



Gibbons Creek Environmental  
Redevelopment Group, LLC

2023 GIBBONS CREEK  
ANNUAL CCR UNIT  
INSPECTION SITE F LANDFILL

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 Site F Landfill is located approximately 1.5 miles northeast of the GCSES administration buildings. The landfill area is approximately 95 acres and is registered with the TCEQ as Unit Number 1 with Solid Waste Registration Number 32271. The landfill was originally constructed with a 3-foot-thick compacted clay liner. The landfill contains liquids, sludges, slurries and/or solid process and waste materials resulting from the combustion of coal.

The Site F Landfill is currently undergoing closure operations. Its permanent landfill cap will consist of a compacted clay barrier overlain with a geomembrane and geocomposite. The cap liner will then be covered with an 18-inch-thick infiltration layer and 6-inch-thick erosion layer. Approximately 30 acres of the landfill has received its final cap, approximately 50 acres has an intermediate cover placed over it, and approximately 15 acres of the landfill is open and currently receiving CCR material excavated and hauled from Ponds 1-4.

Inspections of the GCSES 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 CCR Units 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.

## Site F Landfill Regulatory Conclusion

§ 257.84 (b) (1) Existing and new CCR landfills and any lateral expansion of a CCR landfill must 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., the results of inspections by a qualified person, and results of previous annual inspections):

*David Vogt, P.E. reviewed the 2022 weekly Site F Landfill inspection reports and 2021 Annual CCR Inspection Report prior to inspecting the Site F Landfill.*

- (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.

*David Vogt, P.E. performed a visual inspection of the Site F Landfill on January 23, 2023, to identify signs of distress or malfunction.*

(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 structure since the previous annual inspection:

*Since the January 19, 2022, inspection, the landfill initiated its final closure process. The inspection on January 23, 2023, noted that the upper tier of the landfill had received the final constructed landfill cap while the lower tiers were being brought to their final closure subgrades and elevations in preparation for the installation of the cap.*

- (ii) The approximate volume of CCR contained in the unit at the time of the inspection:

*Approximately 8,135,230 cy of CCR material was contained in the Site F Landfill at the time of inspection.*

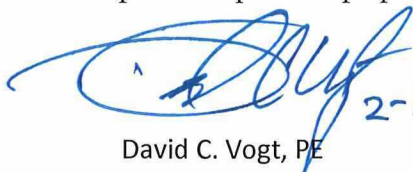
- (iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit:

*No appearances of actual or potential structural weakness of the Site F Landfill, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the Site F Landfill, were observed.*

- (iv) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

*No other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection were observed.*

This inspection report was prepared by:

 2-10-23

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