appropriate for disposal at La Crosse County. Following the initial discuss no application was filed.

1.5 Deviations from Acceptance Criteria

None

1.6 Problems Encountered Implementing Special Waste Management Plan

None

1.7 Training

The following internal employee training was conducted as required by NR 524.07 1(f). Reviews of the special waste and general landfill operational procedures constitute internal training in accordance with this requirement.

1. Periodic meetings between the Special Waste Manager, Operations Coordinator, Operations Technician and the Scale Attendants to discuss special waste operations.
 2. Reviews of special waste and landfill operations at a variety of meetings throughout the year including regular staff meetings.
 3. Continuing education required for the renewal of Landfill Operations License.
-

Appendix H

2014 Residential Asphalt Shingle Processing and Beneficial Use La Crosse County Landfill Complex and Disposal Facility

Prepared by
La Crosse County Solid Waste Department
La Crosse County, Wisconsin

March 2015

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1.4 Summarized Test Results of Ground Recycled Asphalt Shingles	2
1.5 Discuss Positive Aspects of the Program	41

Attachments

Attachment H-1	Summary Report of Shingle Testing 2014
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1 Purpose

This report has been prepared to address annual reporting requirements associated with the processing and beneficial use of residential asphalt shingles. Reporting and record keeping requirements were identified as Item No. 10 in the WDNR January 24, 2008 Low Hazard Exemption for the storage processing and beneficial use of waste residential asphalt shingles. An identical condition was included as Condition No. 9 in the WDNR February 4, 2008 WDNR Approval for Exemption for Solid Waste Processing for Recycling of Asphalt Shingles. These reporting requirements required the submittal of the following information to the DNR by April 1 of each year:

Reference this grant of exemption.

Summarize total tonnages of recycled asphalt shingles used as an additive in hot mix asphalt plant operations under this approval, and separately tabulate tonnages of shingles from roofing tear-off jobs.

Describe the asbestos testing program and specific sampling and testing methods.

Summarize test results of ground recycled asphalt shingles.

Discuss the positive aspects of the program along with any difficulties encountered or complaints received during all aspects of collection, storage, processing and reuse of the materials and measures taken to modify the program to address difficulties or complaints.

1.1 Item a – Reference this Grant of Exemption

See above text.

1.2 Item b – Summary of Tonnages of Recycled Asphalt Shingles and Shingles Received

A total of 4854.34 tons of recycled asphalt shingles were received in 2014. 3761.87 tons were processed and sent out to be incorporated into hot mix asphalt. Processed shingles include asphalt shingles accepted in both 2013 and part of 2014.

1.3 Item c - Tabulate the Location and Amount of Shingles Used by Individual Paving Project

Paving projects utilizing hot mix asphalt performed in 2014. Mathy Construction purchased 3761.87 tons of processed shingles, produced at the La Crosse County Landfill, from St. Joseph construction. The material was used on several projects in Marathon County, including, but not limited to, CTH U from CTH M – CTH H, CTH S from CTH F – CTH FF, CTH F from CTH H to CTH S, CTH Y from STH 153 – STH 29 and CTH C from STH 13 – CTH E.

1.4 Item d - Describe the Asbestos Testing Program

In 2014, 4854.34 tons of residential asphalt shingles were accepted and stockpiled in the shingle processing area. Samples were collected monthly by operations staff at the La Crosse County landfill. Samples taken were based off of weekly tonnage subtotals, to achieve one sample per one hundred tons. Samples were prepared and shipped by the Landfill Scale Attendant to Micro Analytical Incorporated for asbestos testing. The bulk asbestos analytical report and testing was prepared utilizing PLM and dispersion stain technique.

1.5 Item e - Summarized Test Results of Ground Recycled Asphalt Shingles

Attached in Appendix H-1 are the results of asbestos testing from Micro Analytical Inc. Of the fifty two samples submitted, none were detected as containing asbestos. Additional information is provided on test reports regarding shingle fibrous components, texture, color and non-fibrous components.

1.6 Item f - Discuss the Positive Aspects of the Program

The two most significant beneficial aspects of the residential asphalt shingle recycling program have been to minimize materials placed in the landfill and to provide a product that has been incorporated into hot mix or substituted for gravel road sub-base. Since the shingles weight approximately 1 ton per yard after processing, approximately 3,761 cubic yards of air space use will be avoided. The uses of the ground shingles as a substitute for road base has minimized fuel consumption associated with the transport of materials from quarries and resulted in a product that produces less dust, less tracking of mud on roads and saved the County significant costs. Some additional benefits of the recycling program has been increased public acceptance of waste diversion concepts and customers paying a lower price since shingles suitable for recycling are charged at a rate of \$29.00 per ton less than the demolition material landfill rate in 2014.

In 2010 the County initiated a project to improve the processing pad area for not only shingles, but also wood wastes and concrete and asphalt aggregate materials. With the removal of stockpiled clay at the North end of the processing pad we were able to add approximately .25 acres to the processing pad in 2014. The processing pad is now 4.41 acres in size and can accept shingles, wood waste, concrete and asphalt year round and has an impermeable pad for housing yard waste and sand/salt mix for winter road use. The additional space added in 2014 will hold our rental containers during the winter when demand is low. This allows sufficient room for inspections and repairs of containers while they are not being used.

In January of 2013, the County of La Crosse Solid Waste Department requested of and was granted approval by the WDNR West Central Region, for the storage of preprocessed and post processed shingles of up to 15,000 tons, with a maximum windrow height of 20 feet.

ATTACHMENT H-1, 1 of 1

La Crosse County Solid Waste
Report of Shingles 2014

DATE	# OF LOADS	TONS	TOTAL SAMPLES TAKEN	TOTAL SAMPLES NON-ASBESTOS	TOTAL SAMPLES W/ASBESTOS	NOTES
January	4	8.06	0	0	0	
February	2	5.19	0	0	0	
March	22	52.81	0	0	0	
April	162	444.14	5	5	0	04/25- 5 samples
May	304	833.83	8	8	0	05/07-1, 05/14-2 , 05/29-5
June	289	797.44	7	7	0	6/10-4, 06/11 -1, 06/12-1, 6/19-1,
July	270	695.17	6	6	0	7/17 -6,
August	187	501.49	7	7	0	8/19 -7,
September	265	632.67	5	5	0	9/18 - 5,
October	269	634.39	3	3	0	10/21-3,
November	69	157.82	0	0	0	
December	38	95.91	11	11	0	12/2-10, 12/30-1
TOTALS	1881	4854.34	52	52	0	

*Analytical analysis reports are on file at the La Crosse County Solid Waste Department and available for review upon request.
