



Solid By-Product Management Plan

Incinerator Ash at Cedar Rapids Water Pollution Control Facilities
Revision Date: 02/10/2026

This Solid By-Product Management Plan for Incinerator Ash at the City of Cedar Rapids Water Pollution Control Facilities (CRWPCF) is required as part of the Beneficial Use Determination permit (IDNR No. 57-BUD-23-97) held by Lee Crawford Quarry Company, the provider of storage and disposal of incinerator ash generated at CRWPCF, which holds Ash Monofill permit IDNR No. 57-SDP-07-85P, expiration 1/09/2028.

Source: CRWPCF operates a multiple hearth sewage sludge incinerator at the facility located at 7525 Bertram Rd SE, Cedar Rapids, IA. The facility processes approximately 12,500 to 13,500 dry tons of sewage slugged annually. Between 85% and 90% of this sewage sludge is incinerated, generating 3,5000 dry tons of ash (the remaining sewage sludge is alkaline stabilized, and land applied). The ash generated is slurried with plant effluent and conveyed to one of two ash storage lagoons (IDNR permit 57-SDP-07- 85P).

Sampling: Incinerator ash is sampled quarterly from the operating ash lagoon. Samples are sent to the State Hygienic Lab in Coralville, IA and analyzed for TCLP, SPLP, and RCRA total metals.

Storage: CRWPCF stores incinerator ash in alternating use of two on-site ash lagoon cells permitted as landfills under DNR Permit Number 57-SDP-07-85P. Ash slurry flow is regularly sent to one of the two cells (North 1 or North 2) until it nears capacity. At that time, ash slurry flow is changed to the empty ash lagoon and the full ash lagoon is drained of liquid, allowing the ash to cake and dry. After the ash has sufficiently dried, it is excavated and hauled to Lee Crawford Quarry for beneficial use. Transitions between North 1 and North 2 lagoons occur approximately twice per year. CRWPCF lagoons have a total capacity of approximately 10,030 dry tons of incinerator ash. Due to the ash being stored in lagoons, there is minimal potential for run off and uncontrolled dispersion.

Location where ash is beneficially used:

Lee Crawford Quarry

5707 F Ave NW, Cedar Rapids, IA 52405

From January 1, 2025 to December 31, 2025 2,446.30 tons of incinerator ash from CRWPF were utilized for the project.

If you have any questions, please feel free to contact me.

A handwritten signature in cursive script, reading "Margaret Nelson".

Margaret A. Nelson

Utilities Environmental and Compliance Program Manager

City of Cedar Rapids Water Pollution Control Facility



Solid By-Product Management Plan

Lime Sludge at Cedar Rapids Water Treatment Facilities
Revision Date: 02/10/2026

This Solid By-Product Management Plan for lime sludge at the City of Cedar Rapids Water Treatment Plant (CRWTP) is required by the Beneficial Use Determination permit (IDNR ID No. 57-BUD-23- 97) held by Lee Crawford Quarry Company, the provider of storage and disposal of lime sludge from the CRWTP J Avenue Plant and East Well Field storage area.

Source: CRWTP J Avenue Water Treatment Plant processes on average 26 MGD of water and utilizes a lime softening process in the treatment. This process generates approximately 18,000 dry tons of residual lime annually. The lime is centrifuged to remove the solids, with approximately 10,000 dry tons of lime hauled out for beneficial use at Lee Crawford Quarry. The centrate, which is conveyed via a piping system to the East Well Field storage area and residual lime conveyed to the East Well Field when a basin is drained for cleaning account for the approximately 8,000 dry tons annually discharged to the East Well Field. This system of trenches allows for residual solids in the centrate to dewater; the solids are then hauled to Lee Crawford Quarry.

Sampling: Samples are collected quarterly for both the centrifuged lime and the dewatered centrate lime. Samples are sent to the State Hygienic Lab in Coralville, IA and analyzed for TCLP, SPLP, and RCRA total metals.

Storage: The lime hauled straight from the centrifuge is not stored on site. It is loaded into a truck and hauled to Lee Crawford Quarry as it leaves the centrifuge. The centrate is dewatered and held at the East Well Field until it is hauled out for beneficial use as fill at the Lee Crawford Quarry. Due to lime being stored in lagoons, there is minimal potential for run off and uncontrolled dispersion. The maximum anticipated inventory for lime in the East Well Field is approximately 8,000 tons with a maximum storage time of one year.

Location where lime sludge is beneficially used:

Lee Crawford Quarry

5707 FAve NW, Cedar Rapids, IA 52405

From January 1, 2025, to December 31, 2025, 10,065.88 tons of lime sludge were utilized from the East Well field and 11,369.90 tons were utilized from the J Ave. centrifuge.

If you have any questions, please feel free to contact me.

A handwritten signature in cursive script that reads "Margaret Nelson".

Margaret A. Nelson

Utilities Environmental and Compliance Program Manager
City of Cedar Rapids Water Pollution Control Facility