

Appendix C: Landfill Inspection Forms - Fourth Quarter CY 2011

C.1 Original Landfill

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 10/31/11 TIME: 0900 REVIEWED BY: Greg Squill
 TEMPERATURE: 52° WEATHER CONDITIONS: Sunny + Clear REVIEW DATE: 10-31-11

SUBSIDENCE / CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates – Inspect integrity. Intact? Yes No

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

See attachment for details on cracks.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SEEPS (IF PRESENT)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

See attachment for details on seeps and surface cracks.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

Vegetation inspection completed in September

ORIGINAL LANDFILL - MONITORING AND MAINTENANCE PLAN INSPECTION FORM

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?
COVER- WEST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
COVER - EAST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 1		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 2		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 3		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 4		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 5		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 6		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 7		<input type="checkbox"/> Yes <input type="checkbox"/> No		
WEST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
EAST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
UPPER BUTTERESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		
LOWER BUTTRESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		

JAM

* Unwanted vegetation includes weeds and "woody vegetation." Woody vegetation within the OLF waste footprint shall be removed. Other locations shall be evaluated per Section 3.5.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES

CHANNELS

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
TEMPORARY CHECK DAMS*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

* Check dams may be removed after vegetation is established.

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM
STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL 1	<i>Good condition / Minimal sediment</i>
DIVERSION BERM OUTFALL 2	
DIVERSION BERM OUTFALL 3	
DIVERSION BERM OUTFALL 4	
DIVERSION BERM OUTFALL 5	
DIVERSION BERM OUTFALL 6	
DIVERSION BERM OUTFALL 7	
WEST PERIMETER CHANNEL OUTFALL	
EAST PERIMETER CHANNEL OUTFALL	
FRENCH DRAIN OUTFALL (SID)	

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

“RUN-ON” CONTROL

AREA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ADVERSELY AFFECTING OLF?
NORTH OF THE ORIGINAL LANDFILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: <i>N/A</i>
WEST OF THE WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: <i>N/A</i>
EAST OF THE EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: <i>N/A</i>
NORTH OF WOMAN CREEK	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: <i>N/A</i>

MAINTENANCE REQUIRED

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

ACTION ITEMS

DEFICIENCY	DATE NOTED	ACTION	DATE COMPLETED	COMMENTS
Repair cracks below berm 1, above berm 4, and above berm 7 next to EPL.	10/31/11	Fill and compact cracks with RF Alluvium.	* Repairs will be completed by site staff ASAP.	

INSPECTOR SIGNATURE: *[Signature]* DATE: 10/31/11

REVIEWER SIGNATURE: *[Signature]* DATE: 10-31-11

Original Landfill October 2011 Monthly Inspection—Attachment 1

The monthly inspection of the OLF was completed on October 31. The Site received approximately 10 inches of snow on October 25 and 26, however the cover was dry at the time of the inspection except for a few of the seep locations. The Rocky Flats Site received average amounts of precipitation for the month of October with a total of 1.29 inches. A few small cracks were observed on the OLF cover below berm 1 and above the East Perimeter Channel (EPC). These cracks will be filled with Rocky Flats Alluvium and compacted as directed by the geotechnical engineer's recommendations. The slump in the EPC remained unchanged.

Berm locations that were re-graded during the OLF Maintenance 2011 Project remained in good condition. Vegetation in the West Perimeter Channel continues to establish slowly.

Project Areas



Berm 1



West Perimeter Channel

Seeps

The Seep 1 area was dry, as usual. The area around Seeps 2 and 3 were dry and showed no surface expression. The area around Seeps 4 and 5 had some surface expression that was draining through the berm 3 drain as designed. The Seep 6 area has three locations above berm 7 that were dry. The Seep7 area was saturated, but had no surface flow. Surface flow at Seep 8 continues at a rate of approximately 1 gpm. The seep locations continue to support small amounts of wetland vegetation even though drier conditions are present.



Seep 4 and 5 Area



Seep 8 Area

EPC Slump

The slump that was observed on the eastern slope of the EPC toward the top of the channel remains unchanged. The wooden stakes that were installed around the perimeter of the slumping area have not moved. No vertical displacement is apparent. We will continue to monitor the slumping area for any changes during routine and nonroutine inspections of the OLF.

Cover Cracks

A few small cracks were observed on the OLF cover during the monthly inspection. One crack was located between berm 1 and berm 2 towards the middle of the landfill. This crack is in the area where the berm 1 subsidence was located and likely is associated with the movement of the slumping area. The crack was approximately 4 feet long and 2 inches wide.

Another crack was observed above the EPC towards the end of berm 4. This crack is approximately 3 feet long and 2 inches wide. Cracks have been previously observed in this location. According to the geotechnical engineer, these cracks are attributed to the steep headwall at the top of the EPC.

All observed cracks will be filled with Rocky Flats Alluvium and compacted. These repairs prevent precipitation from entering the cracks which may cause further movement.



Crack between Berm 1 and Berm 2



Crack above EPC

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 11/30/11 TIME: 1300 REVIEWED BY: Greg Sgall
 TEMPERATURE: 42°F WEATHER CONDITIONS: pt. cloudy REVIEW DATE: 11-30-11

SUBSIDENCE / CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates – Inspect integrity. Intact? Yes No

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

Cracks observed during the October inspection were repaired on 11/15/11.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SEEPS (IF PRESENT)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None. See Attachment 1 for details on Seeps.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

VEGETATION

OLF Vegetation Survey
11/9/11 Bay K Nelson

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?
COVER- WEST	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-100%	VETHI, ERCII, SAAMI, SAEMI, POBEI, <1%
COVER - EAST	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10-100%	VETHI, SAAMI, SAEMI, ELANI, CEDII <1%
DIVERSION BERM 1	None to good	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0-95%	— 0
DIVERSION BERM 2	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-95%	ERCII, <1%
DIVERSION BERM 3	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-100%	SAAMI, SAEMI, POBEI <3%
DIVERSION BERM 4	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-75%	CEDII, <1%
DIVERSION BERM 5	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-90%	CEDII, ERCII, <1%
DIVERSION BERM 6	Moderately to good	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	20-90%	— 0
DIVERSION BERM 7	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-85%	VETHI, ELANI, CEDII <1%
WEST PERIMETER CHANNEL	Sparsely to good	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5-90%	— 0
EAST PERIMETER CHANNEL	Sparsely to good	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5-90%	— 0
UPPER BUTTRESS FILL SIDESLOPE ^{top}	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10-90%	VETHI, POBEI <1%
LOWER BUTTRESS FILL SIDESLOPE ^{W. side}	Sparsely to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15-90%	VETHI, <1%

* Unwanted vegetation includes weeds and deep-rooting trees.

MAINTENANCE REQUIRED / COMMENTS/PHOTO LOG

Overall OLF vegetation looks great.

JKN 11/9/11

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES

CHANNELS

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
TEMPORARY CHECK DAMS*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

* Check dams may be removed after vegetation is established.

OTHER DEFICIENCIES?

None

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM
STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL 1	<p align="center"><i>Good condition / No sediment</i></p> 
DIVERSION BERM OUTFALL 2	
DIVERSION BERM OUTFALL 3	
DIVERSION BERM OUTFALL 4	
DIVERSION BERM OUTFALL 5	
DIVERSION BERM OUTFALL 6	
DIVERSION BERM OUTFALL 7	
WEST PERIMETER CHANNEL OUTFALL	
EAST PERIMETER CHANNEL OUTFALL	
FRENCH DRAIN OUTFALL (SID)	

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSTITUTIONAL CONTROLS

ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS, OR BUILDINGS ON COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —

OTHER DEFICIENCIES / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

ACTION ITEMS

DEFICIENCY	DATE NOTED	ACTION	DATE COMPLETED	COMMENTS
Small cracks observed below berm 1, above berm 4, and above berm 7 next to EPC	10/31/11	Fill and compact crack locations	11/15/11	-
Clean-out Geo-ridges	11/15/11	Remove vegetation from geo-ridges	11/15/11	Routine maintenance

INSPECTOR SIGNATURE: [Signature]

DATE: 11/30/11

REVIEWER SIGNATURE: [Signature]

DATE: 11-30-11

Original Landfill November 2011 Monthly Inspection—Attachment 1

The monthly inspection of the OLF was completed on November 30. The Rocky Flats Site received less than an inch of precipitation during the month of November. The small cracks that were observed on the OLF cover during the October monthly inspection were repaired. The slump in the EPC remained unchanged.

Berm locations that were re-graded during the OLF Maintenance 2011 Project remained in good condition. Vegetation on the landfill cover including the seep areas is now dormant.

Movement Monitors



Inclinometers



Settlement Monument

Inclinometers and Settlement Monuments are used to monitor movement on the landfill cover. Inclinometers are downloaded monthly and Settlement Monuments are surveyed quarterly. Very little movement has been observed on the OLF cover since December 2010.



West Perimeter Channel

Seeps

All of the seep locations, except for seep 8, were dry at the time of this inspection. Seep 8 continues to flow at a rate of approximately 1 gpm.



Seep 4 and 5 Area



Seep 8 Area

EPC Slump

The slump that was observed on the eastern slope of the EPC toward the top of the channel remains unchanged. The wooden stakes that were installed around the perimeter of the slumping area have not moved. No vertical displacement is apparent. We will continue to monitor the slumping area for any changes during routine and nonroutine inspections of the OLF.

Cover Cracks

A few small cracks were observed on the OLF cover during the October monthly inspection. One crack was located between berm 1 and berm 2 towards the middle of the landfill. This crack is in the area where the berm 1 subsidence was located and likely is associated with the movement of the slumping area. The crack was approximately 4 feet long and 2 inches wide.

Another crack was observed above the EPC towards the end of berm 4. This crack is approximately 3 feet long and 2 inches wide. Cracks have been previously observed in this location. According to the geotechnical engineer, these cracks are attributed to the steep headwall at the top of the EPC.

All observed cracks were filled with Rocky Flats Alluvium and compacted. These repairs prevent precipitation from entering the cracks which may cause further movement.



Repaired crack location below Berm 1

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 12/23/11 TIME: 1030 REVIEWED BY: [Signature]
 TEMPERATURE: 45°F WEATHER CONDITIONS: Sunny + clear REVIEW DATE: 12-23-11

SUBSIDENCE / CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates – Inspect integrity. Intact? Yes No

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SEEPS (IF PRESENT)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

See Attachment 1 For details on Seeps.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

The quarterly vegetation inspection was completed in November.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?
COVER- WEST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
COVER - EAST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 1		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 2		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>JAm</i>	
DIVERSION BERM 4		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 5		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 6		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 7		<input type="checkbox"/> Yes <input type="checkbox"/> No		
WEST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
EAST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
UPPER BUTTERESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		
LOWER BUTTRESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		

* Unwanted vegetation includes weeds and "woody vegetation." Woody vegetation within the OLF waste footprint shall be removed. Other locations shall be evaluated per Section 3.5.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES

CHANNELS

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
TEMPORARY CHECK DAMS*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

* Check dams may be removed after vegetation is established.

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM
STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL 1	<i>Good condition / No sediment</i>
DIVERSION BERM OUTFALL 2	
DIVERSION BERM OUTFALL 3	
DIVERSION BERM OUTFALL 4	
DIVERSION BERM OUTFALL 5	
DIVERSION BERM OUTFALL 6	
DIVERSION BERM OUTFALL 7	
WEST PERIMETER CHANNEL OUTFALL	
EAST PERIMETER CHANNEL OUTFALL	
FRENCH DRAIN OUTFALL (SID)	

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

“RUN-ON” CONTROL

AREA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ADVERSELY AFFECTING OLF?
NORTH OF THE ORIGINAL LANDFILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
WEST OF THE WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
EAST OF THE EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
NORTH OF WOMAN CREEK	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —

MAINTENANCE REQUIRED

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSTITUTIONAL CONTROLS

ITEM				
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT:	—
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS, OR BUILDINGS ON COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT:	—
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT:	—
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT:	—

OTHER DEFICIENCIES / PHOTO LOG

None.

Original Landfill December 2011 Monthly Inspection—Attachment 1

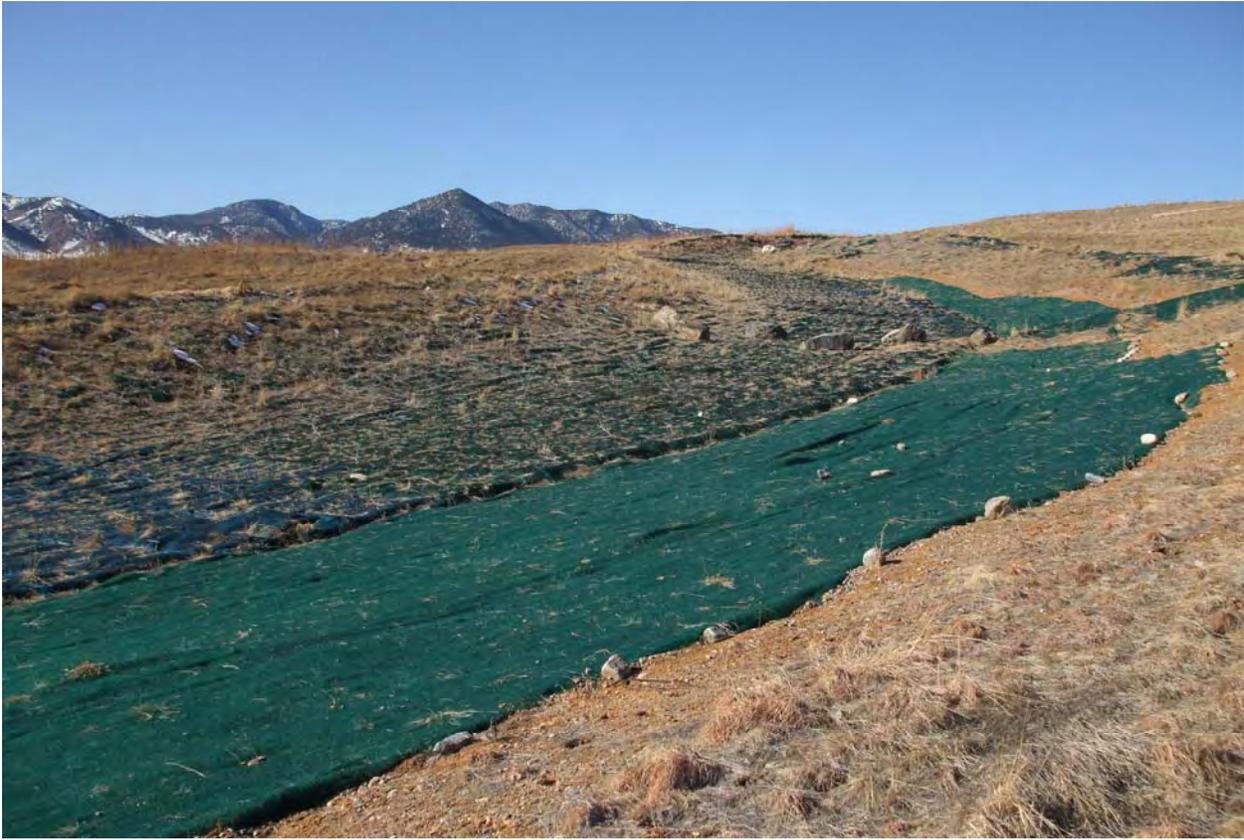
The monthly inspection of the OLF was completed on December 23. The Rocky Flats Site received almost 1 inch of precipitation during the month of December. The cover was saturated at the time of the inspection and no new cracks were observed. The slump in the East Perimeter Channel (EPC) remained unchanged.

Berm locations that were re-graded during the OLF Maintenance 2011 Project remained in good condition. Vegetation on the landfill cover including the seep areas remains dormant.

Project Areas



Berm 1 Area



West Perimeter Channel



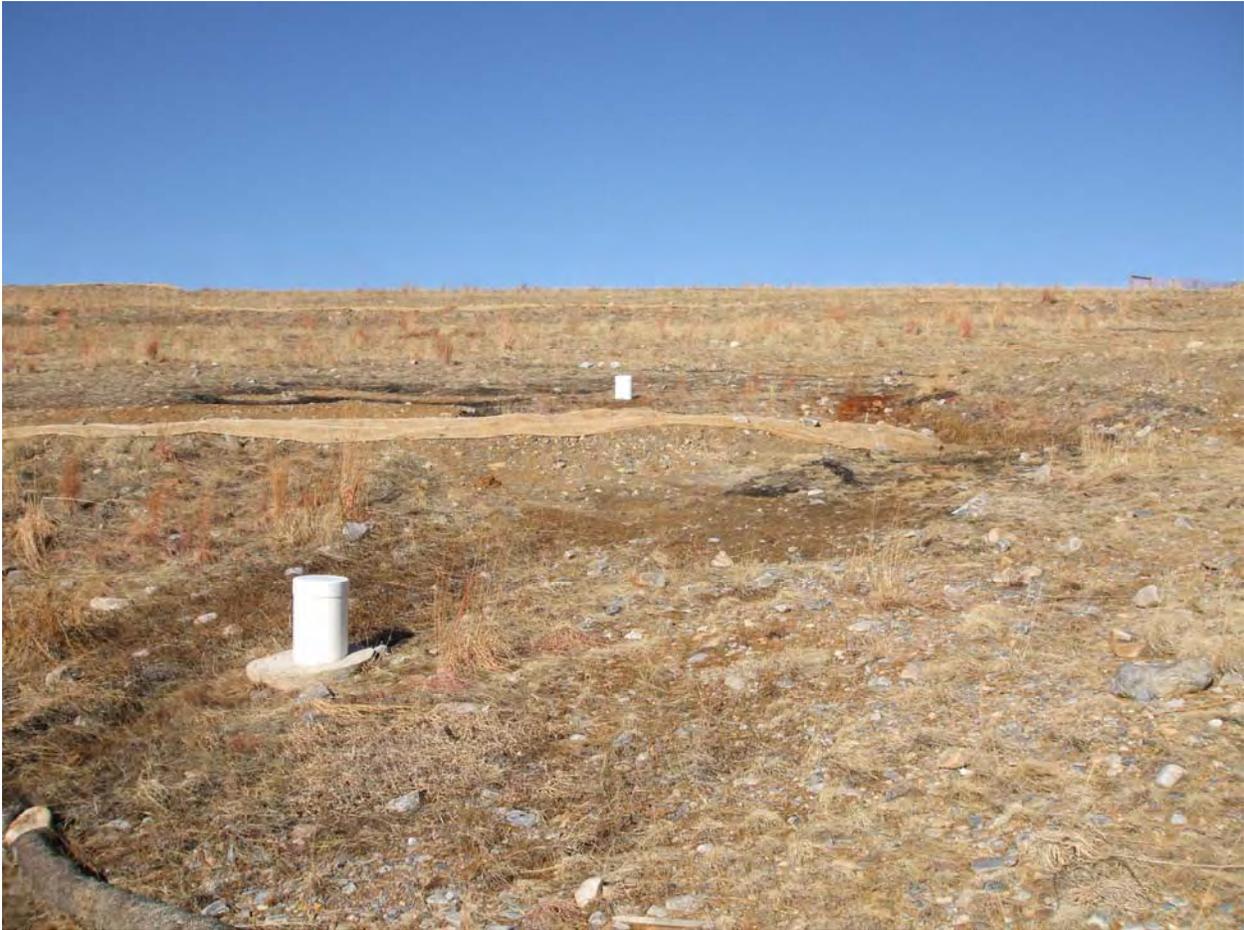
Berm 7 Outfall

Seeps

All of the seep locations were saturated at the time of this inspection due to the melting of a recent snowfall. Seep 7 was flowing at a rate of approximately .5 gallons per minute (gpm). Seep 8 was flowing at 3-5 gpm. No other seeps produced any surface flow.



Seep 4 and 5 Area



Seep 7 Area

EPC Slump

The slump that was observed on the eastern slope of the EPC toward the top of the channel remains unchanged. The wooden stakes that were installed around the perimeter of the slumping area have not moved. No vertical displacement is apparent. We will continue to monitor the slumping area for any changes during routine and nonroutine inspections of the OLF.



EPC Slump



OLF Cover

C.2 Present Landfill

PRESENT LANDFILL – MONITORING AND MAINTENANCE PROGRAM

INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 11/30/11 TIME: 1500 REVIEWED BY: Greg Spill
 TEMPERATURE: 42°F WEATHER CONDITIONS: pt. cloudy REVIEW DATE: 11-30-11
 METEOROLOGICAL STATION LOCATION: NREL Wind Site

SUBSIDENCE/CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
TOP OF COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
TOP OF COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – NORTH SEEP*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates and side-slope monitoring points to be inspected for integrity. During Year 1, they will be surveyed quarterly, and annually thereafter

Integrity intact?
 Yes No

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

* AREA OF SEEP IS OUTSIDE OF LANDFILL COVER AND EAST OF THE COVER ANCHOR TRENCH

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	EVIDENCE OF SEEPS?	OTHER (DESCRIBE BELOW)
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
PERIMETER CHANNEL OUTER SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
PERIMETER CHANNEL OUTER SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – NORTH SEEP*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

Seep area next to East Face was dry at the time of this inspection.

* AREA OF SEEP IS OUTSIDE OF LANDFILL COVER AND EAST OF THE COVER ANCHOR TRENCH

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
TOP OF COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
TOP OF COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
EAST FACE SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
EAST FACE SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
EAST FACE SLOPE – CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
AREA WHERE EAST SLOPE CENTRAL MEETS EAST SLOPE NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
AREA WHERE EAST SLOPE CENTRAL MEETS EAST SLOPE SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
	VENT CAPS IN PLACE & SECURE?	STANDPIPES IN GOOD CONDITION?	BIRDS OR INSECTS IN VENT CAPS?	
COVER – BAROMETRIC VENTS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	OTHER (DESCRIBE BELOW)
TOP OF COVER - WEST	good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	VETHI, CEDII,
TOP OF COVER - EAST	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, ERCH, VETHI, CANVI, LIDAI,
EAST FACE SLOPE - NORTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HYPEI, CIARI, VETHI,
EAST FACE SLOPE - SOUTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CIARI, HYPEI, CEDII,
EAST FACE SLOPE - CENTRAL	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	SAEXI, HYPEI , CIARI, HYPEI, CANVI
COVER SIDESLOPE - NORTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CIARI, VETHI,
COVER SIDESLOPE - SOUTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, VETHI,
VEGETATION-LINED PERIMETER CHANNEL - NORTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	VETHI,
VEGETATION-LINED PERIMETER CHANNEL - SOUTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	VETHI, ERCH, COARI, CEDII,

* Unwanted vegetation includes weeds and deep-rooting trees.

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

SEEP TREATMENT SYSTEM

REGION	EVIDENCE OF PLUGGING, OBSTRUCTIONS, OR EXCESS DEBRIS?	EVIDENCE OF CRACKS OR DETERIORATION?	OTHER (DESCRIBE BELOW)
GWIS INLET PIPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
STRIP DRAIN INLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
NORTH MANHOLE OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
SOUTH MANHOLE OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TREATMENT UNIT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TREATMENT UNIT OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
NORTH MANHOLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
SOUTH MANHOLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TREATMENT UNIT GRATING	NA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

STORMWATER MANAGEMENT STRUCTURES

CHANNELS/LINING

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?	EVIDENCE OF LINING DETERIORATION, HOLES, RIPS, OR SEPARATION?	EVIDENCE OF LINING DISPLACEMENT?
DIVERSION BERM	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
VEGETATION-LINED PERIMETER CHANNEL – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
VEGETATION-LINED PERIMETER CHANNEL – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
RIPRAP-LINED PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
C350-LINED EAST FACE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST FACE RIPRAP CHANNEL – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST FACE RIPRAP CHANNEL – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION/SEDIMENT DEPTH
DIVERSION BERM OUTFALL – NORTH	<i>Good condition / No Sediment</i> 
DIVERSION BERM OUTFALL – SOUTH	
CULVERT 1 OUTFALL	
CULVERT 2 OUTFALL	
SOUTHWEST CULVERT OUTFALL	

CULVERTS

CHECK EACH STRUCTURE FOR BLOCKAGE, SURROUNDING CONDITIONS, BREACHING, SEDIMENT BUILD-UP, AND INLET/OUTLET CONDITIONS.

STRUCTURE	CONDITION
CULVERT 1	<i>Good condition</i> 
CULVERT 2	
SOUTHWEST CULVERT	

MAINTENANCE REQUIRED/PHOTO LOG

None

"RUN-ON" EROSION CONTROL

AREA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ADVERSELY AFFECTING PLF?
RUN-ON INTO PERIMETER CHANNEL -- NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
RUN-ON INTO PERIMETER CHANNEL -- SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
NATURAL DRAINAGE FED BY CULVERT 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
NATURAL DRAINAGE FED BY NORTHEAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
NATURAL DRAINAGE FED BY RIPRAP	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —

MAINTENANCE REQUIRED/PHOTO LOG

Name _____

INSTITUTIONAL CONTROLS

ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF CONSTRUCTION OF ROADS OR TRAILS ON COVER OR BUILDINGS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF UNAUTHORIZED ENTRY?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
DISRUPTION OR DAMAGE OF SEEP TREATMENT SYSTEM?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -

OTHER DEFICIENCIES/PHOTO LOG

None.
