

April 23, 2025

Brian L. Rath, P.E.
Environmental Engineer Senior
IDNR – Land Quality Bureau
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321



**RE: SEMI-ANNUAL INSPECTION – SPRING, 2025
CEDAR RAPIDS WPCF ASH MONOFILL
IDNR PERMIT #57-SDP-07-85P
HLW PN 3422-24A.750**

Dear Mr. Rath:

In accordance with the General Provisions of the SDP Permit dated January 9, 2025, a semi-annual inspection of the Cedar Rapids WPCF Ash Monofill was personally conducted the morning of April 17, 2025. Jason Decker, Environmental & Compliance Program Manager with the City of Cedar Rapids, accompanied me on the inspection. Conditions at the time of the inspection were overcast with light to moderate rainfall and temperatures in the 50's.

The monofill consists of two approved ash sludge disposal areas: the South Disposal Area and the North Disposal Area (now referred to as North 1 Disposal Area). Ash was historically excavated and disposed of during scheduled WPCF incinerator shutdowns; however, with the presence of two lined disposal areas ash disposal is no longer limited to the scheduled incinerator shutdowns which allows staff flexibility in scheduling ash removal operations.

The South Disposal Area was placed into operation on April 23, 2012. The North 1 Disposal Area was approved for ash disposal in Permit Amendment #2 dated November 15, 2016.

As per WPCF staff, since the beginning of 2023 ash disposal has been directed into the disposal areas as follows:

- North 1 Disposal Area from October 10, 2022 to March 8, 2023.
- South Disposal Area from March 8, 2023 to May 12, 2023.
- North 1 Disposal Area from May 12, 2023 to August 14, 2023.
- South Disposal Area from August 14, 2023 to August 16, 2023.
- North 1 Disposal Area from August 16, 2023 to August 23, 2023.
- South Disposal Area from August 23, 2023 to November 15, 2023
- North 1 Disposal Area from November 15, 2023 to May 10, 2024
- South Disposal Area from May 10, 2024 to July 16, 2024
- North 1 Disposal Area from July 16, 2024 to October 16, 2024
- South Disposal Area from October 16, 2024 to November 22, 2024
- North 1 Disposal Area from November 22, 2024 to February 26, 2025
- South Disposal Area from February 26, 2025 to present.

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Ash removal since the Fall, 2024 semi-annual inspection has been as follows:

- Approximately 557 dry tons of ash removed, North 1 Disposal Area, November, 2024
- Approximately 1,976 dry tons of ash removed, South Disposal Area, December, 2024
- Approximately 1,379 dry tons of ash removed, South Disposal Area, January, 2025
- Approximately 380 dry tons of ash removed, North 1 Disposal Area, March, 2025

Dewatered ash is hauled to the Lee Crawford Quarry for beneficial use under Beneficial Use Determination (BUD) Authorization No. 57-BUD-23-97. This BUD is effective through January 2, 2027. Adequate capacity remains in the North and South Disposal Areas for current operations.

Status of the Permit

The Sanitary Disposal Project Permit for the Cedar Rapids WPCF Ash Monofill was renewed on January 9, 2025 and expires on January 9, 2028. The site has received the following permit amendments to date:

- Permit Revision #1, January 23, 2025, updated General Provision IX of the permit to require online submittal of tonnage reports.

Annual Water Quality Report

The 2024 Annual Water Quality Report (AWQR) was submitted to IDNR on December 16, 2024 (Doc #111490). IDNR comments on the 2024 AWQR have not been received to date.

As per Special Provision X.4 of the SDP Permit, MW-1, MW-4, MW-23, and MW-26 have been abandoned in conjunction with the North 2 Disposal Area project. As per the permit, MW-4 and MW-23 will be replaced. MW-24 was also mistakenly abandoned. A Teams meeting was held on March 26, 2025 with City of Cedar Rapids, IDNR, and HLW personnel to discuss MW-24. MW-24 has been replaced with MW-24R. Monitoring well abandonment documentation for MW-1, MW-4, MW-23, MW-24, and MW-26 was submitted to IDNR on March 26, 2025 (Doc #112610).

Mr. Decker and I discussed submission of the well construction documentation to IDNR.

As per the SDP Permit, MW-2, MW-3R1, MW-22, and MW-24 (replaced with MW-24R) may be abandoned after the South Disposal Area is removed and if constituents are below the groundwater protection standard. Mr. Decker and I discussed continuing to sample these wells until IDNR grants approval for abandonment.

Monitoring Well Maintenance Performance Reevaluation Plan

The most recent Monitoring Well Maintenance Performance Reevaluation Plan (MWMPRP) was included in the 2024 AWQR submitted to IDNR on December 16, 2024 (Doc #111490). The Plan recommended no significant modifications to the Hydrologic Monitoring System Plan (HMSP) or site monitoring wells; however, significant changes to the HMSP are anticipated later this year due to the completion of the current construction activities. As per IDNR Regulations, the MWMPRP is required every 5 years.

Financial Assurance

2025 Financial Assurance documentation was submitted to IDNR on January 14, 2025 (Doc #111836) and approved by IDNR on March 27, 2025 (Doc #112619).

Special Provisions of the SDP Permit

1. The permit holder is authorized to accept sewage sludge incinerator ash slurry from the Cedar Rapids WPCF for storage and dewatering prior to disposal.
2.
 - a) No changes.
 - b) No changes.
 - c) Results from TCLP testing of the ash in accordance with this provision were included in the 2024 SDP Permit Renewal documentation submitted to IDNR on July 14, 2024 (Doc #110268). TCLP test results for the ash are also submitted to IDNR in accordance with the BUD Authorization.
 - d)-j) No changes.
3. No changes.
4. No changes.
5. No changes.
6. No changes.
7. No changes.

Based on observations during the inspection, along with discussions with Mr. Decker, the facility appears to be in general conformance with the SDP Permit.

Additional Comments

Work on the new North 2 Disposal area is ongoing. Piping improvements have been made and the majority of the compacted clay liner portion of the base liner has been installed.

The flexible membrane liner in the anchor trench on the north perimeter of the North 1 Disposal Area was damaged during construction activities associated with the North 2 Disposal Area. IDNR was notified of the damage. The flexible membrane liner in this area has been exposed; however, repairs have not been completed to date.

Work on the North 2 Disposal Area required the inlet pipes for the existing disposal areas to be relocated as follows:

- North 1 Disposal Area – relocated to the northeast corner.
- South Disposal Area - relocated to the northwest corner

IDNR Field Office #1 completed an inspection of the site on September 10, 2024. The report contained no requirements and stated that “This facility appears to be operated in general compliance with its permit and departmental rules.”

Leachate lines were cleaned in July, 2024 (North 1 Disposal Area) and September, 2024 (South Disposal Area). As per the 3 year cleaning frequency required by IDNR the lines should be cleaned in 2027.

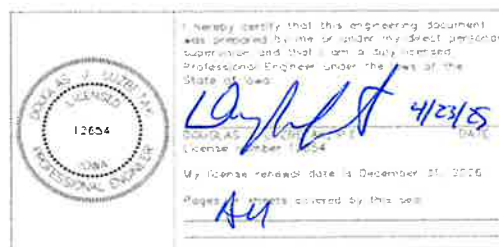
As reported in past AWQR’s, elevated levels in the leachate head monitoring point in the North 1 Disposal Area have historically been recorded. All measurements in the leachate head monitoring point in 2025 have been less than 12”. The 2023-2025 measurements are attached.

All measurements in the leachate head monitoring point in the South Disposal Area in 2025 to date have been less than 12” (2023-2025 measurements attached).

All measurements in the groundwater head monitoring point in the South Disposal Area in 2025 to date have been less than 12” (2023-2025 measurements attached). Note that groundwater collected by the groundwater diversion system under the South Disposal Area is combined with the leachate from the North and South Disposal Areas and conveyed to the WPCF for treatment and disposal.

Recommendations

1. Repair flexible membrane liner along north perimeter of North 1 Disposal Area.
2. Submit well construction documentation for MW-24R.
3. HLW will include discussion on levels in the leachate head monitoring points in the North and South Disposal Areas and the groundwater head monitoring point in the South Disposal Area in the 2025 AWQR.
4. Continue operations in accordance with the SDP Permit.



cc: Jason Decker, Utilities Environmental & Compliance Program Manager, Cedar Rapids WPCF (electronic copy)

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Ash Lagoon Underdrain Level Measurements
City of Cedar Rapids Water Pollution Control Facilities

Date	Time	North Ash Lagoon Leachate		
		Ground Water	South Ash Lagoon Collection Pipe	Drainage Media
1/5/2023	15:52	--	--	0.6
1/6/2023	8:12	0.4'	<1'	--
2/1/2023	11:28	0.3'	<1'	0.6
3/1/2023	8:18	0.4'	<1'	0.7'
4/3/2023	8:25	0.4'	0.3'	0.7'
5/1/2023	8:47	0.4'	0.3'	0.8'
6/1/2023	9:23	0.4'	0.2'	0.8'
7/3/2023	8:47	0.8'	0.2'	0.9'
8/1/2023	8:25	0.9'	0.1'	1.0'
9/1/2023	9:03	0.8'	0.3'	0.9'
10/2/2023	8:48	0.8'	0.4'	0.9'
11/1/2023	8:59	0.9'	0.4'	1.0'
12/1/2023	10:56	0.9'	0.4'	1.0'
1/2/2024	8:59	0.9'	0.4'	0.8'
2/1/2024	14:40	0.2'	0.3'	1.1'
3/1/2024	8:42	0.3'	0.2'	0.5'
4/1/2024	10:29	0.6'	0.5'	0.6'
5/1/2024	9:48	0.5'	0.4'	0.8'
6/5/2024	8:24	0.4'	0.3'	0.6'
7/1/2024	9:06	0.5'	0.4'	0.6'
8/1/2024	11:42	0.4'	0.3'	
8/7/2024	12:17			0.8'
9/5/2024	10:11	0.9'	0.4'	0.9'
10/1/2024	8:26	0.9'	0.5'	0.8'
11/1/2024	9:50	0.7'	0.5'	0.7'
12/2/2024	9:35	0.7'	0.2'	0.9'
1/2/2025	9:51	0.9'	0.4'	0.9'
2/10/2025	13:49	0.9'	0.6'	0.5'
3/3/2025	9:24	0.7'	0.3'	0.9'
4/1/2025	9:31	0.6'	0.3'	0.9'