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December 14, 2022

Mr. Leif Tolokken
Manager, Water and Waste Programs
Dairyland Power Cooperative
3200 East Avenue South
La Crosse, WI 54601

Subject: Alma Off-Site Disposal Facility – Phase IV Landfill
2022 Annual Inspection by a Professional Engineer

Dear Mr. Tolokken:

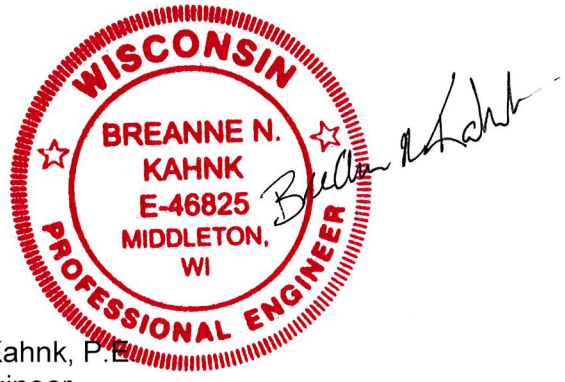
This letter presents the results of the inspection of the Alma Off-Site Disposal Facility – Phase IV Landfill located in the town of Belvidere, Buffalo County, Wisconsin. Prior to the inspection TRC reviewed the permitting documents, the weekly inspection forms, the operational plans, and the documents posted on the publicly accessible website.

On November 9, 2022, BreAnne Kahnk, PE, of TRC Environmental Corporation (TRC) along with Todd Martin and Zach Bauman, PE, of TRC performed an on-site inspection of Dairyland Power Cooperative's (DPC) coal combustion residual landfill with Leif Tolokken and Brian Kalvelage of DPC. Attached to this letter are the inspection report and a photographic log to document the observed conditions.

Based on the documents reviewed and the site inspection, the landfill is designed, constructed, operated, and maintained consistent with good engineering practices. The site was being operated in a safe manner and there were no indications of structural weakness at the time of the inspection.

Sincerely,

TRC



BreAnne Kahnk, P.E.
Senior Engineer

Attachments: Landfill Inspection Checklist
Photographic Log

cc: Todd Martin, Zach Bauman – TRC

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PROJECT/PROPOSAL NAME	PREPARED		CHECKED		PROJECT/PROPOSAL NO.
	By:	Date:	By:	Date:	
Dairyland Power Cooperative Phase IV, Alma Off-site Disposal Facility	B. Kahnk	11.21.2022	T. Martin	12.05.2022	469888.0000

Landfill Annual Inspection Report

Purpose:

This inspection checklist has been developed to meet the requirements for inspections by a qualified professional engineer for a coal combustion residual (CCR) landfill. This checklist exceeds the requirements for 40 Code of Federal Regulations 257.84(b). This inspection of the Alma Off-Site Disposal Facility Phase IV Landfill was performed by TRC Environmental Corporation on behalf of Dairyland Power Cooperative (DPC).

The goal of the inspection is to ensure that the design, construction, operation, and maintenance is consistent with recognized good engineering practices. In addition, the inspection looked for conditions of structural weakness or conditions that may affect the safe operation of the CCR unit.

The following were performed for the inspection of the CCR unit.

Review of Available Information:

The following documents were reviewed in preparation of the site visit.

- Health and Safety Plan
- Fugitive Dust Control Plan (12/29/2021)
- Groundwater Monitoring Program (10/2017)
- Dust Control Report (12/2021)
- Post-Closure Plan (10/2016)
- Closure Plan (10/2016)
- Run-on and Run-off Control System Plan (10/2021)
- Annual Landfill Inspection Report (12/16/2021)
- Location Restrictions (5/2018)
- Weekly inspections performed by qualified personnel (11/10/2021 through 11/8/2022)

Comments on the Operating Record:

Electronic system that is well organized and accessible from the office at the landfill. Able to access weekly inspections, reports, and records of government notifications.

Summary of the Site Conditions (based on document review):

DPC operates a CCR landfill (Alma Off-Site Disposal Facility Phase IV Landfill) located in the NE 1/4 of the NE 1/4 of Section 19 and portions of Sections 18 and 20, T21N, R12W, Town of Belvidere, Buffalo County, Wisconsin. The location of the Phase IV landfill is in a valley including 3 phases of non-contiguous closed landfills. This inspection addresses the Phase IV landfill, because the Phase 1, II, and III landfills were closed prior to the promulgation of the federal CCR rule (40 Code of Federal Regulations 257.50 through 107).

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The Phase IV landfill is permitted through the State of Wisconsin (License #4126). To date, the liner system for Cells 1, 2A, 2B, 3A and 3B have been constructed. Final cover has been installed over a portion of Cells 1, 2A, and 2B. There is an interim geosynthetic cover over a portion of the CCR in Cells 2B, 3A and 3B. Cell 3B, the most recently constructed cell of the Phase IV landfill, was constructed during May through August 2015. The landfill construction includes a composite liner system, composite cover system, leachate collection system, leachate storage tank, and storm water controls (diversion berms, sedimentation basin, ditching, and downslope flumes).

Changes to the unit since the previous report:

Since the inspection in 2021, there has been continued placement of CCR into Cells 2B, 3A, and 3B. No additional temporary geosynthetic cover has been placed at the landfill.

Approximate volume of CCR in the unit at the time of the inspection: Approximately 1,301,000 cubic yards of CCR have been placed in the Phase IV landfill based on the November 15, 2022 topographic survey.

Visual Inspection:

A site visit and visual inspection were performed by BreAnne Kahnk, Todd Martin and Zach Bauman (TRC Environmental Corporation) on November 9, 2022

Time arrived on site: 10:00 a.m.
Time departed from site: 12:10 p.m.
DPC Personnel Present: Leif Tolokken & Brian Kalvelage
Weather Conditions: sunny, clear, 60s

Summary of Items Visually Inspected: Electronic operating record, weekly inspection forms, sedimentation basin, perimeter/access road, perimeter run-on controls including stormwater channels, outlets, culverts; final cover areas including diversion berms and vegetation; working area conditions; surface condition at the leachate collection tank and leachate transfer manholes; and flow into leachate tank.

Site Operations during Inspection: No CCR placement occurred during the site visit.

Appearance of structural conditions:

Final Cover Conditions (Cell 1, 2A, and 2B areas):

Vegetation Condition: In general, the cover system had a dense, well-established stand of native prairie vegetation present. Small localized areas of sparse vegetation were observed on the final cover over Cell 1.

Evidence of Erosion:	Yes: ____	None: X
Evidence of slumping, sloughing, or slope distress:	Yes: ____	None: X
Evidence of seepage:	Yes: ____	None: X

Comments: Well maintained.

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Perimeter Berm:

Vegetation Condition: Dense vegetation, native prairie.

Evidence of Erosion: Yes: ____ None: X

Cracking along crest: Access Road along crest Yes: ____ None: X

Evidence of slumping, sloughing, or slope distress: Yes: ____ None: X

Evidence of seepage: Yes: ____ None: X

Phase Delineation Berms: Exposed geomembrane in good condition, sufficient clearance for containing runoff within the cell.

Comments: Exposed geomembrane not showing signs of deterioration or damage.

Stormwater Controls:

Run-on Controls: Diversion berms and grading provide adequate drainage away from open areas.

Perimeter Drainage Ditches: Erosion prevented by vegetation, areas around inlets are clear and protected by stone. Minor amount of woody vegetation observed in perimeter drainage ditches.

Comments: Continue to keep drainage ditches clear. Remove woody vegetation. No other concerns at this time.

Run-off Controls: Final Cover

Diversion Berms: Good condition. Well-maintained with good vegetative cover, no erosion observed, and clear of obstructions. Small localized areas with sparce vegetation were observed on the final cover over Cell 1.

Comments: Overseed areas with sparce vegetation.

Downslope Flumes: Well-maintained; outlets were cleared of vegetation and good rock protection present. Drains down to perimeter ditches clear.

Ditching: No erosion observed, clear, good slope. No standing water observed.

Comments: Stormwater controls are well-maintained at the site. Good drainage and conveyance to the sedimentation basin, no obstructions observed. Check dams along perimeter ditching in good condition. Good stand of vegetation in diversion berms and perimeter ditching. Remove woody vegetation observed in perimeter ditches.

Sedimentation Basin No. 1:

Outlets Operational: Yes, clear, no debris and not deformed; stone filter visible at base

Culverts Operational: Yes, clear, inlet and outlet protection for culverts

Comments: Little standing water in sedimentation basin due to overnight rain. Some downed vegetation was observed along sidewall of sedimentation basin, monitor the vegetation to confirm it does not become displaced.

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Operating Conditions:

Changes in Operation since the previous annual inspection: No significant changes in site operations.

Access Road Conditions:
Durable paved, well groomed. Very minor tracking of a soil and ash mixture observed at egress from Phase IV (northern approximately 50 feet of paved surface). No tracking was observed on the remainder of access road.
Comments: Sweep landfill egress as needed, especially following rain events.

Landfill Operations:

Temporary Storm Water Controls: Diversions and grading to prevent runoff, slopes maintained to provide sufficient freeboard to maintain containment.

Working Face Conditions: No waste placement occurring; operational face is well maintained. Working face was damp from recent rain that occurred overnight.

Access roads: Good condition; no active waste placement conditions during inspection.

Fugitive Dust Observed: Yes: ____ No: X

Comments: No dust observed during site visit. Recent rain overnight provided sufficient moisture to mitigate dusting.

Leachate Management: No leachate ponding observed within cell. Constructed vertical sand drains inside Cell 2B to connect leachate collection system to the surface. Leachate observed flowing into tank.

Ash Tracked Out on Access Road? Yes: X None: ____

Leachate Collection System: Well maintained at surface.

Pipe Cleanouts: Accessible, recently jetted, protected by bollards, name tags in place.

Tank: Controls are accessible and appear operational

Loadout Area: Accessible and operational.

Comments: Appears to be a well-maintained system used for daily site operations.

Conditions that may potentially impact safety: None observed

Observed Deficiencies and Proposed Corrective Actions: None observed

Future Action:

– Continue monitoring and maintenance of stormwater controls.
– Continued implementation of dust control practices.
– Remove woody vegetation from perimeter drainage ditches.
– Continue to monitor vegetation for signs of displacement or disturbance.
– Overseed small localized areas with sparce vegetative cover.
– Sweep landfill egress as needed, especially following rain event

Photographic Log

Client Name:	Site Location:	Project No.:
Dairyland Power Cooperative	Phase IV Landfill Alma Off-Site Disposal Facility	469888.0000

Photo No.	Date
1	11/09/2022

Description:
Asphalt paved site entrance road looking towards the entrance to the facility.

Photo No.	Date
2	11/09/2022

Description:
Sedimentation Basin 1 outlet. Vegetation established at the base. Gravel placed surrounding base of outlet pipe. No distressed vegetation or sloughing observed in the sideslopes. Minor standing water near outlet pipe due to overnight rain.

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Photo No.	Date
3	11/09/2022

Description:
Perimeter road is well maintained and provides access around the landfill. Leachate headwell protected by bollards. In background of photo, vegetation established on Area 1 and Area 2 final cover.

Photo No.	Date
4	11/09/2022

Description:
CCR filling area showing Cell 3 delineation berm. Sufficient space and berm height provided to control runoff within the landfill. In the foreground of the photo, the temporary white geosynthetic cover is visible with ballast materials to protect from wind uplift.

Photographic Log

Client Name:	Site Location:	Project No.:
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Photo No.	Date
5	11/09/2022

Description
Perimeter drainage ditch with rock check dam.

Photo No.	Date
6	11/09/2022

Description:
Box culvert to improve storm water conveyance around perimeter of site. Grouted riprap protects sideslopes at transition. No obstructions observed in the perimeter ditch or at conveyance structures.

Photographic Log

Client Name:	Site Location:	Project No.:
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Photo No.	Date
7	11/09/2022

Description:
Active filling area of the landfill (Cell 3A and 3B). Phase delineation berm in the foreground. No evidence of unstable conditions. No fugitive dust observed.

Photo No.	Date
8	11/09/2021

Description:
Riprap ditch protection in perimeter ditch. Minor vegetative growth not impacting performance. Dense vegetation is established around ditch and ditch is clear of obstructions.

Photographic Log

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Photo No.	Date
9	11/09/2022

Description:
Asphalt paved access road at entrance filling area. Minor tracking of a mix of soil and ash observed at egress from Phase IV.

Photo No.	Date
10	11/09/2022

Description:
Wheel shakers installed at egress of Phase IV Landfill to minimize/prevent tracking.

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Client Name:	Site Location:	Project No.:
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Photo No.	Date
11	11/09/2022

Description:
Leachate tank surface features; cleared, accessible, and in good working order. Observed leachate flowing into the tank.