



Gibbons Creek Environmental
Redevelopment Group, LLC

2023 GIBBONS CREEK
ANNUAL CCR UNIT
INSPECTION FOR ASH PONDS
A, B, AND C

Gibbons Creek Steam Electric Station

Anderson, Texas

February 10, 2023

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BACKGROUND

40 CFR Subpart D § 257.83(b) and 257.84(b) requires that coal combustion residual units (CCR Units) be inspected annually by a qualified professional engineer. The GCERG, a subsidiary of Charah Solutions, Inc., as the owner of the Gibbons Creek Steam Electric Station (GCSES), has retained HDR to inspect the CCR Units at their facility and prepare a written report.

The CCR units at the GCSES consist of the Scrubber Pond, Ash Ponds, and Site F Landfill. The Ash Ponds are three adjoining and connected CCR surface impoundments (ponds A, B, and C) separated by earthen dikes and hydraulic gates. The ponds are located approximately 3,000 feet southeast of the GCSES administration buildings. Each pond is approximately 1,820 feet long and 245 feet wide at the dike crest interior top of bank and approximately 20 feet deep. The interior area of the three ponds combined is approximately 30.7 acres. The bottom of the Ash Ponds is at elevation 250.0 ft-msl and the crest is at elevation 270 ft msl.

The Ash Ponds underwent the CCR closure by removal process in 2022 and are no longer required to be inspected per 40 CFR Subpart D § 257.104(a). They were certified closed on the following dates:

- Ash Pond A certified closed on April 18, 2022
- Ash Pond B certified closed on March 21, 2022
- Ash Pond C certified closed on May 16, 2022

Inspections of the CCR Units occurred on January 23, 2023. The inspections were performed by:

- Stephen Dugger, GCERG Environmental Scientist
- Dave Vogt, P.E., HDR Engineering, Inc.

The last formal inspection of Gibbons Creek's Ash Ponds occurred on January 19, 2022.

The last recorded rainfall event prior to this inspection occurred on January 19, 2023. The site received 0.37 inches of rainfall that day. On the date of inspection, the ground was moist and there were areas of standing water present.

Ash Ponds Regulatory Conclusion

§ 257.83 (b) (1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

- (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections):

Weekly inspections of Ash Ponds were performed on the structure until the CCR material and impacted soils were removed and the Ash Ponds were certified closed. David Vogt, P.E. reviewed those pertinent files available in the operating record, the 2016 structural stability assessment, the 2022 weekly Ash Ponds inspection reports, and the 2021 annual inspection report.

- (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures:

The ponds were certified closed in 2022, and an inspection per § 257.83 is no longer required.

- (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation:

The ponds were certified closed in 2022, and an inspection per § 257.83 is no longer required.

(2) Inspection report. The qualified professional engineer must prepare a report following each inspection that addresses the following:

- (i) Any changes in geometry of the impounding structure since the previous annual inspection:

The ponds were certified closed in 2022, and an inspection per § 257.83 is no longer required.

- (ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection:

There is no instrumentation at the ponds. The ponds were certified closed in 2022, and an inspection per § 257.83 is no longer required.

- (iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection:

Since the previous inspection, the ponds only contained trace amounts of CCR material while the closure process was completed. Upon closure completion, no CCR remained in the pond.

	<i>Minimum Depth</i>	<i>Minimum Elevation</i>	<i>Maximum Depth</i>	<i>Maximum Elevation</i>	<i>Present Depth</i>	<i>Present Elevation</i>
<i>Ash Pond A</i>	<i>0'</i>	<i>250.0' msl</i>	<i>1'</i>	<i>251.0' msl</i>	<i>1'</i>	<i>251.0'</i>
<i>Ash Pond B</i>	<i>0'</i>	<i>250.0' msl</i>	<i>1'</i>	<i>251.0' msl</i>	<i>1'</i>	<i>251.0'</i>
<i>Ash Pond C</i>	<i>0'</i>	<i>250.0' msl</i>	<i>1'</i>	<i>251.0' msl</i>	<i>1'</i>	<i>251.0'</i>

(iv) The storage capacity of the impounding structure at the time of the inspection:

The combined storage capacity of the Ash Ponds is 456-acre feet (approximately 152-acre feet per pond).

(v) The approximate volume of the impounded water and CCR at the time of the inspection:

	Water Volume (acre-feet)	CCR Volume (CY)
Ash Pond A	10.2	0
Ash Pond B	10.2	0
Ash Pond C	10.2	0

(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; and

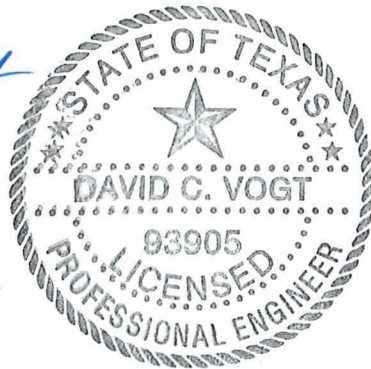
The ponds were certified closed in 2022, and the ponds no longer function as a CCR unit.

(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

The ponds were certified closed in 2022, and the ponds no longer function as a CCR unit.

This inspection report was prepared by:


2/10/23



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