Annual CCR Landfill
PE Inspection

Utility Waste Landfill
New Madrid Power Plant
New Madrid, MO

Associated Electric Cooperative, Inc.

Inspection

Visual Inspection

On January 11, 2017, a visual inspection of the landfill was completed to identify signs of distress or malfunction. The following subsections and enclosed inspection report describe the conditions observed during the inspection.

Changes in Geometry

Since the last inspection, the current cell has reached an elevation and the first bench has been added, per design. In addition, intermediate cover has been placed on the side slopes to protect the slopes and prevent erosion.

Volumes

The landfill storage volume is estimated to be approximately 944,000 cubic yards. This estimate is based on topographic survey data from November 2015 plus a prorated 14 months of operation at an estimated annual disposal rate.

Inspection for Structural Weaknesses

The landfill was visually inspected for any appearances of an actual or potential structural weakness of the CCR unit. The visual inspection did not indicate any deficiencies. Details of this inspection can be found in the enclosed inspection checklist.

Changes Since Previous Inspection

Since the last inspection, construction of the next existing cell has been completed. This cell was constructed per original design in a phased approach, therefore stability of Cell 1 should not be affected. Should there be a release from Cell 1 to Cell 2, no adverse impacts are expected since Cell 2 construction is complete and the cell meets the requirements of the Utility Waste Landfill.

Certification

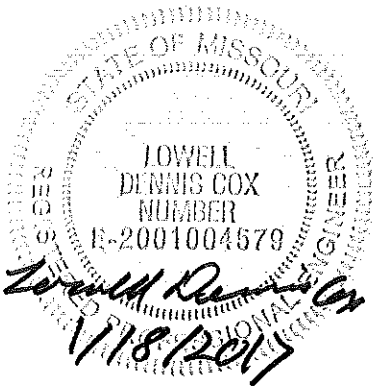
The assessment of the general condition of the landfill is based upon available data and visual observation as required by 40 CFR 257.84 (b) – Inspection Requirements for CCR Landfills. In reviewing this report, it should be realized that the described condition of the landfill is based on observations of field conditions at the time of inspection. Conditions of landfills depend on numerous internal and external conditions, therefore it should be noted that the estimates and observations only represent the conditions at the time of inspection.

Signed: Lowell Dennis Cox

Print Name: Lowell Dennis Cox

Missouri License Number: E-2001004579

Date: 1/18/2017



Annual CCR Landfill Inspection Report

Facility Name: AECI NMPP UWL Inspection Date: 11 January 2017

Owner/Operator: AECI New Madrid Power Plant

Persons Present During Inspection		
Name	**Title/Position**	**Representing**
Dennis Cox	Senior Engineer	AECI
Josh Huber	Engineering CoOp	AECI
Person Responsible for Inspection		
Dennis Cox	Senior Engineer	AECI

Operations Record Review				
Item	**Comments/Observations**	NO ACTION	MONITOR	REPAIR
Are weekly inspections being performed and records kept in the facility record?	Yes, weekly inspections and reports are performed by AECI and kept in the landfill operating record.	X		
Has facility record been reviewed as part of this inspection?	Yes, 7-day inspection records were reviewed.	X		

Facility Operations	**Comments/Observations**	NO ACTION	MONITOR	REPAIR
Is facility access restricted by fences, gates, etc. to control access?	Yes, access is restricted by fencity and security check-in to plant facility.	X		
Is CCR placement consistent with design plans?	Yes, placement of CCR and configuration of the landfill appears to be in accordance with Phase I Construction Drawings and Construction Permit Application.	X		
Is CCR being placed in lifts and compactive effort applied?	Yes, CCR is trucked in and spread in 4-6 inch lifts. Compactive effort is achieved through dozer compaction.	X		
Is CCR being placed in a manner to promote positive drainage?	Yes, positive drainage was being maintained.	X		
Is there evidence of water ponding in the active fill area?	No evidence of water was observed at the time of the inspection.	X		
Is the liner system and leachate collection system being maintained and operating properly?	Yes. The leachate collection system, including the Phase I pump and the leachate collection pond loadout pump were operating as designed, per discussion with plant personnel.	X		
Are haul roads properly maintained and generally in good condition?	Yes. No further comment.	X		

Facility Operations (cont'd)	Comments/Observations	NO ACTION	MONITOR	REPAIR
Are stormwater run-on and run-off controls being maintained?	Yes. Perimeter berms control both run-on and run-off. The stormwater pipes, ditch, and sedimentation pond were operating in accordance with intended design.	x		
Is there evidence of discharges to Waters of the U.S. ?	No. Run-off is controlled by perimeter berms.	x		

Stability	Comments/Observations	NO ACTION	MONITOR	REPAIR
Is there evidence of erosion on fill slopes or in-active landfill areas?	Yes. Perimeter berms control both run-on and run-off. The stormwater pipes, ditch, and sedimentation pond were operating in accordance with intended design.	X		
Is there evidence of surface cracking at top of CCR fill or along any slope benches?	None observed at the time of the inspection.	X		
Is there evidence of sinkholes or animal burrows?	None observed at the time of the inspection.	X		
Are fill slopes in accordance with design plans?	Yes, positive drainage was being maintained.	X		
Is there evidence of slides, sloughs or scarps?	None observed at the time of the inspection.	X		
Is there any evidence of water seepage through fill slopes or at toe of fill slopes?	None observed at the time of the inspection.	X		
Is there evidence of movement, erosion, or instability in any soil embankments retaining CCR at the landfill?	No evidence of movement, erosion, or instability in the perimeter berms was observed.	X		
Is vegetation present in in-active/closed landfill areas? Comment on density, height, and type.	Intermediate cover has been established on Cell 1 North, East, and West slopes with consistant vegitation on these slopes. Vegitation was not present in the placed ash.	X		

Additional Comments: