



## Department of Energy

Ohio Field Office  
Fernald Closure Project  
175 Tri-County Parkway  
Springdale, Ohio 45246

NOV 3 2006



Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0049-07

Mr. Thomas Schneider, Project Manager  
Ohio Environmental Protection Agency  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911

Mr. Dave Devault  
United Fish and Wildlife Services  
Regional Office – Federal Building  
Fort Snelling, Minnesota 55111

Dear Mr. Saric, Mr. Schneider, and Mr. Devault:

### **CONTRACT DE-AC24-01OH20115, TRANSMITTAL OF THE SEPTEMBER 26, 2006 INSPECTION CHECKLIST FOR ON-SITE DISPOSAL FACILITY CELL 1, 2, 3, 4, 5 AND 6 CAPS**

The purpose of this letter is to transmit the completed checklist for the September 26, 2006 inspection of the On-Site Disposal Facility (OSDF) Cell 1, 2, 3, 4, 5 and 6 Caps 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), the S.M. Stoller Corporation, and Fluor Fernald, Inc. The inspection was the 13th conducted on the Cell 1 Cap, the 9th conducted on the Cell 2 Cap, the 5th conducted on the Cell 3 Cap, the 4th conducted on the Cell 4 Cap, the 4th conducted on the Cell 5 Cap and the 2nd complete inspection of the Cell 6 Cap. In general, all six caps were found to be in good condition.

During the September 2006 inspection, there was some evidence of animal burrowing and digging, primarily along the west toe of the cells. There were two bare areas on the east side that needed to be reseeded. Thistle was observed on Cells 3, 4, 5 and 6, primarily on the east face but some on the west as well. The thistle was sprayed with a selective herbicide in October 2006. Thistle that was observed on Cell 1 had been sprayed with herbicide just two weeks prior to the inspection. All of the other items identified during the inspection were addressed in October 2006.

Mr. James Saric  
Mr. Thomas Schneider  
Mr. Dave Devault

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DOE-0049-07

Originally, as stated in the inspection report from the June 2006 OSDF inspection, all eight cells were to be inspected during the September inspection. However, the vegetation on Cell 7 was new and it was decided that it would be best not to walk over the young vegetation. Cell 8 was not yet completed.

The next OSDF Cell Cap inspection, which will include all eight Cell caps, is scheduled for December 2006.

If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,



Johnny Reising  
Director

Enclosures: As stated

cc w/enclosures:

E. Skintik, DOE-OH  
C. Jacobson, Stoller  
M. Lutz, Stoller  
S. Marutzky, Stoller/MS2  
M. Miller, Stoller/MS2  
J. Powell, DOE-LM/MS2  
M. Cullerton, Tetra Tech  
S. Helmer, ODH  
G. Jablonowski, USEPA-V, SR-6J  
D. Sarno, FCAB  
T. Schneider, OEPA-Dayton (three copies of enclosures)  
M. Shupe, HSI GeoTrans

cc w/o enclosures:

J. Chiou, Fluor Fernald, Inc./MS88  
J. Homer, Stoller/MS12  
U. Kumthekar, Fluor Fernald, Inc./MS88  
F. Johnston, Fluor Fernald, Inc./MS12  
L. McHenry, Stoller/MS12  
C. Murphy, Fluor Fernald, Inc./MS1  
P. Mohr, Fluor Fernald, Inc./MS1  
T. Terry, Fluor Fernald, Inc./MS1  
S. Walpole, Stoller/MS76

# OSDF Cell Cap Post Closure Inspection Checklist

Date of Inspection: September 26, 2006

Weather Conditions: Partly cloudy, cool

Time of Inspection: 9:00 AM

Temperature: 61 ° F

Wind Speed (Miles per hour) and Direction: 5 mph southwest

Inspection By: SM Stoller, Fluor Fernald, Tetra Tech, OEPA,

Transect Direction\*\*: East/West

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
<b>1. Entrance Road/Monitoring Access Road</b>										
1A. Verify entrance gate, lock and signage are intact and in good working order.	A	A	A	A	A	A	A	N	Final institutional control configuration will not be in place until DPC.	
1B. Verify that access gates are locked to prevent unauthorized entry.	A	A	A	A	A	A	A	N	Final institutional control configuration will not be in place until DPC.	
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	N	Final institutional control configuration will not be in place until DPC.	
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	A	A	A	A	A	A	N	Final institutional control configuration will not be in place until DPC.	
<b>2. Chain Link Fence and Signage</b>										
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	N	Final institutional control configuration will not be in place until DPC.	
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	N	Final institutional control configuration will not be in place until DPC.	
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	N	Final institutional control configuration will not be in place until DPC.	
<b>3. Surface Water Management</b>										
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	N		
3B. Visually check the integrity of riprap in drainage channels for signs of deterioration or removal of rock.	A	A	A	A	A	A	A	N		
3C. Visually check for the presence of woody vegetation growing in drainage channels and in Rip-Rap	U	U	U	U	U	U	U	N	Woody vegetation is present in the north and east drainages and needs to be removed by hand (currently) and/or treated with selective herbicide (in Spring 2007).	October 2006
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	N		

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

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
<b>4. (A) Final Cover</b>										
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	N	N		
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	N	N		
4A3. Any ponding or standing water. Flag any standing water.	A	A	A	A	A	A	N	N		
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.										
4A5. Evidence of vehicle traffic on the OSDF cap.	A	A	A	A	A	A	N	N		
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	U	U	U	N	N	Erosion is occurring between the edge of the vegetation and the riprap on cells 4, 5, and 6. Additional rock needs placed along the edge of the vegetation.	October 2006
4B2. A 20-ft corridor at the toe for the presence of woody vegetation, siltation, and/or biointrusion. Flag any woody vegetation, siltation, and/or biointrusion.	U	U	A	U	A	U	N	N	Woody vegetation is present along the toe of the cells on both the east and west sides.	October 2006
4B3. Condition of rip-rap. Flag any observable abnormalities.	A	A	A	A	A	A	N	N		
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	A	A	A	A	A	N	N		

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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	N	N		
4D2. Adequate grass coverage/density with no bares 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	U	A	A	U	N	N	There are two bare spots that need addressed with seed and matting. One on the east side of cell 3 and one on the east side of cell 6.	October 2006
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	A	U	U	U	U	N	N	Thisle was present over portions of the entire cell cap. Cell 1 had been treated with selective herbicide before the 9/26/06 inspection. Cells 3, 4, 5, and 6 need to be treated with selective herbicide.	October 2006
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								The monitors were abandoned earlier in the month of September before the inspection. All areas were reseeded and matted prior to the inspection.	September 2006
<b>5. Groundwater Monitoring Wells</b>										
5A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	A	A	A	A	A	N	N		
5A1. Groundwater Monitoring Wells	A	A	A	A	A	A	N	N		
5A2. Horizontal Monitoring Wells	A	A	A	A	A	A	N	N		

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<b>6. Miscellaneous</b>										
6A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.										
6B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A	A	A	A	A	A	N	N		
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	N	N		
6D. Visually inspect all infrastructure for any act of vandalism.	A	A	A	A	A	A	N	N		
6E. List any other observations not listed above.	A	A	A	A	A	A	N	N		

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## 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

# On-Site Disposal Facility Inspection Report

## September 2006



**OSDF**  
September 2006



6319D-5177

**East Face Cell 1**



6319D-5181

**West Face Cell 1**



6319D-5180

**North Face Cell 1**



6319D-5179

**North Drainage (looking west)**



**East Face Cell 2**



**West Face Cell 2**



**East Face Cell 3**



**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**

6319D-5174

6319D-5186



6319D-5170

**East Drain Cell 7 (looking south)**



6319D-5174

**East Drain Cell 4 (looking south)**



6319D-5178

**East Drain Cell 1 (looking south)**



6319D-5188

**West Drain Cell 7 (looking south)**



6319D-5189

**West Drain Cell 3 (looking south)**