SUNFLOWER ELECTRIC POWER CORPORATION

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ANNUAL LANDFILL INSPECTION REPORT

Sunflower Electric Power Corporation
Holcomb Station Unit #1
2440 Holcomb Lane / P.O. Box 430
Holcomb, KS 67851

January 7, 2022

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LIST OF APPENDICES

LIST OF ACRONYMS

CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
EPRI	Electric Power Research Institute
FGD	Flue Gas Desulfurization

1.0 INSPECTION

The annual inspection of the Sunflower Electric CCR landfill was performed on January 7, 2022 by Emily Vsetecka, Manager, Environmental and Laboratory Services. The purpose of this inspection is to comply with the CCR rule.

2.0 DESCRIPTION AND HISTORY OF LANDFILL

2.1 General Overview

FGD materials, fly ash, and bottom ash produced by the plant are disposed of in the Holcomb Landfill. These materials are delivered to the landfill by truck.

2.2 Location

The Landfill is located approximately 1.0 mile north of Holcomb Station. The plant is located five miles south of Holcomb, KS in the north Half of Section 29, Township 24S, Range 33W.

2.3 Landfill Description

Holcomb Station operates (1) CCR industrial landfill called Holcomb Common Facilities, LLC. Holcomb has the only industrial landfill in the western part of the state. The Landfill accepts CCR material along with basin sludge, baghouse bags, and concrete. The landfill consists of multiple phases with Phase 3A as the current, active phase.

The Landfill includes an area of approximately 292 acres with a landfill footprint of 190 acres.

2.4 Performance History

There are no reported incidences of slope failure on Phase 3A.

2.5 Construction History

The plant has disposed of CCR in Phase 3A of the landfill since May, 2013.

2.6 Review of Operational Records

Design, construction and the results of weekly inspection reports were reviewed for the annual inspection.

2.6.1 Design and Construction Information

The landfill area is approximately 292 acres with a landfill footprint of 190 acres and a volume of 18,169,000 cubic yards. Phases 1, 2A and 2B of the landfill no longer accept waste, Phase 3A is the current, active phase for disposal.

2.6.2 Results of Weekly Inspection by a Qualified Person

The landfill is subject to periodic inspections by the Sunflower Electric environmental staff. The 2021 inspection reports were reviewed. The inspector observed any maintenance required on the landfill, any erosion on the slopes and vegetation on the inactive phases. The repairs made to the inactive phase slope were monitored with no additional erosion. Seeding was also completed on Phase 2 cap with additional vegetation growth in 2021. These inspections are documented and retained by Sunflower Electric. The weekly inspections by the environmental staff are appropriate for compliance with the CCR rule. A sample of Sunflower's Inspection Form can be found in Appendix B.

2.6.3 Results of Previous Annual Inspections

The previous annual inspection conducted under the CCR rule for Holcomb Landfill did not indicate any concerns. This report and other pertinent reports and data will be available at the following website: http://sunflowernet.azurewebsites.net/sunflower-electric-documents/.

3.0 FIELD INSPECTION OF HOLCOMB LANDFILL

A field inspection was conducted on January 7, 2022 by Emily Vsetecka, Manager, Environmental & Laboratory Services of Sunflower Electric.

A photograph log documenting the landfill at the time of the inspection is presented in Appendix A. The Annual Inspection checklist is presented in Appendix C.

3.1 General

The field inspection was performed by Emily Vsetecka. The inspection took place by driving around the active landfill to identify any areas of concern and to provide a baseline for future inspections.

3.2 Volume of CCR

Sunflower estimates the amount of CCR in storage at the time of the inspection to be 450,535 tons and approximately 391,965 cubic yards.

3.3 Actual or Potential Structural Weaknesses

There were no appearances of actual or potential structural weakness or existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit.

3.4 Observed Changes

This is the seventh annual inspection conducted under the CCR rule for the Holcomb Landfill. Normal disposal activities were taking place on the landfill at the time of the inspection. The landfill has had 51,149 tons of CCR placed in the landfill since the last inspection. The Phase 3A waste pit had been expanded to accommodate the waste from the 2021 basin cleanout and seeding was completed on Phase 2 cap with additional vegetation growth this year.

4.0 ENGINEERING CERTIFICATION

Pursuant to 40 CFR 257.84 and by means of this certification, I attest that:

(i) I am familiar with the requirements of the CCR Rule (40 CFR 257);

(ii) I, or my agent, have visited and examined the Holcomb Station;

(iii) the Annual Inspection Report has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the CCR Rule.

Emily D. Vsetecka
Printed Name of Qualified Professional Engineer

Emily Vsetecka
Signature of Qualified Professional Engineer

Registration/License No. 20380 State: Kansas

Appendix A

Inspection Photographs

Photo 1: Entrance road to Phase 3A

Photo 2: Phase 3A looking east. On top of waste pit.

Photo 3: Contact water ditch for Landfill looking west

Photo 4: East end of contact water ditch to evaporation basin

Photo 5: On access road around Phase 3A

Photo 6: Looking south from access road around Phase 3A

Appendix B

Weekly Inspection Form

Sunflower Electric Power Corporation

CCR Landfill
Weekly Inspection Report

Name of CCR Landfill: Holcomb Common Facilities, LLC
Qualified Inspector: _____
Landfill ID Number Kansas Permit No. 420
Date: _____ **Time:** _____
Owner: Sunflower Electric Power Corporation
Weather: _____
Operator: Sunflower Electric Power Corporation
Precipitation (since last inspection): ___ in.
Site Conditions: _____

I. Perimeter Slope

1. Is there an access road around the perimeter slope? ___ Yes ___ No
   If 'Yes', describe (good condition, numerous cracks, newly paved, stone uniformly distributed, etc.) _____

2. Are there any depressions, ruts, or holes on the access road? ___ Yes ___ No
   If 'Yes', describe (size, location, etc.) _____

II. Landfill Conditions

1. Describe operations in the landfill (disposal, reclamation, general operational activities): _____

2. Are any stormwater controls obstructed? ___ Yes ___ No
   If 'Yes', describe (type of debris, reason for obstruction, etc.) _____

3. Are there indications of erosion on the landfill slopes? ___ Yes ___ No
   If 'Yes', describe what type and its condition (rill, gully, dimensions, etc.) _____

4. Other observations around the landfill (changes since last inspection, etc.): _____

III. Repairs, Maintenance, Action Items

1. Has any routine maintenance been conducted since the last inspection? ___ Yes ___ No
   If 'Yes', describe. _____

2. Have any repairs been made since the last inspection? ___ Yes ___ No
   If 'Yes', describe. _____

Sunflower Electric Power Corporation | **CCR Landfill Weekly Inspection Report**

3. Are there any areas of potential concern? ___ Yes ___ No
If 'Yes', describe.

4. Has this inspection identified any need for repair or maintenance? ___ Yes ___ No
If 'Yes', describe and state the urgency of maintenance. "Urgent" for maintenance that should be conducted as soo as possible, "Moderate" for maintenance that should be conducted within three months, and "Not Urgent" for maintenance that can be conducted in a year.

IV. Photographs

Photographs can be taken of notable features. List of photographs:

	Location	Direction of Photo	Description
i.			
ii.			
iii.			
iv.			
v.			
vi.			
vii.			
viii.			
ix.			
x.			

V. General Notes

Appendix C

Annual Inspection Checklist

Checklist for Annual Inspections of CCR Landfills

Annual structural stability assessments shall be conducted to document whether the CCR unit has been designed, constructed, operated, and maintained in accordance with Federal Register Vol. 80, No. 74, Rule §257.84(b). The assessment must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures with respect to items one (1) through three (3) listed below. If a deficiency or a release is identified during the assessment, the owner or operator of the unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

The checklist is intended to provide general guidance to comply with the minimum requirements for the annual structural stability assessment of CCR Landfills. The annual inspection should be completed and certified by a qualified professional engineer (i.e., an individual who is licensed by the state where the CCR Unit is located as a professional engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart). The following checklist items should be addressed:

1. Review of Operational Records (as applicable) including:

   ☐ Design and Construction Information
   ☐ Results of Weekly Inspection by A Qualified Person
   ☐ Results of Previous Annual Inspections
   ☐ Other Documents: _____
   Comments: _____
   _____
   _____

2. Conducted a visual inspection of the CCR unit to identify signs of distress or malfunction of the unit and appurtenant structures.
   Note: the Weekly Inspection form(s) may be used to facilitate the visual inspection augmented for site specific conditions.

   ☐ Yes ☐ No Comments: _____
   ☐ N/A _____

3. Compiled an inspection report addressing items one (1) and two (2), above, in addition to:

   ☐ Changes in geometry of the CCR Landfill since the previous annual inspection.
   ☐ Approximate volume of CCR contained in the CCR Landfill. Storage capacity of the CCR Landfill structure at the time of the inspection.
   ☐ Any appearances of actual or potential structural weakness of the CCR Landfill.
   ☐ Any existing conditions that are disrupting of have the potential to disrupt the operation and safety of the CCR Landfill and appurtenant structures.

☐ Any other changes which may have affected the stability or operation of the CCR Landfill since the previous annual inspection.

Comments: _____

_____

_____

_____

_____

Name of Qualified Professional Engineer: _____

License Number: _____

Date of Inspection: _____

Signature: _____