

**Coal Combustion Residual (CCR) Landfill
2023 Annual Inspection**

**Twin Oaks Power Generating Station
Robertson County, Texas**

January 3, 2024

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1.0 Introduction

The following Annual Landfill Inspection is intended to fulfill the requirements of 30 TAC §352.841 and Coal Combustion Residual (CCR) Rule §257.84 - *Inspection Requirements for CCR Landfills* (40 CFR §257.84). This report contains the inspection findings, observations, and photographic descriptions of the onsite CCR landfill located at the Twin Oaks Generating Station near Bremond, Texas.

The onsite inspection of the ash landfill was completed by Mr. John J. Tayntor, P.E. on November 21, 2023, and conducted in general accordance with 40 CFR §257.84(b).

2.0 General Landfill Information

The Twin Oaks Power (TOP) utility landfill disposes of Coal Combustion Residuals (CCR's) from combustion of the lignite fuel source from the adjacent power generating station. At the time of the inspection the CCR landfill contained an approximate volume of 12.8 million cubic yards of placed and compacted ash by-product material [40 CFR §257.84(b)(2)(ii)].

3.0 Landfill Inspection and Observations

3.1 Operating Record Review

In accordance with 40 CFR §257.84(b)(i) the weekly landfill inspection reports in the facility operating record were reviewed for any documented changes in the landfill geometry or overall condition. The weekly inspection documentation did not report any issue or change that would signify distress of the landfill. The review of the operating record was conducted prior to field inspection of the ash landfill. In addition, a meeting was held with the qualified person conducting the weekly inspections to identify any areas of concern, none were noted. A review of the initial annual landfill inspection report was conducted prior to the inspection.

3.2 Ash Landfill Inspection

Ambient ground conditions at the time of the inspection were varied, ranging between soft and saturated to firm and dry. Based on information gathered by the National Weather Service (Waco Area, Texas), the general area received approximately 26 inches of rainfall for 2023 (at the time of inspection), which is below average for the region.

The inspection [40 CFR §257.84(b)] of the ash landfill consisted of walking along the landfill toe and crest. Slope lengths were traversed and inspected for any existing signs or potential signs of distress, or areas of concern, or areas of instability requiring corrective action or additional observation. The top of the landfill was traversed and inspected for any ponding of storm water, subsidence, cracking or similar areas of potential distress caused by differential movement or settlement in the ash fill. No visible signs of slope creep, longitudinal cracking or wedge failures were noted during the inspection. Inspection of the toes did not reveal any evidence of bulging, displacement, or subsidence that may signal

potential distress, indicate actual distress or actual structural slope failure. At the time of the inspection, no existing conditions were noted that could potentially disrupt the safe operation of the landfill. No areas of erosion were noted along the slope lengths; that would require additional monitoring or immediate corrective action or cause landfill or slope instability.

During the inspection, there was no observation of uncontrolled releases of ash or stormwater from perimeter drainage ditches. Photographs obtained during the inspection are contained in the Appendix of this inspection report.

3.3 Final Discussion

Based on observations at the time of my inspection, the ash landfill at the TOP Generating Station appears to be stable with no visible signs of distress, structural weakness and no observed activities that may jeopardize the safety of the landfill. Per the review of the facility's operating record, weekly landfill inspections are being conducted as required and being completed by a qualified person.

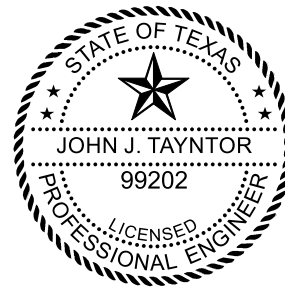
General maintenance activities at the landfill will be ongoing as weather and conditions allow.

4.0 Annual CCR Landfill Inspection

By means of this certification, (i) I am familiar with the requirements of 30 TAC §352.841 and 40 CFR §257.84(b) – *Inspection Requirements for CCR Landfills*, (ii) visited and examined the facility, (iii) and the 2023 Annual CCR Landfill Inspection Report for the Twin Oaks Power onsite CCR Landfill has been prepared to the best of my knowledge in accordance with 40 CFR §257.84(b).

By: 

Dated: January 3, 2024



TBPE Firm Registration No. F-16721
Expires 2/28/2024

Appendix

Landfill Inspection Photographs



Photo No. 1 – West perimeter drainage ditch, view south.



Photo No. 2 – West perimeter drainage ditch, drop structure, view south.



Photo No. 3 –West slope perimeter drainage ditch, view south.



Photo No. 4 – North perimeter ditch, view east.



Photo No. 5 – North perimeter ditch, view northeast.



Photo No. 6 – Stormwater Pond 004 side slope, view south.



Photo No. 7 – Disposal Area North, view west.



Photo No. 8 – East perimeter ditch, view south.



Photo No. 9 – East perimeter ditch, view north.



Photo No. 10 – South perimeter ditch, view west.



Photo No. 11 – South side slope (from toe), view north.



Photo No. 12 – South side slope (from crest), view southeast.



Photo No. 13 – Disposal Area South, view south.



Photo No. 14 – Stormwater Pond 003, view southeast