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Cincinnati, OH 45253-8704

192900

FLUOR

August 23, 2006

Fernald Closure Project
Letter No. C:CPD:2006-0181

Mr. Johnny W. Reising, Director
U. S. Department of Energy
Ohio Field Office – Fernald Closure Project
175 Tri-County Parkway
Cincinnati, Ohio 45246

Dear Mr. Reising:

CONTRACT DE-AC24-01OH20115, TRANSMITTAL OF THE JUNE 13, 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 June 13, 2006 inspection of the On-Site Disposal Facility (OSDF) Cell 1, 2, 3, 4, 5 and 6 Caps for your review. A portion of the east side of Cell 7 was also inspected. 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 Department of Energy Office of Legacy Management, the S.M. Stoller Corporation, and Fluor Fernald, Inc. The inspection was the 12th conducted on the Cell 1 Cap, the 8th conducted on the Cell 2 Cap, the 4th conducted on the Cell 3 Cap, the 3rd conducted on the Cell 4 Cap, the 3rd conducted on the Cell 5 Cap and the first complete inspection of the Cell 6 Cap. In general, all six caps were found to be in good condition.

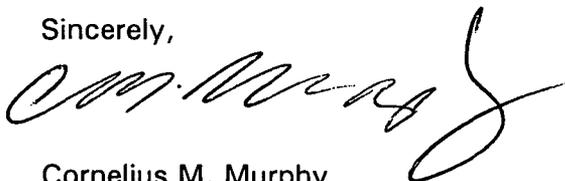
During the June 2006 inspection, there was little evidence of animal burrowing and digging. There were some bare spots resulting from the spot spraying of herbicide to kill invasive plants on Cell 1. The area was reseeded. There were also areas of sparse vegetation on Cell 5 and Cell 6, which subsequently resulted in the development of some minor erosion rills. It appeared that the sparse vegetation on Cell 6 was the result of difficulties encountered during seeding activities. In one portion of the east face of Cell 5, jute was removed, the slope was re-graded and new erosion matting was installed following reseeding. In other areas, the erosion rills were filled with topsoil and reseeded. The sparse areas were also reseeded. There was another growth of Canada thistle on Cell 1 and large amounts of Yellow Sweet Clover on Cells 3 and 4. The thistle was sprayed with a selective herbicide and most of the clover was mowed prior to going to seed. A portion of Cell 3 was left un-mowed in order to preserve forage and potential breeding habitat for grassland bird species. All of the items identified were addressed June-August 2006.

The next OSDF Cell Cap inspection, which will include all eight Cell Caps is scheduled for September 26, 2006.

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 Jyh-Dong Chiou at (513) 738-2834 or John Homer at (513) 484-2313.

Sincerely,



Cornelius M. Murphy
Closure Project Director

CMM:LM:JH:ldt

Enclosures

c: With Enclosures

J.D. Chiou, MS88
Joe Desormeau, DOE-OH/FCP, MS2
John Homer, MS12
Frank L. Johnston, MS12
Timothy Jones, DOE Contracting Officer, DOE/EMCBC
Uday A. Kumthekar, MS88
Lisa McHenry, MS12
Harold Swiger, MS12
Tammy Terry, MS1
Chuck Van Arsdale, MS88
DOE Records Center
File Record Subject – June 2006 Inspection Checklist OSDF Cells 1 - 6 Caps
Letter Log Copy, MS1
Project Number 20100.2.22 & 20900.2.22
Administrative Record (w/2 enc), MS6

Without Enclosures

Donna Metzler, Stoller, MS2
Reinhard Friske, MS52-3
Paul Mohr, MS1
Dennis Sizemore, Fluor Fernald, Inc. Prime Contract, MS1
Gary Stegner, DOE-OH

OSDF Cell Cap Post Closure Inspection Checklist

Date of Inspection: June 13, 2006

Weather Conditions: Clear

Time of Inspection: 9:00 a.m.

Temperature: 70° F

Wind Speed (Miles per hour) and Direction: 5-10 mph

Inspection By: DOE, Fluor, Stoller, OEPA, ODH

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	A	A	A	A	A	N		
1B. Verify that access gates are locked to prevent unauthorized entry.	A	A	A	A	A	A	A	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	A	A	N		
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		
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	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	A	A	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	A	A	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	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 riprap	A	A	A	A	A	A	A	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	A	A	N		

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

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

197900

OSDF Cell Cap Post Closure Inspection Checklist

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Weather Conditions: Clear

Time of Inspection: 9:00 a.m.

Temperature: 70° F

Wind Speed (Miles per hour) and Direction: 5-10 mph

Inspection By: DOE, Fluor, Stoller, OEPA, ODH

Transect Direction** North/South

Inspection Component	Condition for Each Cell Cap								Comments	Addressed
	A* or U*									
	1	2	3	4	5	6	7	8		
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	U	U	U	N	Cell 5 east, Cell 6 east, Cell 6 west, and Cell 7 east	July 2006
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	N		
4A3. Any ponding or standing water. Flag any standing water.	A	A	A	A	A	A	A	N		
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.	U	A	A	A	A	A	A	N	Cell 1 northeast	June 2006
4A5. Evidence of vehicle traffic on the OSDF cap.	A	A	A	A	A	A	A	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	A	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.	A	A	A	A	A	A	A	N		
4B3. Condition of riprap. Flag any observable abnormalities.	A	A	A	A	A	A	A	N		
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	A	A	U	U	U	A	N	Silt fence removed along east toe of Cells 4, 5 and 6	August 2006

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

OSDF Cell Cap Post Closure Inspection Checklist

Date of Inspection: June 13, 2006

Weather Conditions: Clear

Time of Inspection: 9:00 a.m.

Temperature: 70° F

Wind Speed (Miles per hour) and Direction: 5-10 mph

Inspection By: DOE, Fluor, Stoller, OEPA, ODH

Transect Direction** North/South

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
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.	U	A	A	A	U	U	A	N	Bare spot on Cell 1 east resulting from spot spraying of thistle. Sparse vegetation in several areas on Cell 5 west. Seed drill missed several areas on Cell 6 east.	July 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	A	A	A	N	Several patches of Canada thistle are present on Cell 1. A large amount of yellow sweet clover is present on Cells 3 and 4.	July 2006
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									
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									
5C. Visually inspect manholes and junction boxes and their immediate vicinity for the presence of standing water. Flag all standing water.	A									
6. Groundwater Monitoring Wells										
6A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	A	A	A	A	A	A	N		
6A1. Groundwater Monitoring Wells	A	A	A	A	A	A	A	N		
6A2. Horizontal Monitoring Wells	A	A	A	A	A	A	A	N		

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006261

OSDF Cell Cap Post Closure Inspection Checklist

Date of Inspection: June 13, 2006

Weather Conditions: Clear

Time of Inspection: 9:00 a.m.

Temperature: 70° F

Wind Speed (Miles per hour) and Direction: 5-10 mph

Inspection By: DOE, Fluor, Stoller, OEPA, ODH

Transect Direction** North/South

Inspection Component	Condition for Each Cell Cap A* or U*								Comments	Addressed
	1	2	3	4	5	6	7	8		
7. Miscellaneous										
7A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	A	A	A	A	A	A	N	N		
7B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A									
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	A	N	N		
7D. Visually inspect all infrastructure for any act of vandalism.	A	A	A	A	A	A	N	N		
7E. List any other observations not listed above.	A	A	A	A	A	U	N	N	Wood debris on Cell 6 east (10:1 slope).	June 2006

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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

June 2006



OSDF
June 2006



East Face Cell 1



Northeast Face Cell 1

006261



6319D-5029

North Face Cell 1



6319D-5031

Northwest Face Cell 1



6319D-5032

West Face Cell 1



6319D-5033

East Face Cell 2



6319D-5034

West Face Cell 2



6319D-5035

East Face Cell 3



6319D-5036

West Face Cell 3



6319D-5037

East Face Cell 4



6319D-5038

West Face Cell 4



6319D-5039

East Face Cell 5



6319D-5040

West Face Cell 5



6319D-5041

East Face Cell 6



6319D-5042

West face Cell 6



6319D-5043

East Face Cell 7



6319D-5045

East Drainage Cell 1 (looking south)



6319D-5044

East Drainage Cell 4 (looking south)



6319D-5046

North Drainage (looking west)



6319D-5046

Inner West Drainage Cell 1 (looking south)



6319D-5048

Outer West Drainage Cell 1 (looking south)



6319D-5049

Inner West Drainage Cell 4 (looking south)



6319D-5050

Outer West drainage at Cell 4 (looking south)