



Department of Energy

**Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246
(513) 648-3155**



DEC 13 2005

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-0041-06

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

Mr. Bill Kurey
United States Fish & Wildlife Service, Suite H
6950 American Parkway
Reynoldsburg, OH 43068

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

TRANSMITTAL OF THE OCTOBER 3, 2005 INSPECTION CHECKLIST FOR ON-SITE DISPOSAL FACILITY CELL 1, 2, 3, 4 AND 5 CAPS

The purpose of this letter is to transmit the completed checklist for the October 3, 2005 inspection of the On-Site Disposal Facility (OSDF) Cell 1, 2, 3, 4 and 5 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 Tetra Tech, Inc. [supporting U.S. Environmental Protection Agency (EPA)], Ohio Environmental Protection Agency (OEPA), and Fluor Fernald, Inc. The inspection was the tenth conducted on the Cell 1 Cap, the sixth conducted on the Cell 2 Cap, the third conducted on the Cell 3 Cap, the second conducted on the Cell 4 Cap, and the first conducted on the Cell 5 Cap. In general, all five caps were found to be in good condition.

Mr. James A. Saric
Mr. Tom Schneider
Mr. Bill Kurey

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During the October 2005 inspection, there was evidence of animal burrowing or digging on most of the caps. The majority of the burrows were no more than a few inches deep, however a few required filling in with soil and re-seeding. There were areas on each of the five cell caps that did not have adequate grass coverage. Bare spots greater than three feet in diameter were reseeded and covered with coir matting. Woody vegetation was observed at the toe of Cell 1 and on the cover of Cell 3. The woody vegetation was removed by hand or mechanical means. Trash observed on the northwest side of Cell 1 and the top of Cell 5 was picked up and discarded.

The next OSDF Cell Cap inspection, which will include Cell Caps 1, 2, 3, 4, 5 and 6 is scheduled for January 2006. A date will be finalized prior to the end of this year. Upon your concurrence, please forward to the EPA, OEPA and the remainder of the inspection team.

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

Sincerely,



Johnny W. Reising
Director

Mr. James A. Saric
Mr. Tom Schneider
Mr. Bill Kurey

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DOE-0041-06

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Enclosure

cc w/enclosures:

E. Skintik, DOE-OH
G. Stegner, OH/FCP
J. Craig, DOE-LM
C. Jacobson, Stoller
M. Lutz, Stoller
J. Powell, DOE-LM
M. Cullerton, Tetra Tech
T. Schneider, OEPA-Dayton (three copies of enclosures)
G. Jablonowski, USEPA-V, SR-6J
D. Sarno, FCAB
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS6

cc w/o enclosures:

H. Bilson, Fluor Fernald, Inc./MS1
J. Chiou, Fluor Fernald, Inc./MS88
J. Homer, Fluor Fernald, Inc./MS90
U. Kumthekar, Fluor Fernald, Inc./MS88
L. McHenry, Fluor Fernald, Inc./MS90
D. Nixon, Fluor Fernald, Inc./MS1
D. Powell, Fluor Fernald, Inc./MS64
H. Swiger, Fluor Fernald, Inc./MS90
S. Walpole, Fluor Fernald, Inc./MS76
E. Woods, Fluor Fernald, Inc./MS90

OSDF Cell Cap Post Closure Inspection Checklist

Date of Inspection: October 3, 2005
 Time of Inspection: 9:00 A.M.
 Inspection By: OEPA, Tetra Tech, Fluor Fernald

Weather Conditions: Clear
 Temperature: 68 °F
 Transect Direction** North/South

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

Inspection Component	Condition for Each Cell Cap A* or U* or N*								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	A	A	A	N	N	N	N	
1B. Verify that access gates are locked to prevent unauthorized entry.	A	A	A	A	A	N	N	N	N	
1C. Visually observe condition of access road for signs of erosion, ruts, standing water, proper drainage and excess vegetation.	A	A	A	A	A	N	N	N	N	
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	A	A	A	A	N	N	N	N	
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	N	N	N	N	
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	N	N	N	N	
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	N	N	N	N	
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	N	N	N	N	
3B. Visually check the integrity of RipRap in drainage channels for signs of deterioration or removal of rock.	A	A	A	A	A	N	N	N	N	
3C. Visually check for the presence of woody vegetation growing in drainage channels and in Rip-Rap	A	A	A	A	A	N	N	N	N	
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	N	N	N	N	

*A = Satisfactory *U = Unsatisfactory (comments required) *N = Not inspected
 ** Transect Direction should alternate each inspection (North to South & East to West)

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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	N	N			
4A2. Any observable depressions, settlement/subsidence, slumping or desiccation cracks. Flag any observable depressions, slumps, settlement/subsidence or desiccation 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.	U	U	A	U	U	U	N	N	Cell 1, north & west; Cell 2, west; Cell 4, east; Cell 5 top & west		11/05
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	A	A	A	N	N			
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	A	A	A	A	A	N	N			11/05
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	A	A	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.	U	U	U	U	U	U	U	U	N	Cell 1, top & northeast Cell 2, toe & east Cell 3, toe & east Cell 4, west Cell 5, east	11/05
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.	A	A	U	A	A	A	A	A	N	Cell 3, west	11/05
5. Cover Monitoring System											
5A. Visually inspect the integrity of the cover monitoring system: check Junction boxes, manholes, pressure transducer risers, soil water status nest headers, and settlement plates of the remote monitoring system for evidence of damage (see attached map). Check that lids and caps on enclosures are intact and in good working order.	A	A	A	A	A	A	A	A	N		
5B. Visually inspect monitoring system manholes and junction boxes for the presence of animals, insects, rodents or misc. biota. Note the presence or evidence of any biota.	A	A	A	A	A	A	A	A	N		
5C. Visually inspect manholes and junction boxes and their immediate vicinity for the presence of standing water. Flag all standing water.	A	A	A	A	A	A	A	A	N		
6. Groundwater Monitoring Wells											
6A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	A	A	A	A	A	A	A	N		
6A1. Groundwater Monitoring Wells	A	A	A	A	A	A	A	A	N		
6A2. Horizontal Monitoring Wells	A	A	A	A	A	A	A	A	N		

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7. Miscellaneous										
7A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	A	A	A	A	A	N	N	N		
7B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A	A	A	A	A	N	N	N		
7C. 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	N	N	N		
7D. Visually inspect all infrastructure for any act of vandalism.	A	A	A	A	A	N	N	N		
7E. List any other observations not listed above.	U	A	A	A	U	N	N	N	Trash – Cell 1, northwest; Cell 5, top	11/05

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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

October 2005



OSDF 10/05

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East Face Cell 1



West Face Cell 1



6319D-4926

North Face Cell 1



6319D-4927

North Drainage (looking west)



6319D-4924

East Face Cell 2



6319D-4916

West Face Cell 2



East Face Cell 3



West Face Cell 3



6319D-4922

East Face Cell 4



6319D-4918

West Face Cell 4



East Face Cell 5



West Face Cell 5



6319D-4913

West Drainage Cell 1 (looking south)



6319D-4931

Outer West Drainage Cell 1 (looking south)



6319D-4928

East Drainage (looking south)



6319D-4932

Outer West Drainage Cell 3 (looking south)



6319D-4929

East Drainage Cell 3 (looking south)



6319D-4930

East Drainage Cell 3 (looking north)



West Drainage Cell 5 (looking north)