

ROCKY FLATS SITE

REGULATORY CONTACT RECORD 2018-02

Purpose: Minor Modification to the Inspection Form Attached to the Original Landfill (OLF) Monitoring and Maintenance Plan (M&M Plan)

Contact Record Approval Date: February 20, 2018

Site Contact(s)/Affiliation(s): Scott Surovchak, U.S. Department of Energy (DOE); Jeremy Wehner, Linda Kaiser, David Ward (Navarro Research and Engineering, Inc. [Navarro])

Regulatory Contact(s)/Affiliation(s): Carl Spreng, Lindsay Masters, Colorado Department of Public Health and Environment (CDPHE); Vera Moritz, U.S. Environmental Protection Agency (EPA)

Date of Consultation Meeting: September 23, 2017

Consultation Meeting Participants: Scott Surovchak, Carl Spreng, Vera Moritz, Lindsay Masters, Linda Kaiser, Jeremy Wehner, David Ward, John Boylan, George Squibb, Michelle Hanson

Related Contact Records: CR 2008-07, CR 2012-03, CR 2016-04

Introduction: Minor modifications to the current OLF inspection form are necessary to (1) capture changes to water management controls resulting from routine maintenance and repairs conducted since 2009, (2) delete the vegetation inspection page, and (3) allow for the use of an electronic inspection form.

Pursuant to *Rocky Flats Legacy Management Agreement* (RFLMA) paragraph 66, DOE, CDPHE, and EPA do not consider these items to constitute a significant change from existing requirements of the RFLMA or the OLF M&M Plan, and this Contact Record provides public notice of the proposed minor modifications.

Discussion: The following modifications to the 2009 version of the OLF inspection form were proposed and discussed with CDPHE and EPA in the September 23, 2017 consultation.

Page 1:

- Adding checkboxes for the type of inspection report—monthly and weather-related
- Adding text boxes for precipitation data entry from Rocky Flats Site, Colorado (RFS), meteorological station and National Renewable Energy Laboratory meteorological station
- Making minor changes to text in column headers (e.g., changed “Evidence of cracks” to “Visible Cracks”)

Page 2:

- Removing “Cover seeps (if present)” from first column
- Making minor changes to text in column headers (e.g., changed “Evidence of seeps” to “Visible Seeps”)

Page 3:

- Making minor changes to text in column headers (e.g., changed “Evidence of soil deposition or erosion” to “Visible Erosion”) (page 2 of the attached new form)
- Consolidating page 3 with page 2

Page 4:

- Replacing “Vegetation” inspection page in its entirety with new “Seep Evaluation” page (page 3 of attached new form)
 - Removing the vegetation inspection requirement from Table 3 of RFLMA Attachment 2 was authorized by CR 2012-03; landfill vegetation is now monitored and managed under the site-wide vegetation and revegetation plans.

Page 5:

- Making minor changes to text in column headers (e.g., changed “Evidence of burrowing animals” to “Visible Animal Burrows”) (page 4 of the attached new form)
- Removing “Temporary check dams*” from first column (page 4 of the attached new form)

Page 6:

- Removing “Diversion berm outfall” entries 1 through 7 from first column. The diversion berm outfalls are inspected as part of the diversion berm channels and will be recorded on page 4 of the new form.
- Removing “West perimeter channel outfall” from first column. The west perimeter channel outfall is inspected as part of the west perimeter channel and will be recorded on page 4 of the new form.
- Removing “East perimeter channel outfall” from first column. The east perimeter channel outfall is inspected as part of the east perimeter channel and will be recorded on page 4 of the new form.
- Adding “East Subsurface Drain – Solid pipe” and “East Subsurface Drain – Perforated pipe” to the first column (page 4 of the attached new form). This reflects the 2016 repair and upgrade of the East Subsurface Drain within the East Perimeter Channel (CR 2016-04).
- Consolidating page 6 with page 5

Page 7:

- Replacing the four specific areas listed in the first column that represent the direction that run-on could enter the landfill with one entry that considers run-on from any direction around the landfill (page 5 of the attached new form)

Page 8:

- Making minor changes to text in column one to focus inspection on evidence of *unauthorized* activities prohibited by the institutional controls. This distinction is necessary because some activities prohibited by the institutional controls may be authorized by the RFLMA parties. For example, the inspector would not note evidence of excavation on the OLF cover on the form if that excavation is part of a known repair or maintenance activity approved by the RFLMA parties.
- Adding a footnote to emphasize the importance of notifying management of potential institutional control violations (page 5 of the attached new form)
- Consolidating page 8 with page 7

Page 9:

- Removing “Date Noted” column (page 6 of the attached new form)

Electronic Inspection Forms. The OLF M&M Plan is silent on the use of electronic inspection forms to fulfill routine and weather-related inspection requirements. Approval of this Contact Record (CR) allows the use of an electronic inspection form. In order to satisfy OLF M&M Plan inspection requirements, the content of the electronic form must be substantially similar to the attached hard copy form approved by this CR. Minor format deviations in an electronic form (or hard copy) are acceptable; however, none of the inspection criteria for landfill engineered features (e.g., buttress, berms) may be revised or deleted without prior approval through the RFLMA consultation process. Due to the dynamic nature of some seeps on the landfill, the deletion or addition of seeps on the inspection form is allowed without prior approval from the RFLMA parties. Electronic signatures on electronic inspection forms are also acceptable. A completed electronic form is considered a DOE record and will be maintained per DOE procedures to serve as documentation of compliance with OLF M&M Plan inspection requirements.

Resolution: CDPHE, after reviewing the proposed modifications to the OLF M&M Plan inspection form and after consultation with EPA, has approved the inspection form modifications detailed in this CR and approved the use of electronic inspection forms with electronic signatures. CDPHE has determined that the proposed modifications: (1) will not compromise or impair the function of the remedy and (2) will not result in an unacceptable release or exposure to residual subsurface contamination.

The attached OLF inspection form (in hard copy or electronic form), is authorized for immediate use upon approval of this CR by CDPHE. Approval of this CR does not formally modify the OLF M&M Plan; however the RFLMA parties agree that the M&M Plan should be modified to include this new form during the next revision of the M&M Plan.

Closeout of Contact Record: This CR will be closed upon approval of the CR.

Contact Record Prepared by: David Ward, Patty Gallo, and Jeremy Wehner

Distribution:

Carl Spreng, CDPHE

Lindsay Masters, CDPHE

Vera Moritz, EPA

Scott Surovchak, DOE

Linda Kaiser, Navarro

Rocky Flats Contact Record File

Attachment 1

Modified OLF Inspection Form

Original Landfill – Monitoring and Maintenance Plan Inspection Form

Inspector: Enter Date: Date Time: Enter AM/PM

Precipitation: MET* Enter NREL* Enter Weather: Enter Report Type: ☐ Monthly ☐ Weather-related

Reviewed by: Enter Review date: Date

*Since last report

Subsidence/Consolidation

Region	Visible Cracks	Visible Depressions	Visible Ponding	Within Waste Footprint	Other (Describe Below)
Berm 1 Basin - West	Select...	Select...	Select...	Select...	Enter text
Berm 1 Basin - East	Select...	Select...	Select...	Select...	Enter text
Berm 2 Basin	Select...	Select...	Select...	Select...	Enter text
Berm 3 Basin	Select...	Select...	Select...	Select...	Enter text
Berm 4 Basin	Select...	Select...	Select...	Select...	Enter text
Berm 5 Basin	Select...	Select...	Select...	Select...	Enter text
Berm 6 Basin	Select...	Select...	Select...	Select...	Enter text
Berm 7 Basin	Select...	Select...	Select...	Select...	Enter text
Buttress fill	Select...	Select...	Select...	Select...	Enter text

Settlement monuments—inspect integrity. Intact: Select...

Maintenance required, comments, and photo log:

Enter text

Original Landfill – Monitoring and Maintenance Plan Inspection Form

Slope Stability				
Region	Visible Cracks	Visible Seeps	Visible Block or Circular Failure	Other (Describe Below)
Cover– West	Select...	Select...	Select...	Enter text
Cover– East	Select...	Select...	Select...	Enter text
Buttress fill side slope	Select...	Select...	Select...	Enter text
West perimeter channel side slopes	Select...	Select...	Select...	Enter text
East perimeter channel side slopes	Select...	Select...	Select...	Enter text
Maintenance required, comments, and photo log: Enter text				

Soil Cover and Buttress				
Region	Visible Erosion	Visible Gullies	Visible Animal Burrows	Other (Describe Below)
Cover– West	Select...	Select...	Select...	Enter text
Cover– East	Select...	Select...	Select...	Enter text
Buttress fill	Select...	Select...	Select...	Enter text
Buttress fill side slope	Select...	Select...	Select...	Enter text
Maintenance required, comments, and photo log: Enter text				

Original Landfill – Monitoring and Maintenance Plan Inspection Form

Seep Evaluation				
Seep	Visible Saturation	Visible Flow	Approximate Flow	Description
Seep 1*	Select...	Select...	Select...	Enter text
Seep 2/3*	Select...	Select...	Select...	Enter text
Seep 4*	Select...	Select...	Select...	Enter text
Seep 5*	Select...	Select...	Select...	Enter text
Seep 6*	Select...	Select...	Select...	Enter text
Seep 7*	Select...	Select...	Select...	Enter text
Seep 8a	Select...	Select...	Select...	Enter text
Seep 8b	Select...	Select...	Select...	Enter text
Seep 8c	Select...	Select...	Select...	Enter text
Seep 9	Select...	Select...	Select...	Enter text
Seep 10	Select...	Select...	Select...	Enter text
Seep 10a	Select...	Select...	Select...	Enter text
Select...	Select...	Select...	Select...	Enter text
Select...	Select...	Select...	Select...	Enter text
Select...	Select...	Select...	Select...	Enter text
Select...	Select...	Select...	Select...	Enter text
Maintenance required, comments, and photo log: Enter text				

* Indicates seep was observed during or shortly after OLF closure in 2005.

NOTE: A seep is defined as an area where water percolates to the land surface or an area persistently moist whose source, as observed in multiple inspections, is confirmed to be groundwater and not surface water.

Original Landfill – Monitoring and Maintenance Plan Inspection Form

Water Management Structures						
Channels						
Structure	Visible Excessive Erosion, Gullyng, or Undermining	Visible Settlement, Subsidence, or Depressions	Visible Breaching or Bank Failure	Visible Animal Burrows	Visible Sediment Build-Up or Other Blockage	Comments
Diversion Berm 1	Select...	Select...	Select...	Select...	Select...	Enter text
Diversion Berm 2	Select...	Select...	Select...	Select...	Select...	Enter text
Diversion Berm 3	Select...	Select...	Select...	Select...	Select...	Enter text
Diversion Berm 4	Select...	Select...	Select...	Select...	Select...	Enter text
Diversion Berm 5	Select...	Select...	Select...	Select...	Select...	Enter text
Diversion Berm 6	Select...	Select...	Select...	Select...	Select...	Enter text
Diversion Berm 7	Select...	Select...	Select...	Select...	Select...	Enter text
West perimeter channel	Select...	Select...	Select...	Select...	Select...	Enter text
East perimeter channel	Select...	Select...	Select...	Select...	Select...	Enter text
Drains/Outfalls						
Structure	Visible Excessive Erosion, or Gullyng	Visible Sediment Build-Up or Other Blockage	Is Water Draining or Flowing from Structure?	Comments		
East Subsurface Drain – Solid pipe	Select...	Select...	Select...	Enter text		
East Subsurface Drain – Perforated pipe	Select...	Select...	Select...	Enter text		
French Drain (SID)	Select...	Select...	Select...	Enter text		
Maintenance required and photo log: Enter text						

Original Landfill – Monitoring and Maintenance Plan Inspection Form

“Run-On” Control		
Area	Adversely Affecting OLF	Comments
Run-on to the OLF (any direction)	Select...	Enter text
Enter text	Select...	Enter text
Enter text	Select...	Enter text
Maintenance required and photo log:		
Enter text		
Violations of Institutional Controls		
Item		Comments
Evidence of unauthorized ¹ excavations of cover and immediate vicinity of cover?	Select...	Enter text
Evidence of unauthorized ¹ construction of roads, trails, or buildings on cover?	Select...	Enter text
Evidence of unauthorized ¹ drilling of wells or use of groundwater?	Select...	Enter text
Damage to groundwater monitoring wells at OLF (upgradient or downgradient)?	Select...	Enter text
Other observations, maintenance required, comments, and photo log:		
Enter text		
If “Yes” is marked on any item in the Institutional Controls section, immediately notify your supervisor.		

¹ Unauthorized means not approved by RFLMA parties (DOE, EPA, CDPHE) through the consultative process. Actions covered under an approved soil disturbance review plan are authorized actions.

Original Landfill – Monitoring and Maintenance Plan Inspection Form

Action Items			
Deficiency	Action	Date Completed	Comments
Enter text	Enter text	Date	Enter text
Enter text	Enter text	Date	Enter text
Enter text	Enter text	Date	Enter text
Enter text	Enter text	Date	Enter text
Enter text	Enter text	Date	Enter text
Enter text	Enter text	Date	Enter text
Enter text	Enter text	Date	Enter text

Signatures	
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Inspector signature: _____ Date: _____

Reviewer signature: _____ Date: _____