



GFL Emerald Park Landfill Audit Summary

TO: GFL Emerald Park Landfill Standing Committee, City of Muskego
FROM: Jo-Walter Spear, Jr., P.E.
COPIES: File
DATE: 7/27/2021
PROJECT NUMBER: 1012.10030

Due to the COVID-19 pandemic, JSA Environmental (JSA) and Green For Life Environmental (GFL) are engaging CDC guidelines and common sense.

Attached is the audit report for activities at the GFL Emerald Park Landfill for the week of July 4, 2021. The audit was performed at 12:40 PM on **July 13, 2021** by Jo Spear, Jr.; in the presence of Scott Croft, the Gas Plant Manager

The last audit was performed on July 8, 2021

The weather conditions were overcast with sun and possible rain

The following conditions were noted during this Audit of the GFL EPLI Facility:

The operation required the use of:

- 1 Compactor
- 1 Bulldozer
- 1 Excavator

Contractors on site were using heavy equipment

- 1 Excavator
- 2 Haul Truck

A) Working Face and Location

- Working face in South end of Phase 6/7 working on developing protective berm/lift about outer slopes
- Landfill direct soil being tipped in Phase 7 for future cover
- Site is using Auto-fluff for daily cover on inboard slopes. Soils only on outboard slope

B) Leachate Management

- Leachate being pumped to MMSD treatment
- JSA will be including a review of sump depths in future audits. The form will be edited in the near future.
 - One sump had a leachate depth of greater than one foot of depth

C) Gas Monitoring and Management

- Total destruction volume 2,400 cfm
 - MMSD Controlling flows and receiving 2,400 cfm - MMSD taking all gas, no flare lit.
- Shutdown on 7/11/2021 due to a bearing failure, system restored in eight hours

Attachments:

Action Items List / Landfill Operations Audit Form
Audit Photos



- D) Surface Water Management
 - Small rain events since last audit. Nothing of sizable volume
 - Basins have plenty of freeboard
 - No evidence of new erosion and outboard slopes have been prepped for seeding
- E) Odor Control
 - Gas odors on access road and auto-fluff odors on US-45
- F) Liquid Loads
 - Site not taking liquid loads and will not be for quite some time due to high leachate head elevations
- G) Litter Control
 - GFL is limiting pickers on the site to minimize risk
 - GFL did have 2 pickers active
 - Litter pickers active on US-45 clearing roadside ditches.
 - On site litter mostly in perimeter ditches
- H) Vehicle Impacts
 - US 45 clean and dry
 - Site roads rough but clean, entrance potholed
- I) Inspection of Incoming Waste
 - Site operating with three equipment operators
 - Receiving MSW and soils ~1,000 TPD
- J) Rejected Loads
 - No rejected loads
- K) Residential Drop Off
 - E-Waste Container present
 - Metal boxes overflowing, but all other boxes empty
 - Site clean
- L) Other Comments
 - Eleven wells of nineteen connected to gas system
 - eight wells remain
 - Treatment system for next bio pile being constructed
 - Forcemain for collecting from gas wells under repair by third party

Construction Audit

- A. Work Accomplished Today
 - Placement of gradient layer on West half of new Cell
 - Gradient layer intercepts groundwater under the liner and is pumped to the surface
- B. Excavations/Soil Management
 - No excavation during audit

Attachments:

Action Items List / Landfill Operations Audit Form
Audit Photos

GREEN FOR LIFE ENVIRONMENTAL (GFL) EMERALD PARK LANDFILL
 LANDFILL OPERATIONS AUDIT FORM
 CITY OF MUSKEGO

PROJECT NO. 1020.10030

DATE July 13, 2021

TIME 12:40

Auditor on site at: Open Close

PREVIOUS DATE: July 8, 2021 Completed

WEATHER Overcast with sun possible rain WIND 10-15 MPH
 N S E W

TEMP Maximum 81 °F Minimum 65 °F B.P. 30.03

MAJOR EQUIPMENT USED IN LANDFILL OPERATIONS

No.	DESCRIPTION	Rented	Contracted	No.	DESCRIPTION	Rented	Contracted
1	Compactor						
1	Dozer						
1	Excavator						
	Haul Truck						
	Water Truck						
	Grader						

MAJOR EQUIPMENT BONEYARD

No.	DESCRIPTION	Broken	Maintenance	No.	DESCRIPTION	Broken	Maintenance

A. Working Face Size and Location:

Working face at South end of Phase 6/7
working on developing protect berm/lift
about outer slopes.

Landfill direct soil being tipped in Phase 7
for future cover



Cover Material: Autofluff

B. Leachate Management:

Discharge to MMSD Recirculation

Phases: One sump depth greater than 1'

C. Gas Monitoring and Management: Check appropriate box.

Flares in Operation:	YES <input checked="" type="checkbox"/>	NO <input checked="" type="checkbox"/>	#	1
Blowers in Operation:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	#	1
Flare use since last audit	# <u>7/11/2021</u>			
Shutdowns Since Last Audit:	# <u>7/11/2021</u>			
Total Number of Wells	# <u>All</u>	Under vacuum	# <u>All</u>	
Flow to MMSD:	# <u>2,400</u>	cfm		

Comments: MMSD taking full volume. Shutdowns due to bearing failure, restored in 8 hours

D. Surface Water Management:

Storm Events Since Last # 3 Est. Volume ~1"

EFFECTS: Note condition of perimeter road, erosion/control structures, erosion damage and possible storm water/waste contact locations:

Small events since last audit. Nothing sizable. Basins have free board

E. Odor Control:

Odors Present: Onsite Offsite

Comments: Gas odor on all 16 cells. Autofluff odors on US 45

F. Liquid Loads Received:

None

G. Litter Control:

Litter Present Onsite:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
Litter Present Offsite:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
Pickers Active:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	# 2

Comments:

Litter in USHS boxes, pickers active there during audit
 Onsite litter about ditches

H. Vehicle Impacts: Locations of excessive mud/dust, condition of access and public roads and control measures taken, instances of trucks on County roads.

USHS dry and clear. Site roads, rough but cleared. Entrance patrolled

I. Inspection of incoming Waste:

Scale Camera Operator:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	#	1
Equipment Operator:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	#	3
Spotter:	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	#	
Random Load Inspection Dates:	NA			Form <input type="checkbox"/>
Tonnage:	1,600			

Comments:

MSW and soils.

J. Rejected Loads:

	Date/Time	Reason for Rejection
1.		None
2.		

K. Residential Drop Off: Open During Audit E-Waste Containers Present

Metal box overflowing, all other boxes empty, site clear

L. Other Comments:

* 11 wells connected to gas system
2 to go

* Treatment being constructed for
next bio pile

* Force main for collections from gas wells
under repair by third party

Auditor's Signature: _____

Date: 07/13/2021

Auditor's Printed Name: _____

Jo-Walter Spear, Jr

Management Signature: _____

Date: 7/13/2021

Management Printed Name: _____

Scott Croft

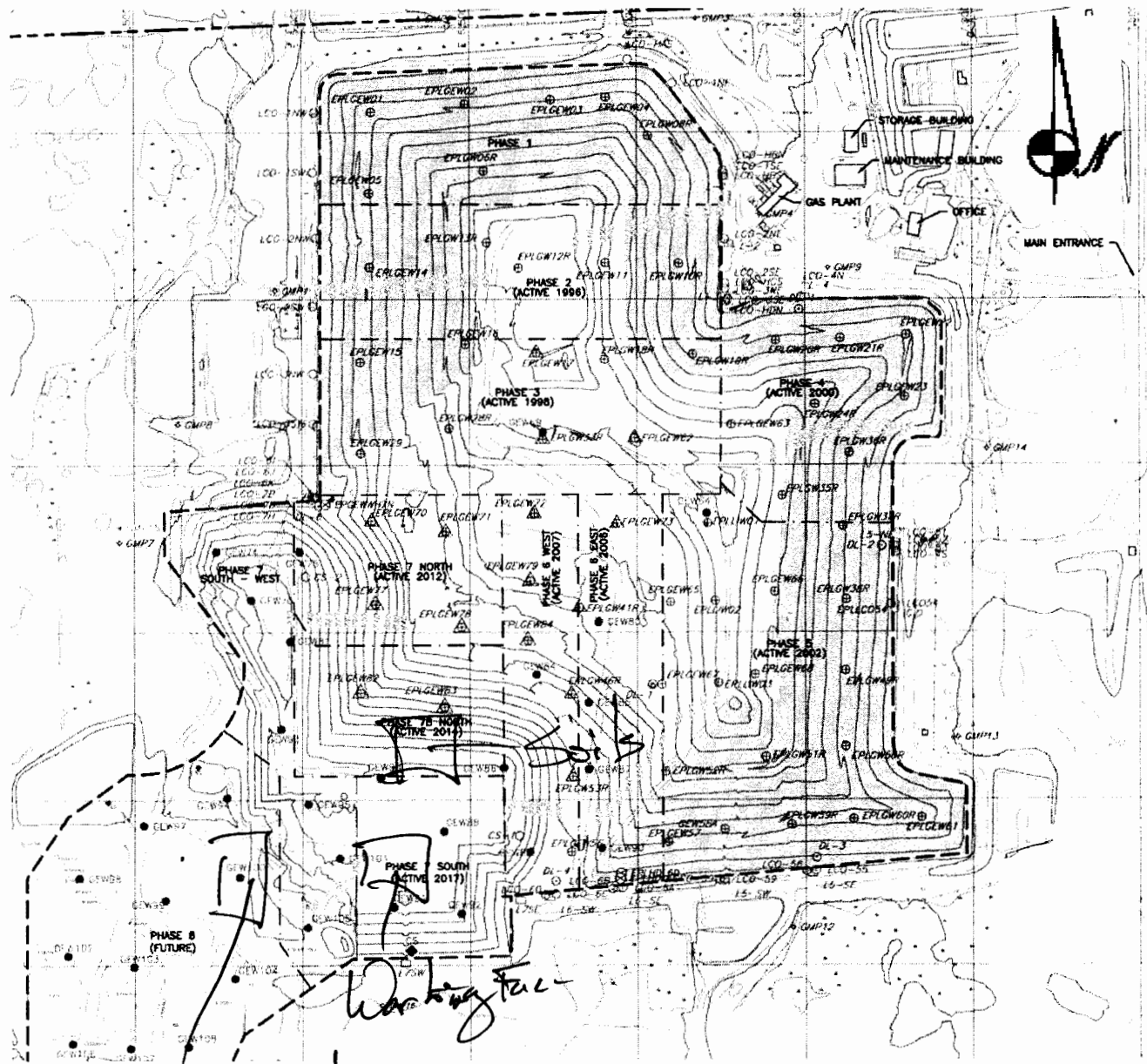
Management Title: _____

Plant manager

JSA Principal Signature: _____

Date: _____

Green For Life Environmental (GFL) Emerald Park Landfill Audit Map



Working File

Gradient Layer Placement

GREEN FOR LIFE ENVIRONMENTAL (GFL) EMERALD PARK LANDFILL
 LANDFILL CONTRACTORS AUDIT FORM
 CITY OF MUSKEGO

PROJECT NO. 1020.10030

DATE July 13, 2021

TIME 1:46

MAJOR EQUIPMENT USED IN CONSTRUCTION OPERATIONS

NO.	DESCRIPTION	Rented	Contracted	NO.	DESCRIPTION	Rented	Contracted
	Scrapper						
	Dozer						
1	Excavator						
2	Haul Truck						
	Water Truck						
	Sweeper						

A. Work Accomplished Today (Scheduled & Completed):

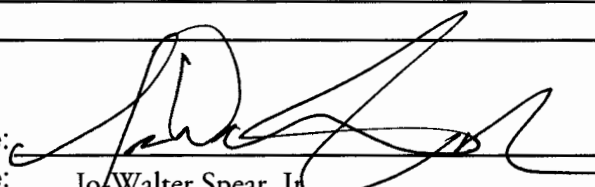
* Toping of gradient layer on West
half of new cell

B. Excavations / Soil Management:

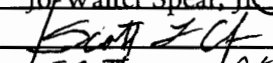
No excavation

C. Off Site Hauling

	Weight Ticket Number	Weight of Load in Pounds
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Auditor's Signature: 

Auditor's Printed Name: Jo Walter Spear, Jr.

Management Signature: 

Management Printed Name: SCOTT CROFT

Management Title: Plant manager

Date: 07/13/2021

Date: 7/13/2021

GFL ENVIRONMENTAL EMERALD PARK LANDFILL

**/ CITY OF MUSKEGO
AUDIT PHOTOS**

PROJECT NO. 1012.10030



Contractor digging trenches for placement of gas collection piping





Previously placed waste acting as protective berm about Phase 6. Cover is autofluff ADC



Working face moving along South end of Phases 6/7



Tipping at working face



Working face in Phase 6/7



Temp sed basin, being maintained by pumping to Basin #1



Overview of new cell construction



Overview of new cell



New cell South slope still being shaped



West side of the new cell, construction ongoing, placement of gradient layer



Placement of gradient layer below liner in new cell



Placement of gradient layer on West side of new cell

**ADS Emerald Park Landfill
Action Items Checklist
City of Muskego Audit**

Opened: 05/28/2020

Updated: 01/09/2014 - Cleared

Item Number	DATE month/date/year	Condition Description	Permit or Contract Reference	Initial Schedule for Completion	Observed Completion Date	Elapsed Time (Days)	Notes
1	05/28/2020	Leachate Seep, discharge into Temp Sed Basin	POO	ASAP	11/06/2020	153	Site management addressing issue
2	05/28/2020	Leachate elevations above maintenance levels	POO & RD&D Permit	ASAP	11/06/2020	153	Site management addressing issue, DNR serviing an NOV