



Gibbons Creek Environmental Redevelopment Group, LLC

2023 GIBBONS CREEK ANNUAL CCR UNIT INSPECTION SCRUBBER SLUDGE POND

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 Sludge Pond, Ash Ponds, and Site F Landfill. The Scrubber Sludge Pond is located approximately 3,300 feet southeast of the GCSES administration buildings. The pond is approximately 750 feet long and 380 feet wide at the north end and 470 feet wide at the south end of the at the dike crest interior top of bank. The pond is approximately 20 feet deep. The total interior area of the pond, as measured from the interior top of crest, is approximately 7.3 acres. The bottom of the pond is at elevation 260.0 ft-msl and the crest is at elevation 279.0 ft-msl.

The Gibbons Creek Steam Electric Station was retired and shut down in October 2019. At that time, the Scrubber Sludge Pond was taken out of service and stopped receiving CCR material. The Scrubber Sludge Pond underwent the CCR closure by removal process in 2022 and is no longer required to be inspected per 40 CFR Subpart D § 257.104(a). The pond was certified closed on March 1, 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 Scrubber Sludge Pond 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.

Scrubber Pond 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 Scrubber Sludge Pond 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 pond was certified closed on March 1, 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.

There are no hydraulic structures underlying the base of the Scrubber Sludge Pond or passing through the dike of the Scrubber Sludge Pond. The pond was certified closed on March 1, 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:

After the CCR was removed from the pond and the pond was certified closed, a portion of the southern berm was removed, and the pond floor was graded to drain. The pond no longer functions as a CCR unit 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 Scrubber Sludge Pond. The pond has been graded to drain and no water accumulates.

(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 pond only contained trace amounts of CCR material while the closure process was completed. After all CCR was removed and the pond's closure was certified, a portion of the southern berm was removed and the pond was graded to drain to prevent water from accumulating.

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

A portion of the southern berm was removed and the pond was graded to drain. The pond no longer has a storage capacity.

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

	Water Volume (acre-feet)	CCR Volume (CY)
Scrubber Sludge Pond	0	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:

The pond was certified closed on March 1, 2022, and no longer functions 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 pond was certified closed on March 1, 2022, and no longer functions as a CCR unit.

This inspection report was prepared by:

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