



Gibbons Creek Environmental  
Redevelopment Group, LLC

2024 GIBBONS CREEK  
ANNUAL CCR UNIT  
INSPECTION SITE F LANDFILL

Gibbons Creek Steam Electric Station

*Anderson, Texas*

February 29, 2024

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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. Gibbons Creek Environmental Redevelopment Group, LLC (GCERG), a subsidiary of Charah Solutions, Inc., as the owner of the Gibbons Creek Steam Electric Station (GCSES), has retained HDR to inspect the Site F Landfill, a CCR Unit, at their facility and prepare a written report.

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 and contains liquids, sludges, slurries and/or solid process and waste materials resulting from the combustion of lignite and coal.

The Site F Landfill stopped receiving waste on December 4, 2023, and is currently undergoing closure operations. Its permanent landfill cap will consist of a compacted clay barrier overlain with a geomembrane and geocomposite drainage liner. The cap liner will then be covered with an 18-inch-thick infiltration layer and 6-inch-thick erosion layer. On the date of the inspection:

- The final landfill cap was placed over approximately 74 acres of the landfill,
- The final soil cover was being placed over approximately 14 acres of landfill, and
- Geomembrane was being placed over approximately 7 acres of landfill.

Inspections of the GCSES CCR Units occurred on February 1, 2024. 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 23, 2023.

The last recorded rainfall event prior to this inspection occurred on January 26, 2024. The site received 0.09 inches of rainfall that day. On the date of inspection, the ground was dry.

## 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 2023 weekly Site F Landfill inspection reports and 2023 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 February 1, 2024, 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 23, 2023, inspection, the landfill has continued the final closure process. The inspection on February 1, 2024, noted that the upper tier and approximately half of the lower tier of the landfill had received the final constructed landfill cap while the remainder was in the process of final landfill cap construction.*

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

*Approximately 8,224,601 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:



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