

# **CCR Landfill 2025 Annual Inspection Report**

## **NC2 Ash Disposal Area**

**Omaha Public Power District**  
**Nebraska City Station**



*Nebraska City, Nebraska*  
**January 10, 2026**

**OPPD Nebraska City Station**  
**NC2 Ash Disposal Area**  
**CCR Landfill 2025 Annual Inspection Report**

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**OPPD Nebraska City Station  
NC2 Ash Disposal Area  
CCR Landfill 2025 Annual Inspection Report**

**Professional Engineer Certification**

"I hereby certify that the CCR landfill known as the NC2 Ash Disposal Area at the Nebraska City Generating Station, owned and operated by the Omaha Public Power District, was inspected and this report prepared in accordance with the Coal Combustion Residual Rule 40 CFR 257.84(b). I am a duly licensed Professional Engineer under the laws of the State of Nebraska."

Name: Joseph R. Shields. PE

Registration State: Nebraska

Registration Number: E-8034

Date: 1/10/2026

My license renewal date is December 31, 2026.

# 1 Introduction

Omaha Public Power District (OPPD), Nebraska City Generating Station (NCS) currently operates an active coal combustion residual (CCR) landfill, referred to as the NC2 Ash Disposal Area. On April 17, 2015, the U.S. Environmental Protection Agency (EPA) published the final rule for the regulation and management of CCR under Subtitle D of the Resource Conservation and Recovery Act (CCR Rule). Requirements for the disposal and handling of CCR within units (either landfills or surface impoundments) are defined in 40 Code of Federal Regulations (CFR) Section 257.

Section 257.84(b) of the regulations specifies that an owner or operator of a CCR landfill have a qualified professional engineer inspect the landfill annually to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. This annual inspection report meets this requirement for the NC2 Ash Disposal Area.

## 1.1 Purpose

The CCR rule requires the initial inspection report for existing CCR landfills be completed and filed in the operating record on an annual basis. The completion date of the last inspection report (i.e., placed in the facility operating record) establishes the deadline to complete the next inspection. Subsequent inspections and reports must be completed and filed on an annual basis. The requirements of the annual inspection include:

- A review of available information regarding the status and condition of the CCR unit - 257.84 (B)(1)(i),
- A visual inspection of the CCR unit to identify signs of distress or malfunction - 257.84 (B)(1)(ii),
- An inspection report that includes the following:
  - Changes in geometry since the last inspection - 257.84 (B)(2)(i)
  - Approximate volume of CCR in unit at time of inspection - 257.84 (B)(2)(ii)
  - Appearance of actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit - 257.84 (B)(2)(iii)
  - Any other changes which may have affected the stability or operation of the CCR unit since the last inspection - 257.84 (B)(2)(iv)

OPPD, as owner and operator of the Station, must notify the Nebraska Department of Water, Energy, and Environment (DWEE) Director within 30 days of placing the CCR Landfill Annual Inspection Report in the operating record and posting to the CCR web site (40 CFR §257.106 and §257.107).

## 1.2 Facility Background

The Station is located 5.5 miles southeast of Nebraska City, Nebraska, along the west bank of the Missouri River. NC2 Ash Disposal Area CCR landfill is permitted under NDWEE Title 132

regulations for fossil fuel combustion ash disposal area (NDWEE Permit No. NE0204421, Facility ID 58343). The NC2 Ash Disposal Area is a CCR landfill with a composite liner and leachate collection system and encompasses a total of 40.7 acres. A facility site map is included in Appendix A.

## **2 Review of Available Information (40 CFR 257.84(B)(1)(i))**

Documents pertaining to the operation and structural integrity of the CCR landfill were reviewed, including:

- The CCR Landfill weekly inspection records (per Section 257.84(a))
- DWEE Title 132 Permit No. NE0204421 and the permit renewal documents
- Documentation regarding NC2 Ash Disposal Area, Cell 1 Closure
- Documentation on the application of dust control agents

Review of the above documents did not uncover any unresolved issues that indicated operational, safety or structural concerns of the CCR landfill. Currently, Cell 1 of the NC2 Ash Disposal Area has been graded and received final cover. It is considered partially closed. Landfilling operations continue in Cells 2 and 3, and into Cell 1 where its west end adjoins to Cell 2.

## **3 Visual Site Inspection (40 CFR 257.84(B)(1)(ii))**

On December 22, 2025, OPPD personnel performed a site inspection of the NC2 Ash Disposal Area, including:

- Joseph R. Shields PE, Senior Engineer
- Megan Seymour, PE, Environmental Affairs Program Administrator
- Payton Beckmann, Environmental Specialist
- Jason Teten, Chemist

The weather during the site visit was partly cloudy with temperatures approximately 45 degrees Fahrenheit and windy. The site was free of snow cover.

### **3.1 Extent of Inspection**

The inspection included a driving and walking review of the NC2 Ash Disposal Area. As the CCR rule only requires the inspection of the existing active CCR landfill itself, this report does not address the condition of the groundwater monitoring system, access roads beyond the landfill perimeter, grades and drainage channels that are not a component of the CCR landfill.

The field visit included inspection of the following:

- Perimeter channel conditions
- Side slope conditions

- General drainage
- Leachate pond(s)

### 3.2 Inspection Findings

The following are the findings of the site inspection:

- Minor erosion has been noted at the south and west toe and slope of Cells 2 and 3. At the time of inspection, erosion does not appear to be currently impacting stability or drainage. OPPD's landfill contractor is required to conduct periodic maintenance to maintain the flow of drainage and mitigate slope erosion. Weekly inspections by OPPD monitor erosion conditions.
- Repair of leachate pumps for Cells 2 and 3 was completed in the Spring of 2025; however, based on inspection reports, the pump in Cell 2 appeared to stop working in October 2025 and Cell 3 pump appeared to stop working in November 2025. Plans for repair of each are in progress.
- Slopes and let down structures on Cell 1 were in good condition and no deficiencies were noted.
- CCR is placed, spread, and compacted in Cells 2 and 3. As lifts are completed they are covered with bottom ash and are sprayed annually with a dust control agent to minimize wind erosion. Documentation on the application of dust control agents was reviewed.
- Leachate ponds were mostly empty and the time of inspection. Deposition of ash near where stormwater runoff from Cell 2 and Cell 3 discharges into Cell 2/3 Leachate Pond was evident. OPPD is developing plans to remove ash deposition from this pond in the first half of 2026.

## 4 Changes in Geometry

The CCR rule requires that the site geometry changes be identified since the last annual inspection. CCR placement in Cells 2 and 3 continuously changes the geometry. Landfilling activities are continuing at grades approximating the design slopes. The south and west slopes were regraded in 2025 to more closely match final waste grades shown in the closure design.

## 5 Approximate CCR Volume

Total ash disposal is estimated on the August 2024 survey, the weight of material deposited in the landfill based on daily records, and the permitted landfill airspace. Permitted landfill airspace is 7.34 million cubic yards and the remaining airspace based on the August 2024 survey is 1,744,150 cubic yards; therefore, the ash volume deposited in NC2 was about 5,595,850 cubic yards. From August 2024 through November 2025, it is estimated that 175,220 cubic yards were landfilled, bringing the total to about 5,771,070 cubic yards.

## 6 Appearance of Structural Weakness

Based on the visual inspection, no apparent or potential structural weaknesses were observed.

## **7 Changes Affecting Stability or Operation**

The CCR rule requires identification of changes that affect stability or operation of the CCR landfill since the last annual inspection. No changes that affect stability were identified.

## **Appendix A**

### **Facility Site Map**

