




**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, 2019

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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, 2019 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 188 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 188 acres and a volume of 17,792,000 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 2018 inspection reports were reviewed. The concerns noted in the weekly inspection reports indicated ongoing work to fill in low areas, some slight erosion on the north slope, and the east slope corrected to a 5:1 slope. 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 rules for Holcomb Landfill did indicate concerns with slope erosion on the inactive phases due to significant fall 2017 rainfall. The intent is to make repairs after the cap on the inactive phase is finalized. This report and other pertinent reports and data will be available at the following website:

<http://sunflower.net.azurewebsites.net/sunflower-electric-documents/>.

3.0 FIELD INSPECTION OF HOLCOMB LANDFILL

A field inspection was conducted on January 7, 2019 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 297,035 tons and approximately 256,064 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 fourth annual inspection conducted under the CCR rules for the Holcomb Landfill. There were no activities on the landfill at the time of the inspection. The landfill has had 54,623 tons of CCR placed in the landfill since the last inspection. The Phase 3A waste pit was expanded to the north and walls heightened to increase the size in preparation for the 2018 scheduled outage and the 'B' basin clean out.

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: East side of Phase 3A looking west



Photo 4: East side of Phase 3A looking east at contact water ditch



Photo 5: East end of contact water ditch for Landfill looking west



Photo 6: East end of contact water ditch to evaporation basin



Photo 7: Access road around Phase 3A



Photo 8: Looking south from access road around Phase 3A

Appendix B
Weekly Inspection Form

Sunflower Electric
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CCR Landfill
Weekly Inspection Report

Name of CCR Landfill	<u>Holcomb Common Facilities, LLC</u>	Qualified Inspector	_____
Landfill ID Number	<u>Kansas Permit No. 426</u>	Date:	_____ Time: _____
Owner:	<u>Sunflower Electric Power Corporation</u>	Weather:	_____
Operator:	<u>Sunflower Electric Power Corporation</u>	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 _____

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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 soon 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

- 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: _____