



**Department of Energy
Office of Legacy Management**

August 13, 2007

Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V-5HSF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Thomas A. Schneider
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402

Dear Mr. Saric and Mr. Schneider:

SUBJECT: Transmittal of the June 20, 2007 Inspection Checklist for On-Site Disposal Facility

The purpose of this letter is to transmit the completed checklist for the June 20, 2007 inspection of the On-Site Disposal Facility (OSDF) for your review. Photographs of the disposal facility and the surrounding area were taken to accompany the inspection and are included with this report. The inspection was conducted with participation from the Ohio Environmental Protection Agency (OEPA), Tetra Tech, Geosyntec Consultants, the Ohio Department of Health, and the S.M. Stoller Corporation. The inspection was the 16th conducted on the Cell 1 Cap, the 12th conducted on the Cell 2 Cap, the 8th conducted on the Cell 3 Cap, the 7th conducted on the Cell 4 and Cell 5 Cap, the 5th conducted on the Cell 6 Cap, and the third complete inspection for the Cell 7 and 8 caps. Responses to the OEPA comments on the March 2007 OSDF inspection are also enclosed.

Establishment of the vegetative cover continues to progress very well. Cells 1 through 6 had full stands of grass, and previously-repaired areas have recovered nicely. Cells 7 and 8 were much improved from the March 2007 inspection, despite the very dry conditions the region has experienced this spring. Note that pursuant to the LMICP, cells 1, 2, and 3 were mowed and baled in May.

Erosion areas on the west side of Cell 7 and the west and south sides of Cell 8 were repaired and seeded just prior to the June 20, 2007 inspection. Germination of the seed in the repaired areas was visible during a separate walk down on June 29. Thistle had been treated with a non-selective broad leaf herbicide (2-4, D) on cell caps 2 through 6 prior to the inspection. The treatment was evident by the curling and dying of the thistle plants. Thistle on Cell 1 was treated with Plateau herbicide (which is protective of native grasses and forbs) following the inspection. Small

2597 B 3/4 Road, Grand Junction, CO 81503	<input type="checkbox"/>	3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507
626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236	<input type="checkbox"/>	1000 Independence Ave., S.W., Washington, DC 20585
11025 Dover St., Suite 1000, Westminster, CO 80021	<input type="checkbox"/>	10995 Hamilton-Cleves Highway, Harrison, OH 45030
955 Mound Road, Miamisburg, OH 45342	<input type="checkbox"/>	232 Energy Way, N. Las Vegas, NV 89030

REPLY TO: Harrison Office

Mr. James A. Saric
Mr. Thomas A. Schneider
Page 2

mammals have burrowed holes across Cell caps 1 through 6. Rocks and other debris were identified on most of the cell caps. Woody vegetation was identified in the rip rap drainages around the OSDF and along the toe of the cell caps. The woody vegetation has been cut or removed manually. Herbicide will be applied to the cut vegetation in late summer or early fall. The enclosed inspection checklist details where repairs and other attention are needed

A meeting was held on June 29 regarding the uneven surface that was observed on the south side of Cell 8 during the December 2006 and March 2007 inspections. The uneven surface is a result of the seedbed preparation process, when a soil stabilizer is used to break up compacted soil. Tire tracks from the stabilizer left a series of depressions at a 45-degree angle to the slope. Geosyntec Consultants re-evaluated the slope following the March 2007 inspection. It was determined that the proper course of action was to continue monitoring for erosion and make any repairs that are necessary. As stated previously, some erosion repair was needed for the west slope of Cells 7 and 8 and the south side of Cell 8. The repairs were completed just prior to the June 2007 inspection. In addition, a portion of the Cell 8 south slope that did not appear to have adequate grass germination was broadcast seeded. The south slope of Cell 8 was subsequently irrigated to promote germination. Observations of Cell 8 during the June 2007 inspection were much improved over the previous two. At the meeting on June 29, it was determined that the repairs and continued maintenance adequately address the issues.

The next OSDF Cell Cap inspection is scheduled for September 2007. If you have any questions or require any additional information, please call me at (513) 648-3148.

Sincerely,



Jane Powell,
Fernald Site Manager
DOE-LM-20.1

Enclosure

cc w/ enclosure:

M. Cullerton, Tetra Tech.
M. Murphy, USEPA-V, A-18J
J. Reising, DOE-EM
T. Schneider, OEPA (three copies of enclosure)
M. Shupe, HSI GeoTrans
Project Record File FER030.1(A) (thru W. Sumner)
Administrative Records (thru W. Sumner)

cc w/o enclosure:

J. Homer, Stoller
F. Johnston, Stoller
L. McHenry, Stoller

OSDF Cell Cap Post Closure Inspection Checklist

Document 6768

Date of Inspection: June 20, 2007

Weather Conditions: Hot, sunny

Time of Inspection: 9:00 AM

Temperature: 75 - 80 °F

Wind Speed (Miles per hour) and Direction:

Inspection By: SM Stoller, Tetra Tech, OEPA, ODH, Geosyntec

Transect Direction**: North/South

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
1. Entrance Road/Monitoring Access Road										
1A. Verify entrance gate, lock and signage are intact and in good working order.	A								A	
1B. Verify that access gates are locked to prevent unauthorized entry.	A								A	Locks/gates opened on as-needed basis. Gates checked at the end of each work day.
1C. Visually observe condition of access road for signs of erosion, ruts, standing water, proper drainage and excess vegetation.	A	A	A	A	A	A	A	A	A	
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	A	A	A	A	A	A	A	A	
2. Chain Link Fence and Signage										
2A. Walk length of fence and ensure fence, posts, etc. are intact and in good condition. Ensure that gates are closed/locked to prevent unauthorized entry.	A	A	A	A	A	A	A	A	A	
2B. Verify that the proper signage is intact and in good condition at the following locations: Restricted Access; Certified Area; and Restored Area. (Some signs not installed at this time).	A	A	A	A	A	A	A	A	A	
2C. Check for vegetation growing over fences, barricades, signs and any noxious vegetation per State of Ohio Regulations (attached) and invasive plants growing on or around OSDF perimeter.	A	A	A	A	A	A	A	A	A	
3. Surface Water Management										
3A. Check integrity of drainage channels around OSDF for erosion or debris restricting water flow (see attached map). Build up of debris/sedimentation in drainage ditch is not to exceed 6 inches.	A	A	A	A	A	A	A	A	A	
3B. Visually check the integrity of rip-rap in drainage channels for signs of deterioration or removal of rock.	A	A	A	A	A	A	A	A	A	
3C. Visually check for the presence of woody vegetation growing in drainage channels and in rip-rap	U	U	U	U	U	U	U	U	A	1. Woody vegetation is growing in the rip rap around most of the OSDF. Vegetation was either cut or removed manually. 2. Herbicide treatment of cut vegetation will take place in the late summer or early fall.

*A = Satisfactory *U = Unsatisfactory (comments required) *N = Not inspected

** Transect Direction should alternate each inspection (North to South & East to West)

OSDF Cell Cap Post Closure Inspection Checklist

Document 6768

Date of Inspection: June 20, 2007

Weather Conditions: Hot, sunny

Time of Inspection: 9:00 AM

Temperature: 75 - 80 °F

Wind Speed (Miles per hour) and Direction:

Inspection By: SM Stoller, Tetra Tech, OEPA, ODH, Geosyntec

Transect Direction**: North/South

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
3D. Visually check the integrity of run-on and run-off control features including: Ditch checks, Gravity Inlet structures, and Culverts.	A	A	A	A	A	A	A	A		

4. (A) Final Cover											
4A. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually inspect for the following items:**											
4A1. Inspect erosion rills/channels. Flag any observable rills/channels greater than 3 inches wide and 6 inches deep or excessive erosion.	A	A	A	A	A	A	A	A	A	Repairs were made on Cells 7 and 8 prior to the June inspection. Erosion rills are backfilled with topsoil by hand, broadcast seeded and mulched with straw.	May and June 2007
4A2. Any observable depressions, settlement/subsidence, slumping or desiccation cracks. Flag any observable depressions, slumps, settlement/subsidence or dessication cracks.	A	A	A	A	A	A	A	A	A		
4A3. Any ponding or standing water. Flag any standing water.	A	A	A	A	A	A	A	A	A		
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.	U	U	U	U	U	U	A	A	A	The presence of moles or similar burrowing animals is evident on cells 1-6. Ground hogs were trapped and the holes backfilled by hand. Mole mounds are collapsed by hand.	June and July 2007
4A5. Evidence of vehicle traffic on the OSDF cap.	A	A	A	A	A	A	A	A	A	A small utility vehicle was being used to conduct maintenance activities on the OSDF. No significant damage resulted.	
4B. Walk toe of slope and visually inspect for the following:											
4B1. Evidence of settlement/subsidence, erosion, and seepage. Flag any observable evidence of settlement/subsidence, erosion, or seepage.	A	A	A	A	A	A	A	A	A	Findings from the March 2007 inspection were repaired prior to the June inspection.	May and June 2007

*A = Satisfactory *U = Unsatisfactory (comments required) *N = Not inspected

** Transect Direction should alternate each inspection (North to South & East to West)

OSDF Cell Cap Post Closure Inspection Checklist

Document 6768

Date of Inspection: June 20, 2007

Weather Conditions: Hot, sunny

Time of Inspection: 9:00 AM

Temperature: 75 - 80 °F

Wind Speed (Miles per hour) and Direction:

Inspection By: SM Stoller, Tetra Tech, OEPA, ODH, Geosyntec

Transect Direction**: North/South

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
4B2. A 20-ft corridor at the toe for the presence of woody vegetation, siltation, and/or bioinvasion. Flag any woody vegetation, siltation, and/or bioinvasion.	U	U	U	U	U	U	A	A	Woody vegetation at the toe of cells 1-6. Woody vegetation was cut or pulled by hand. Herbicide treatment of cut vegetation will take place in late summer or early fall.	July 2007
4B3. Condition of rip-rap. Flag any observable abnormalities.	A	A	A	A	A	A	A	A		
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	A	A	A	A	A	A	A		
4D. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually check vegetative cover for the following:										
4D1. General health of grass cover and signs of stressed or dead grass should be noted.	A	A	A	A	A	A	A	U	A portion of the south face of cell 8 did not have adequate grass germination. This area was broadcast seeded and irrigated.	
4D2. Adequate grass coverage/density with no bare spots greater than 3-ft in diameter. Flag any bare spots greater than 3-ft in diameter. Any areas with questionable vegetative coverage will be sampled for percent cover and type of vegetation using meter-square quadrats.	A	A	A	A	A	A	A	A		
4D3. Inspect the cover for the presence of woody vegetation (i.e., trees or shrubs) or noxious/invasive plants growing. Flag any woody and/or noxious/invasive vegetation for removal/herbicide.	U	U	U	U	U	U	A	A	On cells 1-6, thistle was spot sprayed with a non-selective broadleaf herbicide (2, 4-D) prior to the June 2007 inspection. Cell 1 was boom sprayed with Plateau, which is protective of native grasses and forbs, following the June inspection.	June and July 2007
4E. Visually inspect locations where Cell 1 monitoring equipment and infrastructure has been removed. Check for settling of fill material. Check for adequate vegetative cover.	A									
5. Groundwater Monitoring Wells										
5A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	A	A	A	A	A	A	A		
5A1. Groundwater Monitoring Wells	A	A	A	A	A	A	A	A		
5A2. Horizontal Monitoring Wells	A	A	A	A	A	A	A	A		

*A = Satisfactory *U = Unsatisfactory (comments required) *N = Not inspected

** Transect Direction should alternate each inspection (North to South & East to West)

OSDF Cell Cap Post Closure Inspection Checklist

Document 6768

Date of Inspection: June 20, 2007

Weather Conditions: Hot, sunny

Time of Inspection: 9:00 AM

Temperature: 75 - 80 °F

Wind Speed (Miles per hour) and Direction:

Inspection By: SM Stoller, Tetra Tech, OEPA, ODH, Geosyntec

Transect Direction**: North/South

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
6. Miscellaneous										
6A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	A	A	A	A	A	A	A	A	A	
6B. Visually inspect the integrity of the perched water interceptor trench. Note any abnormalities.	A	A	A	A	A	A	A	A	A	
6C. Visually observe/inspect the corridor 50-ft outside of OSDF for signs/evidence of land use changes, settlement/subsidence, erosion, standing water, encroachment, livestock grazing or noxious vegetation. Note any changes/abnormalities.	A	A	A	A	A	A	A	A	A	
6D. Visually inspect all infrastructure for any act of vandalism.	A	A	A	A	A	A	A	A	A	
6E. List any other observations not listed above.	U	U	U	U	U	U	U	U	U	Rocks and other debris were present on all cell caps. All identified materials were removed by hand.
										June 2007

REFERENCE SOURCES FOR POST CLOSURE OSDF INSPECTIONS

1. Post-Closure Care and Inspection Plan, On-Site Disposal Facility
2. On-Site Disposal Facility Technical Specification #'s 02831, 02270, 02271, and 02930
3. On-Site Disposal Facility Drawing #'s 90X-5500-E-00851 and 90-5500-G-00577
4. Construction Drawing # 90X-6000-G-00073
5. Phase III Drawing #'s 90X-6000-G-00302 and 90X-6000-G-00310

*A = Satisfactory *U = Unsatisfactory (comments required) *N = Not inspected

** Transect Direction should alternate each inspection (North to South & East to West)

On-Site Disposal Facility Inspection Report

June 2007



Stoller
Legacy Management Team





6319D-5376

East Face Cell 1



6319D-5375

West Face Cell 1



6319D-5380

North Face Cell 1

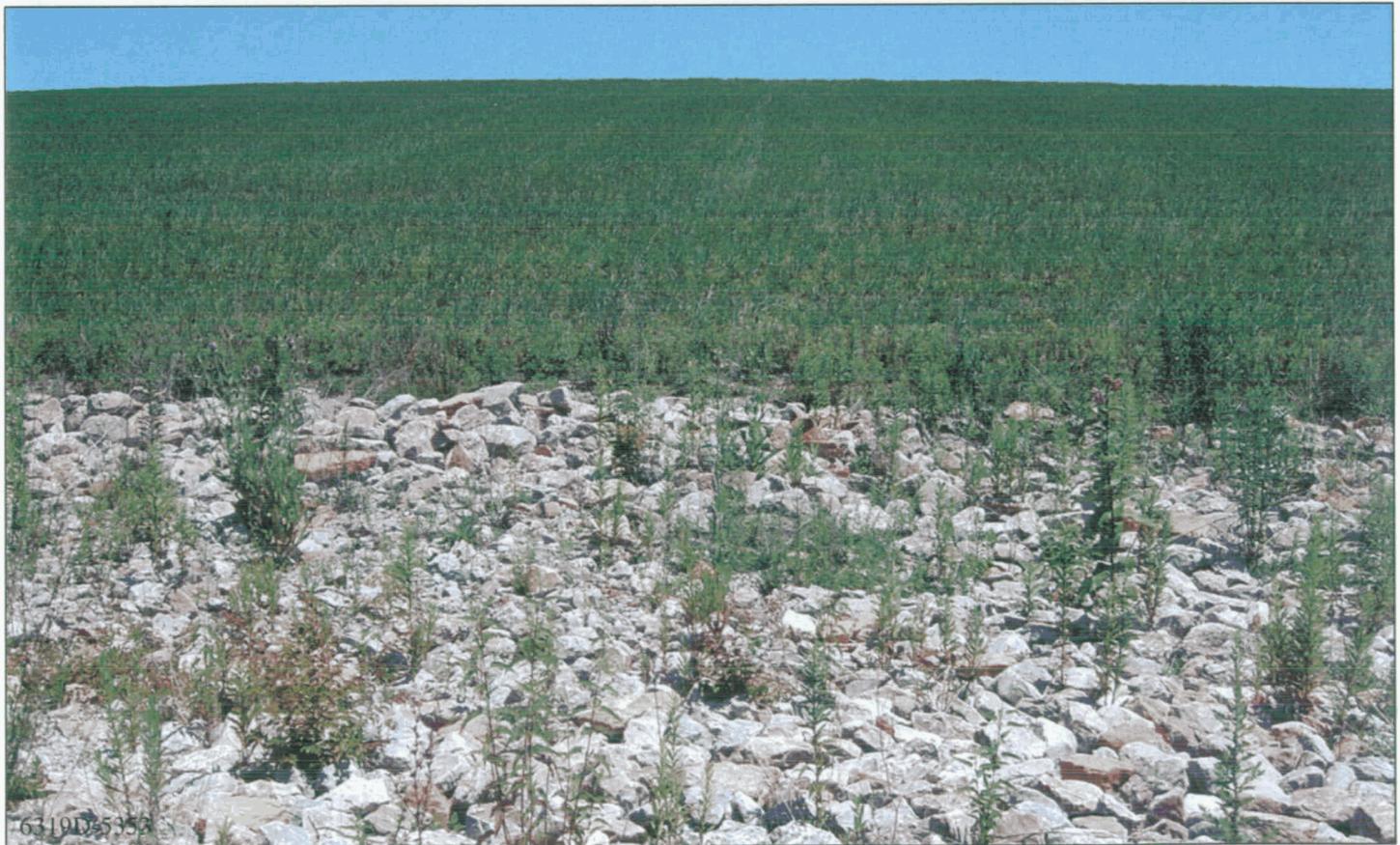


6319D-5178

North Drainage (looking west)



East Face Cell 2



West Face Cell 2



6319D-5374

East Face Cell 3



6319D-5354

West Face Cell 3



East Face Cell 4



West Face Cell 4



East Face Cell 5



West Face Cell 5



East Face Cell 6



West Face Cell 6



East Face Cell 7



West Face Cell 7



East Face Cell 8



West Face Cell 8



South Face Cell 8



South Drainage (looking west)



0819D 5868

East Drainage Cell 7 (looking south)



9D 5873

East Drainage Cell 4 (looking south)



East Drainage Cell 1 (looking south)



West Inner Drainage Cell 7 (looking south)



West Inner Drainage Cell 4 (looking south)



West Inner Drainage Cell 1 (looking south)



6319D-5351

West Outer Drainage Cell 1 (looking south)



6319D-5362

West Outer Drainage Cell 8 (looking north)



West Outer Drainage Cell 8 (looking south)