

## TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

#### MEMPHIS ENVIRONMENTAL FIELD OFFICE 8383 WOLF LAKE DRIVE

BARTLETT, TN 38133-4119

PHONE (901) 371-3000 STATEWIDE 1-888-891-8332 FAX (901) 371-3170

December 17, 2019

Mayor Jimmy Sain Hardeman County P.O. Box 250 Bolivar, TN 38008 CERTIFIED MAIL # 91 7108 2133 3932 2042 8147 RETURN RECEIPT REQUESTED

RE:

FOLLOW UP COMPLIANCE EVALUATION INSPECTION

THIRD NOTICE OF VIOLATION HARDEMAN COUNTY LANDFILL

SNL350000223

Dear Mayor Sain:

On November 19, 2019, the Division of Solid Waste Management (DSWM) conducted a follow up compliance evaluation inspection at your facility. During the course of the inspection it was discovered that the compliance agreement between Hardeman County Solid Waste and the Division of Solid Waste Management dated September 27, 2019, and extended on October 4, 2019, had not been fulfilled. Specifically, leachate was observed on the site, leachate was observed entering the run-off system, the run-on/run-off system was inadequately maintained, and erosion was inadequately controlled.

This case will be referred to the Division's Enforcement Section due to continued and repeated non-compliance. Please be aware that Tennessee Code Annotated §68-211-117 authorize the Department of Environment and Conservation to take enforcement action, including assessment of a civil penalty of up to FIVE THOUSAND DOLLARS (\$5,000.00) per day, for violation of the *Tennessee Solid Waste Disposal Act*.

If you have any questions or comments concerning this correspondence, please contact me by email at <u>John.boatright@tn.gov</u> or by phone at 901-371-3011.

Sincerely,

John Boatright, P.E.

Environmental Consultant II

**ENCL: Inspection Report** 

CC: JB/nb/07912162019

Rick Witson, DSWM, Interim Deputy Director of Field Office Operations

Chris Lagan, DSWM – Enforcement Clifton Jeter, EFOM, DSWM, JFO Joellyn Brazille, EFOM, DWR, MFO

Kenny Brown Director, Hardeman County Solid Waste

## SOLID WASTE INSPECTION REPORT

## SITE/PHYSICAL LOCATION

Bolivar-Hardeman County Landfill SNL350000223
75 Landfill Lane
Bolivar, TN
731-658-2884

### PRIMARY CONTACT

Kenny Brown Director Hardeman County Department of Solid Waste 100 N. Main Street Bolivar, TN 38008

## **DATE/TIME OF INSPECTION**

November 19, 2019, at 10:15 a.m.

## **INSPECTION PARTICIPANTS**

Kenny Brown, Director, Hardeman County Solid Waste Nathan Jordan, Site Operator John Boatright, P.E., DSWM

## REPORT PREPARED BY

John Boatright, P.E. Division of Solid Waste Management Memphis Environmental Field Office 8383 Wolf Lake Drive' Bartlett, TN 38113 901-371-3011

## **PURPOSE OF INSPECTION**

This inspection was conducted to evaluate the solid waste disposal facility's compliance with the applicable requirements of the rules and regulations promulgated pursuant to the *Tennessee Solid Waste Disposal Act*, to evaluate the status of violations noted in previous inspections, and to evaluate Hardeman County Solid Waste's fulfilment of the compliance agreement dated September 27, 2019.

## FACILITY DESCRIPTION

Hardeman County Landfill (SNL 350000223), is a permitted Class I Landfill. The landfill can not accept regulated hazardous waste. The landfill currently has 3 active special waste approvals (1 "one time" and 2 continuous disposal). The landfill is not presently receiving waste.

The landfill property consists of 163 acres, with 19 acres of permitted waste disposal in the current built landfill area. An older pre subtitle D landfill area has been closed. The current landfill consists of four constructed phases. Phase I has received final cover. Phases II and III are in operation. Phase IV has been constructed but not approved to receive waste. Phase IV is scheduled to be reconstructed to achieve approval to receive waste.

## **INSPECTION FINDINGS**

During the course of the inspection the following violations were identified.

## Division Rule 0400-11-01-.04(2)(i)6.

- (2) General Facility Standards Unless specifically noted otherwise, the standards of this paragraph apply to Class I, Class II, Class III, and Class IV disposal facilities.
  - (i) Run-on, Run-off, and Erosion Control
    - 6. The operator must take other erosion control measures (e.g., temporary mulching or seeding, silt barriers) as necessary to control erosion of the site.

#### **Violation Observation:**

Inadequate Erosion Control – Erosion was observed on the East and North slopes of the landfill. While some temporary erosion control measures were observed at the time of the inspection, the measures taken are inadequate to prevent erosion. Specifically the flow lengths on the east face are at least 200 feet long and on the north face at least 100 feet long. The erosion is occurring at the bottoms of these slopes despite the matting and straw placed at the top of the slopes (photographs 4 thru 10). Additionally, the perimeter road is washed out on the east side and is covered in sediment on the north side.

The facility will continue to spend employee and equipment time excavating, placing and replacing cover material until it establishes a viable storm water pollution prevention plan to minimize erosion on site. The Tennessee Erosion Prevention and Sediment Control Training Program (available at <a href="https://tnepsc.org/index.asp">https://tnepsc.org/index.asp</a>) provides valuable training on preventing erosion.

This violation is a repeated violation during this inspector's tenure at this facility and an examination of the record shows it to have been seasonally cited previously.

## Division Rule 0400-11-01-.04(2)(a)(3).

- (2) General Facility Standards Unless specifically noted otherwise, the standards of this paragraph apply to Class I, Class II, Class III, and Class IV disposal facilities.
  - (a) Overall Performance Standard The facility must be located, designed, constructed, operated, maintained, closed, and cared for after closure in such a manner as to minimize to the extent practicable:
    - 3. The potential for releases of solid wastes, solid waste constituents, or other potentially harmful materials to the environment except in a manner authorized by state and local air pollution control, water pollution control, and/or waste management control agencies.

#### **Violation Observation:**

Solid Waste Exposed – The erosion of phases II and III cover had exposed waste during the inspection (photographs 5 and 7). This exposed waste is on the lower slope of the east and north slopes where the erosion of the intermediate cover is greatest.

## Division Rule 0400-11-01-.04(6)(a)3 and 5.

- (6) Waste Handling and Cover Standards -
  - (a) Class I Disposal Facilities -
    - 3. Except for those completed portions to be finally closed (e.g., the final lift), all surfaces which will be left exposed for a period of over thirty days (e.g., initial and intermediate lifts) must be covered by an intermediate cover consisting of at least a one-foot layer of compacted soil or other material approved by the Commissioner.

#### And

5. All initial and intermediate cover depths must be maintained until either additional wastes are placed over the area or final cover is applied.

## **Violation Observation:**

Unsatisfactory Intermediate Cover – Phase II and most of phase III have had intermediate cover recently applied during this inspection and during previous inspections. The soil

Hardeman County Landfill December 17, 2019 Page 4

> type and long flow lengths have resulted in excessive erosion and the exposure of solid waste.

## **General Comments:**

On September 4, 2019, a Compliance Review Meeting was held in the Jackson Field Office. In that meeting Hardeman County agreed to completely cover the east and north faces of the landfill, to plant grass, and take other erosion control measures as appropriate by October 4, 2019, and complete the perimeter road and run-off control ditch by November 4, 2019. An extension for the cover activities was granted until November 4, 2019.

SIGNED:

DATE: 17 DEC 19

John Boatright, P.E.

Environmental Consultant II

Tennessee Department of Environment and Conservation

Division of Solid Waste Management

Memphis Environmental Field Office

DATE: 12/17/2019

Herb Nicholson, P.G., CHMM

Environmental Field Office Manager

Tennessee Department of Environment and Conservation

Division of Solid Waste Management

Memphis Environmental Field Office

#### Attachments:

- (1) Facility Evaluation Form
- Photographs of violations (2)

# Initial Inspection

# TENNESSEE DIVISION OF SOLID WASTE MANAGEMENT CLASS I FACILITY INSPECTION CHECKLIST\*

CL	A:	SS	ı
FA	CII	41	TY

SITE			DATE 20191119	10:15	WEATH	
Bolivar-Harde	man County Landfill SNL350000223 75 Landfill Way Hardeman					efo MEMP
	*SEE DISCLAIME	R ON LAST P	AGE			
	VIOLATION		REGULATION			OBSERVATION AOC V1 V2
	BUFFER ZONE STANDARD					
8310	BUFFER ZONE STANDARD VIOLATED	0400-11-01	04(3)(a)		$\boxtimes$	
COMMENTS						
140	COLLECTED	LEACHAT				
8330	LEACHATE IMPROPERLY MANAGED	0400-11-01	04(4)(a)8(i-iii)		? 🗵	
COMMENTS						
8340	INADEQUATE LEACHATE COLLECTION SYSTEM	0400-11-01	04(4)(a)7		?	
COMMENTS	See 8570					
	COMMUN	ICATIONS				
8130	NO COMMUNICATION DEVICES	0400-11-01	04(2)(f)		? 🗵	
COMMENTS						
	COVER M	IATERIAL				
8160	UNAVAILABILITY OF COVER MATERIAL.	0400-11-01	04(2)(h)		? 🗵	
COMMENTS						
	DEAD A					
8250	DEAD ANIMALS IMPROPERLY HANDLED	0400-11-01	04(2)(k)5.(ii) (I-III)		?	
COMMENTS						
	DUST CO	ONTROL				
8190	INADEQUATE DUST CONTROL	0400-11-01	04(2)(j)		? 🗵	
COMMENTS						
	DUTY TO PROVID	E INFORM	ATION			

	*SEE DISCLAIME	R ON LAST PAGE	
	VIOLATION	REGULATION	OBSERVATION NVO AOC V1 V2
	DUTY TO PROVID	E INFORMATION	
	UNSATISFACTORY RECORDS OR REPORTS	0400-11-0102(5)(a)7	
8530		TCA 68-211-862(a)	
COMMENTS			
8590	PERMITS, PLANS, OPERATING MANUAL NOT AVAILABLE	0400-11-0102(5)(a)(7)	
COMMENTS			
	FIRE S.	AFETY	
8080	EVIDENCE OF OPEN BURNING	0400-11-0104(2)(c)1	
COMMENTS			
8090	INADEQUATE FIRE PROTECTION	0400-11-0104(2)(c)2	
COMMENTS			
	GAS MIGRATION CO		
8380	INADEQUATE GAS MIGRATION CONTROL SYSTEM	0400-11-0104(5)(a) <b>?</b>	
COMMENTS			
8390	INADEQUATE MAINTENANCE OF GAS MIGRATION CONTROL SYSTEM	0400-11-0104(5)(a) <b>?</b>	
COMMENTS			
	GENERAL FACILI	TY STANDARDS	
8010	INADEQUATE VECTOR CONTROL	0400-11-0104(2)(a)1	
COMMENTS			
8020	ACCESS NOT LIMITED TO OPERATING HOURS	0400-11-0104(2)(a)4	
COMMENTS			
8030	INADEQUATE ARTIFICIAL OR NATURAL BARRIER	0400-11-0104(2)(b)1	
COMMENTS			

	*SEE DISCLAIME	R ON LAST PAGE	
	VIOLATION	REGULATION	OBSERVATION NVO AOC V1 V2
	GENERAL FACIL	ITY STANDARDS	
	INADEQUATE INFORMATION SIGNS	0400-11-0104(2)(b)2	
8040		TCA 68-211-703(h)	
COMMENTS			
8050	UNSATISFACTORY ACCESS ROAD(S)/PARKING AREA(S)	0400-11-0104(2)(b)3	
COMMENTS			
8060	CERTIFIED PERSONNEL NOT PRESENT DURING OPERATING HOURS	0400-11-0104(2)(b)5	
COMMENTS			
8070	UNAPPROVED SALVAGING OF WASTE	0400-11-0104(2)(b)6	
COMMENTS			
	LITTER C	ONTROL	
8110	UNSATISFACTORY LITTER CONTROL	0400-11-0104(2)(d) <b>?</b>	
COMMENTS			
	OPERATING	EQUIPMENT	
8140	INADEQUATE OPERATING EQUIPMENT	0400-11-0104(2)(g) <b>?</b>	
COMMENTS			
8150	UNAVAILABILITY OF BACKUP EQUIPMENT	0400-11-0104(2)(g) <b>?</b>	
COMMENTS			
	OVERALL PERFORT	MANCE STANDARD	
8270	EXPOSED SOLID WASTE	0400-11-0104(2)(a)(3)	
COMMENTS	Waste in the interface between phases II and III and IV are exp areas of exposed waste have occurred on the north face of th	osed. <b>This item is addressed in the Phase IV rer</b> e landfill.	novation plan. Additional
8320	INADEQUATE MAINTENANCE OF LEACHATE MANAGEMENT SYSTEM (INSPECTOR TO CHECK AND RECORD LEACHATE LEVELS AT EVERY LANDFILL SUMP)	0400-11-0104(2)(a)(3) <b>?</b> 0400-11-0104(4)(a)7	
COMMENTS	The temporary leachate pit on phase III no longer exist. Leach addressed in the Phase IV renovation plan.	nate from Phases II and III is pumped directly into th	ne system. This item is

	*SEE DISCLAIME	R ON LAST PAGE	
	VIOLATION	REGULATION	OBSERVATION NVO AOC V1 V2
	OVERALL PERFORI	MANCE STANDARD	
0250	LEACHATE OBSERVED AT THE SITE	0400-11-0104(2)(a)(3) ?	
8350		0400-11-0104(4)(a)6,	
COMMENTS	Several leachate streams were observed on the east and nort no off cell leachate was observed. no that rain has started, th	h faces. This is a recurring violation. During the dry e outbreaks re-occur. See Comments.	fall (AUG, SEP, and OCT)
0260	LEACHATE ENTERING RUN-OFF	0400-11-0104(2)(a)(3)	
8360		0400-11-0104(4)(a)6	
COMMENTS	One leachate release was observed on the east face. A photo system. See comments.	graph was taken. Releases on the north face were i	not entering the run-off
0070	LEACHATE ENTERING A WATER COURSE	0400-11-0104(2)(a)(3)	
8370		0400-11-0104(4)(a)6	
COMMENTS			
0.420	POTENTIAL FOR EXPLOSIONS OR UNCONTROLLED FIRES	0400-11-0104(2)(a)2	
8420		0400-11-0104(5)(a)	
COMMENTS			
0.400	EXCESSIVE POOLING OF WATER	0400-11-0104 (2)(a)3	
8490		0400-11-0104(8)(c)4(iii)	
COMMENTS			
8520	DUMPING OF WASTE INTO WATER	0400-11-0104 (2)(a)3	
COMMENTS			
	PERMANENT	BENCHMARK	
8280	NO PERMANENT BENCHMARK	0400-11-0104(2)(o) <b>?</b>	
COMMENTS			
		L SERVICES	
8120	INADEQUATE EMPLOYEE FACILITIES	0400-11-0104(2)(e) <b>?</b>	
COMMENTS			
		AND MAINTENANCE	
8540	GROUNDWATER MONITORING SYSTEM IMPROPERLY MAINTAINED	0400-11-0102(5)(a)4	
COMMENTS			

	*SEE DISCLAIME	R ON LAST PAGE	
	VIOLATION	REGULATION	OBSERVATION NVO AOC V1 V2
	RANDOM INSPEC	TION PROGRAM	
8290	INADEQUATE RANDOM INSPECTION PROGRAM	0400-11-0104(2)(s) <b>?</b>	
COMMENTS			
	RECORDS OF ORIGIN AND A	AMOUNT OF SOLID WASTE	
8610	NO OPERATING SCALES AND/OR FAILURE TO MAINTAIN WASTE RECORDS	TCA 68-211-862(a)(b)(1)(2) ?	
COMMENTS			
	RUN-ON, RUN-OFF, AN	ID EROSION CONTROL	
0.470	INADEQUATE MAINTENANCE OF RUN-ON/RUN-OFF SYSTEM(S)	0400-11-0104(2)(i)1-5	
8170		0400-11-0104(8)(c)4(i)	
COMMENTS	The perimeter road on the east face is still washed out. A peri an inadequate run-off and erosion control plan.	meter ditch has been cut on the east face. The curr	ent approved plans have
0400	INADEQUATE EROSION CONTROL	0400-11-0104(2)(i)6	
8180		0400-11-0104(8)(c)4(ii)	
COMMENTS	Numerous areas of excessive erosion. While mats and hay hav Almost all of the recurring erosion is on the long flow length sk system. The nature of the soil (sand) has allowed most of the s	ve been placed, the long flow lengths on the cover e opes. Excessive amounts of sediment are being disc sediment to settle out before it reaches the sedimer	ncourage erosion. charged into the run-off at pond.
	SPECIAL WASTE AP	PROVAL PROCESS	
8300	MISHANDLING OF SPECIAL WASTE	0400-11-0101(4)(d)1	
COMMENTS			
	UNLAWFUL METHO	DDS OF DISPOSAL	
	OPERATION DOES NOT CORRESPOND WITH ENGINEERING	TCA 68-211-104(3)	
8570	PLANS (EVALUATE AND RECORD THE APPROXIMATE INTERIOR AND EXTERIOR SLOPE OF THE LANDFILL)	TCA 68-211-105(b)	
COMMENTS	See comments below		
	OPERATION DOES NOT CORRESPOND WITH PERMIT	TCA 68-211-104(3)	
8580	CONDITIONS	0400-11-0102(5)(a)(1)	
COMMENTS			
	WASTE HANDLING AN	D COVER STANDARDS	
8430	WASTE NOT CONFINED TO A MANAGEABLE AREA	0400-11-0104(6)(a)1	
COMMENTS			

	*SEE DISCLAIMER	R ON LAST PAGE	
	VIOLATION	REGULATION	OBSERVATION NVO AOC V1 V2
	WASTE HANDLING AN	D COVER STANDARDS	
8440	IMPROPER SPREADING OF WASTE	0400-11-0104(6)(a)2	
COMMENTS			
8450	IMPROPER COMPACTING OF WASTE	0400-11-0104(6)(a)2	
COMMENTS			
	UNSATISFACTORY INITIAL COVER	0400-11-0104(6)(a)3	
8460		0400-11-0104(6)(a)5	
COMMENTS			
0.470	UNSATISFACTORY INTERMEDIATE COVER	0400-11-0104(6)(a)4	
8470		0400-11-0104(6)(a)5	
COMMENTS	Numerous areas of erosion on the east and north faces. Waste	e was exposed on the north face of the landfill. This	s is a recurring violation.
	UNSATISFACTORY FINAL COVER	0400-11-0104(6)(a)6	
8480		0400-11-0104(8)(c)4	
COMMENTS			
8510	UNSATISFACTORY STABILIZATION OF COVER	0400-11-0104(6)(a)5,6 <b>?</b>	
COMMENTS			
	WASTE RES	TRICTIONS	
	UNAUTHORIZED WASTE ACCEPTED	0400-11-0104(2)(k)1	
8210		0400-11-0104(2)(k)6	
COMMENTS			
0220	UNAPPROVED SPECIAL WASTE ACCEPTED	0400-11-0101(4)(b) ?	
8220		0400-11-0101(4)(c)5	
COMMENTS			

8230  COMMENTS  8240  COMMENTS  EACHATE LEVEL The leachate mate open nature.	RES IMPROPERLY HANDLED  EDICAL WASTE IMPROPERLY HANDLED	as leachate, has contributed ti the volume	of leachate. Additionally, the
8230 COMMENTS  8240 COMMENTS  EACHATE LEVEL The leachate materials open nature.	RES IMPROPERLY HANDLED  EDICAL WASTE IMPROPERLY HANDLED  s leter showed 13,376,368 gallons pumped at the of Phase IV, where all rain fall is managed at the of Phase IV, where all rain fall is managed at the of Phase IV, where all rain fall is managed at the of Phase IV, where all rain fall is managed at the of Phase IV, where all rain fall is managed at the of Phase IV, where all rain fall is managed at the of Phase IV, where all rain fall is managed at the other parts of the phase IV, where all rain fall is managed at the other parts of the phase IV, where all rain fall is managed at the other parts of the phase IV, where all rain fall is managed at the phase IV, where all rain fall is managed at the phase IV, where all rain fall is managed at the phase IV, where all rain fall is managed at the phase IV, where all rain fall is managed at the phase IV, where all rain fall is managed at the phase IV.	0400-11-0104(2)(k)3.(i)  0400-11-0104(2)(k)4.(i-iv)  che time of the inspection. This is 918,517 as leachate, has contributed ti the volume	gallons since the last inspection. of leachate. Additionally, the
8230 COMMENTS  8240 COMMENTS  EACHATE LEVEL The leachate mine open nature	EDICAL WASTE IMPROPERLY HANDLED  S Teter showed 13,376,368 gallons pumped at the of Phase IV, where all rain fall is managed a	0400-11-0104(2)(k)4.(i-iv)  the time of the inspection. This is 918,517 as leachate, has contributed ti the volume	gallons since the last inspection. of leachate. Additionally, the
EACHATE LEVEL The leachate materials and the open nature.	S leter showed 13,376,368 gallons pumped at t re of Phase IV, where all rain fall is managed a	the time of the inspection. This is 918,517 as leachate, has contributed ti the volume	gallons since the last inspection. of leachate. Additionally, the
EACHATE LEVEL	S leter showed 13,376,368 gallons pumped at t re of Phase IV, where all rain fall is managed a	the time of the inspection. This is 918,517 as leachate, has contributed ti the volume	gallons since the last inspection. of leachate. Additionally, the
EACHATE LEVEL The leachate m	eter showed 13,376,368 gallons pumped at t re of Phase IV, where all rain fall is managed a	as leachate, has contributed ti the volume	of leachate. Additionally, the
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he leachate m he open natu	eter showed 13,376,368 gallons pumped at t re of Phase IV, where all rain fall is managed a	as leachate, has contributed ti the volume	of leachate. Additionally, the
documents are laws and regul	e information contained in these documents (checklis intended solely for use by DSWM staff. These docume itions. These documents are not intended for, nor can party in litigation with the State of Tennessee or its en	ents are not a substitute for evaluation of complian In they be relied upon, to create any rights, substan	nce in accordance with applicable

Follow-Up Inspection Date

12/19/19

Inspector Name

John Boatright

Og tarly egoed by John Domigre
Dis on John Boomget, enDisson of Sixig Weste Managament, our lannesses
Description of Electroment and Cornervation, energy in boomging(in gar, on U
Days 2019, 11 26 00 01 42 (4000)

#### ADDITIONAL COMMENTS

8350 and 8360 - These are recurring violations. An examination of the record show that each summer the leachate breakouts drop off due to the lack of rain and each winter they reoccur. November 2018 to May 2019, July 2017 to May 2018, and May 2016 to May 2017 for 8350. November 2018 to April 2019, May 2019, January 2018 to March 2019, and December 2017.

8570 - The leachate pit has been removed as part of the Phase IV reconstruction.

The specific violations related to the reconstruction of Phase IV (8340, 8320, and 8570) are not included in the follow-up inspection date listed above.

EROSION CONTROL - Most temporary erosion control measures shown in the Tennessee Erosion Prevention and Sediment Control Program Level I course book do not require a permit modification to be implemented. The current approved plans have an inadequate storm water management and erosion control plan. More effort needs to be placed on reducing the erosive effects

The primary problem for this facility in establishing and maintaining intermediate cover is the poor quality of the available soils. The primary soil is a very slightly clayey sand that has no cohesion when exposed to weathering. Hardeman County should either find a different source of soil that has a higher clay content or take aggressive stabilization measures. Until a more cohesive cover soil is found the County will continue to spend employee time and resources replacing the washed away cover.

8180 - This has been a recurring violation. The seventeen insistences since September 2016. Since February 2018 this has been a constant violation either as minor or a major violation.

On September 4, 2019, a Compliance Review Meeting was held in the Jackson Filed Office. In that meeting Hardeman County agreed to completely cover the east and north faces of the landfill, to plant grass, and take other erosion control measures as appropriate by October 4, 2019, and completed the perimeter road and run-off control ditch by November 4, 2019. An extension for the cover activities was granted until November 4, 2019.

At the time of this inspection the north face of the landfill had exposed waste. Erosion control matting and straw had been place on the cover. Grass had been planted, but was not coming in everywhere. No other erosion control measures had been taken.

The perimeter ditch had been cut on the east face, but not on the north. The perimeter road was washed out on the east face and impassable due to sediment accumulation on the north face.

Given that Hardeman County did not complete the compliance agreement and the regular occurrence of the cover, erosion, and leachate violations, a formal Notice of Violation will follow this inspection report and an Enforcement Action Request will be forwarded to the Division's Central Office. Photographic Log

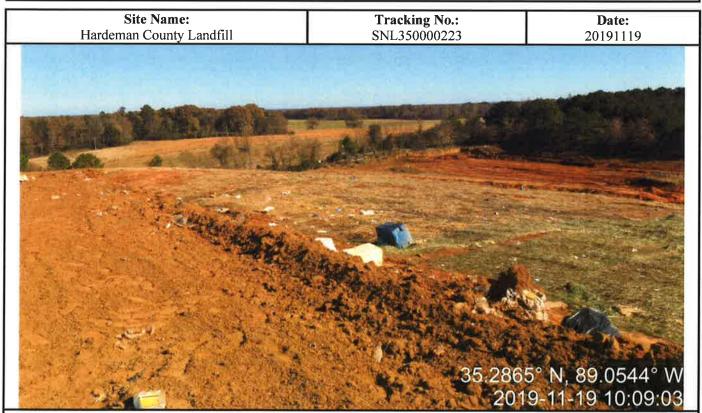
Site Name:
Hardeman County Landfill

Tracking No.:
SNL350000223

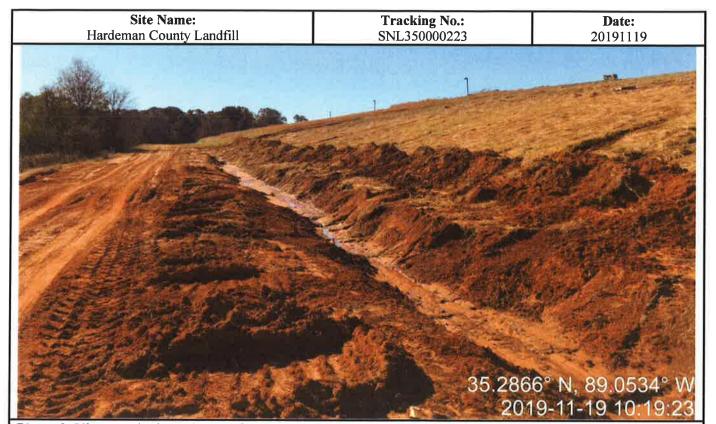
20191119

35.2829° N, 89.0556° W
2019-11-19 10:08:41

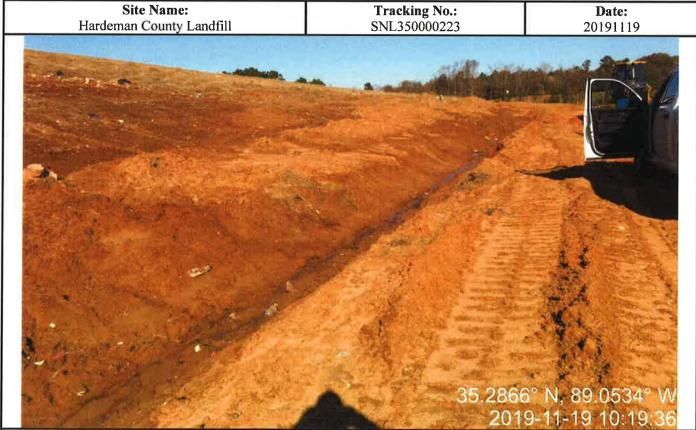
**Photo 1.** View south over the last filled area. Note that the soil type is different from the previous sandy soil. Picture has been cropped to remove excess sky.



**Photo 2.** View northeast over the east face. Note how the matting and straw are holding the soil in place. Picture has been cropped to remove excess sky.



**Photo 3.** View south along the east face. Note the existence of a ditch. Also note that the erosion on the cover is near the toe of the slope. Picture has been cropped to remove excess sky.



**Photo 4.** View north of the east face. The flow in this portion of the ditch appears to be from recent rains. Picture has been cropped to remove excess sky.

Site Name:Tracking No.:Date:Hardeman County LandfillSNL35000022320191119



**Photo 5.** Erosion gully at the bottom of the east face. Note the exposed/washed waste. Also note the rill erosion on the side slope.

Site Name:Tracking No.:Date:Hardeman County LandfillSNL35000022320191119

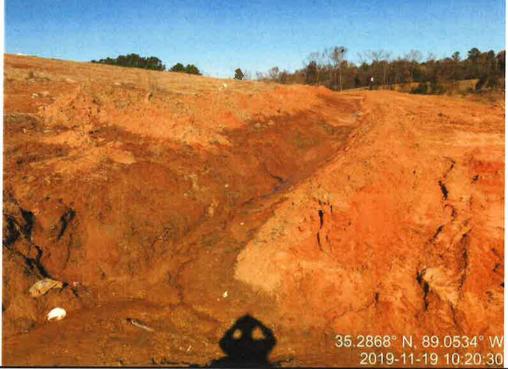


Photo 6. View north along the east face. Note the leachate breakout entering the run off system.

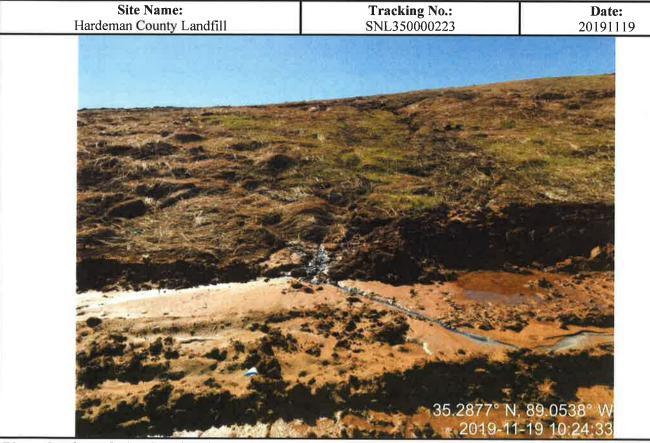
Site Name:
Hardeman County Landfill

Tracking No.:
SNL350000223

20191119

35.2876° N, 89.0536° W
2019-11-19 10:23:50

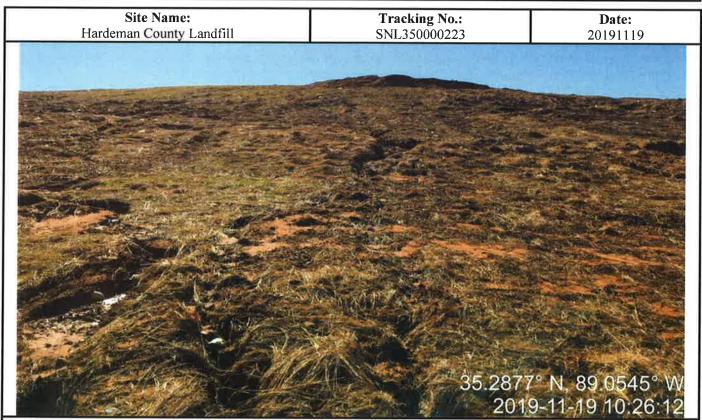
**Photo 7.** View south of the northeast corner of the fill. Note that the eroded cover and exposed waste is at the bottom of the slope. This is intermediate cover. Picture has been cropped to remove excess sky.



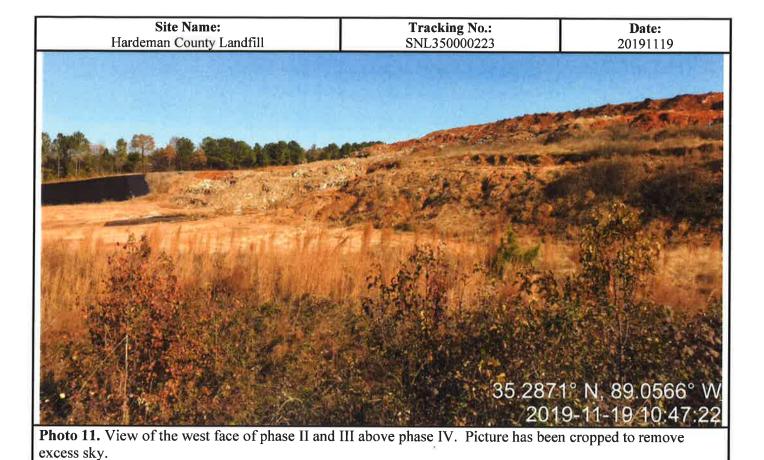
**Photo 8.** View of a leachate breakout on the north slope. Note that the erosion is on the lower slope of the fill.

| Site Name: | Tracking No.: | SNL350000223 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119 | 20191119

**Photo 9.** View of erosion on the north face. Note the water coming from the cover. Picture has been cropped to remove excess sky.



**Photo 10.** View of erosion on the north face. Note that the erosion is in the bottom of the covered area. Picture has been cropped to remove excess sky.



 Site Name:
 Tracking No.:
 Date:

 Hardeman County Landfill
 SNL350000223
 20191119

Photo 12. View of the southern portion of the west face. Picture has been cropped to remove excess sky.