

**2021 ANNUAL INSPECTION OF CCR SURFACE IMPOUNDMENT BY QUALIFIED PROFESSIONAL ENGINEER
40 CFR 257.83**

FACILITY INFORMATION

Facility Name / Location	Jeffrey Energy Center / St Marys, KS
Owner Name	Evergy Kansas Central, Inc.
CCR Unit	Bottom Ash Settling Area (Surface Impoundment)
Inspection Date	December 7, 2021

ANNUAL CCR UNIT INSPECTION REPORT

Rule	Inspection Results																								
<p>§257.83(b)(2)(i):</p> <p><i>“(2) Inspection report. The qualified professional engineer must prepare a report following each inspection that addresses the following:</i></p> <p><i>(i) Any changes in geometry of the impounding structure since the previous annual inspection;”</i></p>	<p>A visual inspection of the Bottom Ash Settling Area and associated features was completed on December 7, 2021, by Mr. Richard Southorn, a qualified professional engineer (QPE) and/or his designated representative. No changes in the geometry of the impounding structure were noted since the 2020 site inspection.</p>																								
<p>§257.83(b)(2)(ii):</p> <p><i>“(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;”</i></p>	<p>No instrumentation is associated with the impoundment.</p>																								
<p>§257.83(b)(2)(iii):</p> <p><i>“(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;”</i></p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #D3D3D3;"> <th>Water</th> <th>Depth (ft)</th> <th>Elevation (MSL)</th> </tr> </thead> <tbody> <tr> <td>Minimum</td> <td>0</td> <td>1,230</td> </tr> <tr> <td>Maximum</td> <td>7.5</td> <td>1,237.5</td> </tr> <tr> <td>Present</td> <td>0</td> <td>1,230</td> </tr> <tr style="background-color: #D3D3D3;"> <th>CCR</th> <th>Depth (ft)</th> <th>Elevation (MSL)</th> </tr> <tr> <td>Minimum</td> <td>9</td> <td>1,230</td> </tr> <tr> <td>Maximum</td> <td>42</td> <td>1,242</td> </tr> <tr> <td>Present</td> <td>9-42</td> <td>1,230-1,242</td> </tr> </tbody> </table>	Water	Depth (ft)	Elevation (MSL)	Minimum	0	1,230	Maximum	7.5	1,237.5	Present	0	1,230	CCR	Depth (ft)	Elevation (MSL)	Minimum	9	1,230	Maximum	42	1,242	Present	9-42	1,230-1,242
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<p>§257.83(b)(2)(iv):</p> <p><i>“(iv) The storage capacity of the impounding structure at the time of the inspection;”</i></p>	<p>Approximately 534,000 cubic yards¹.</p>																								
<p>§257.83(b)(2)(v):</p> <p><i>“(v) The approximate volume of the impounded water and CCR at the time of the inspection;”</i></p>	<p>Approximately 436,000 million cubic yards².</p>																								

<p>§257.83(b)(2)(vi):</p> <p>“(vi) Any appearances of an 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 and appurtenant structures;”</p>	<p>At the time of inspection, slope appearance, stability, and overall impoundment conditions were assessed. The 2021 Periodic Structural Stability Assessment report for this unit was also reviewed as part of this assessment. Evergy has remedied each deficiency identified within that report. Specifically, Evergy has filled in an animal burrow, regraded an eroded area around the outlet pipe, provided additional slope protection, diverted surface water from the impoundment, and has installed a perforated pipe within the outlet structure.</p> <p>No actual or potential structural weaknesses that are or could have the potential to disrupt the operation or safety of the Impoundment were noted at the time of the annual inspection. No signs of distress or malfunction that may contribute to instability of the Impoundment were observed³.</p>
<p>§257.83(b)(2)(vii):</p> <p>“(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.”</p>	<p>Other than the improvements noted above, there have been no changes to the impoundment that have affected the stability or operation of the impounding structure since the previous annual inspection.</p>

1. Storage capacity calculations was estimated by Aptim Environmental and Infrastructure, LLC (Aptim) in the 2020 Annual Inspection Report.
2. The 2021 volume estimate was estimated from Aptim in the 2020 Annual Inspection Report, less approximately 5,000 cy of previously impounded water that was not present at the time of the 2021 inspection.
3. The QPE reviewed §257.83(a)(1) 7-day and 30-day reports as part of the annual inspection.

PROFESSIONAL ENGINEER CERTIFICATION

The undersigned registered professional engineer is familiar with the requirements of the CCR Rule and has visited and examined the CCR unit or has supervised examination of the CCR unit by appropriately qualified personnel. I hereby certify based on a review of available information within the Jeffrey Energy Center’s operating records and observations from my and/or my designated representative’s personal on-site inspection, that this CCR unit does not exhibit any appearances of actual/potential structural weakness that would be disruptive to the safety or normal operations of the CCR unit. The unit is being operated and maintained consistent with recognized and generally accepted good engineering standards and practices. This certification was prepared as required by 40 CFR Part §257.83.

Name of Professional Engineer: Richard Southorn, P.E.

Professional Engineer Seal:

