



REPORT

**CCR LANDFILL ANNUAL INSPECTION
BYPRODUCT STORAGE AREA
DECEMBER 2022**

Lakeland Electric

Submitted to:

City of Lakeland - Department of Electric Utilities

501 East Lemon Street
Lakeland, FL 33801 USA

Submitted by:

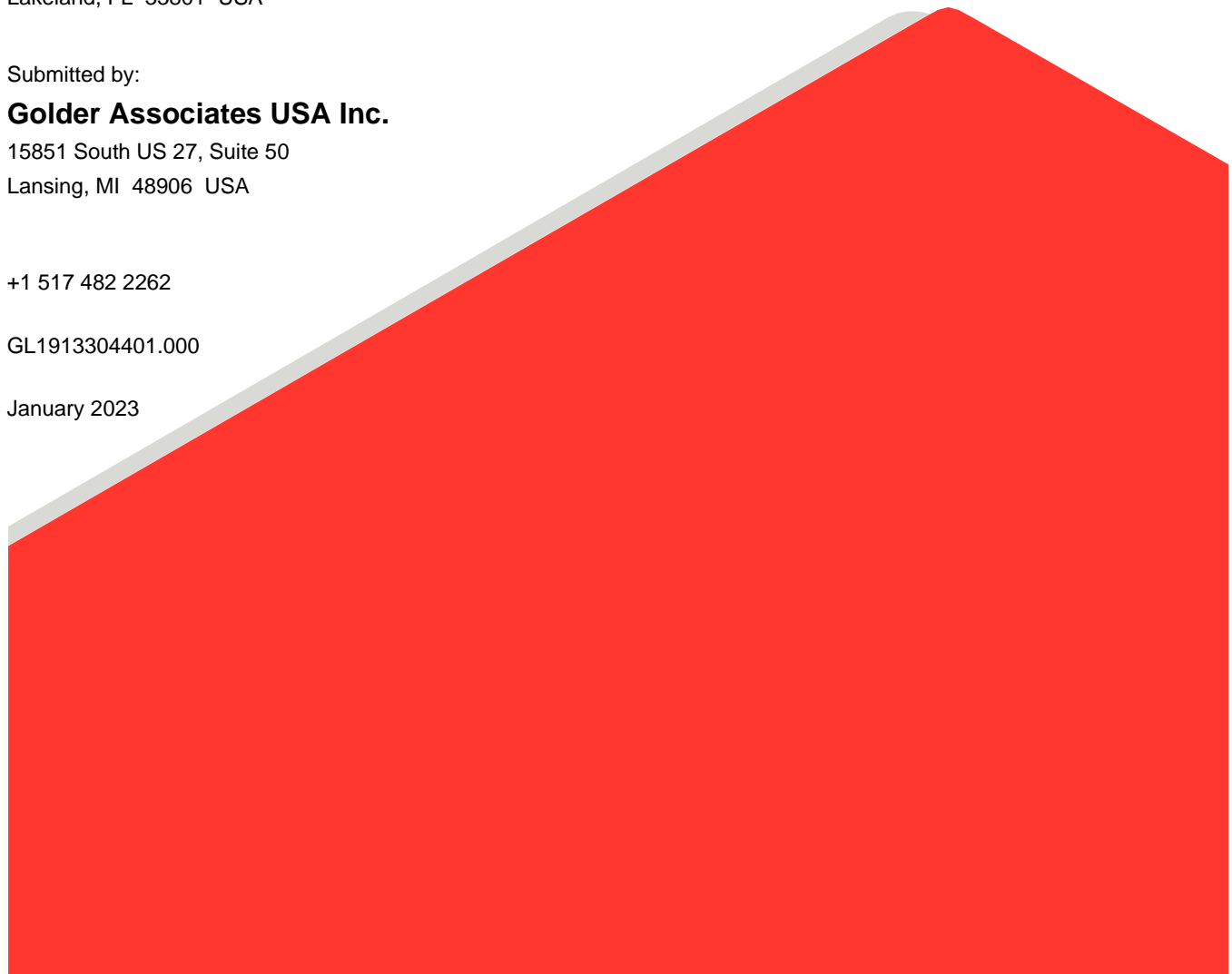
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Distribution List

Lakeland Electric

INTRODUCTION

Golder Associates USA Inc. (Golder), now part of WSP USA Inc., conducted the annual coal combustion residual (CCR) landfill inspection of the Byproduct Storage Area (BSA) at Lakeland Electric's C.D. McIntosh Power Plant (MPP) on December 22, 2021. This report is intended to comply with the requirements of 40 CFR Section (§) 257.84(b).

The MPP, located in Lakeland, Florida (see Figure 1) is owned and operated by Lakeland Electric (City of Lakeland, Department of Electric Utilities). The main entrance of the facility is located at 3030 East Lake Parker Drive, Lakeland, Florida. The BSA is located in the southeast portion of the property and received CCRs generated by Unit 3, which was the only coal-fired electrical generating unit at MPP. Unit 3 ceased generation in 2021 and is currently undergoing decommissioning.

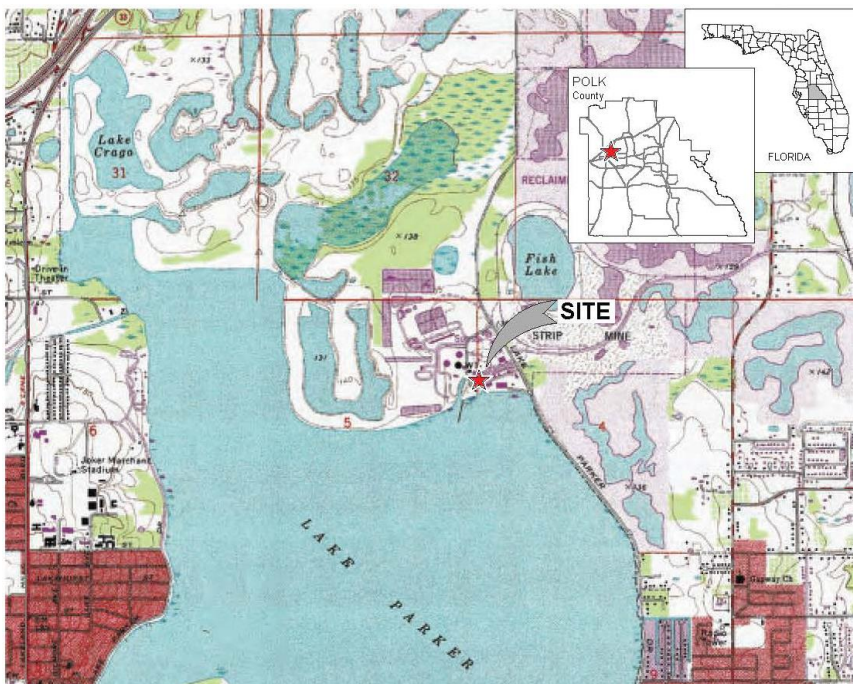


Figure 1: Site Location Map¹

REVIEW OF AVAILABLE INFORMATION - §257.84(B)(1)(I)

Golder's inspection team reviewed the available information regarding the status and condition of the BSA. The documents reviewed included:

- Operations Manual, Combustion By-Product Storage Facility, Shaw Stone & Webster, Inc., January 3, 2006;
- Design Report – Vertical Expansion, Existing Combustion By-Products Storage Facility, Black & Veatch, February 20, 2004;

¹ USGS Topographic Map, 7.5 Min. Quadrangle Map Series, Lakeland Quadrangle, Polk County, Florida.

- C.D. McIntosh, Jr Power Plant Units 3 and 5 Conditions of Certification, PA 74-06R, Florida Department of Environmental Protection, March 6, 2013;
- Run-On and Run-Off Control System Plan Report, Byproduct Storage Area, Geosyntec Consultants, October 2021; and
- Operating records, including inspection results.

INSPECTION SUMMARY - §257.84(B)(1)(II)

Golder conducted the visual inspection of the BSA on December 14, 2022, by traversing the BSA on foot to observe cover conditions, exterior slope conditions, the presence of any erosional issues, vegetative conditions, placement of CCRs, stormwater management features, the presence of potential slope stability issues, and the presence of other signs of distress or malfunction.

CHANGES IN GEOMETRY - §257.84(B)(2)(I)

Changes in the geometry of the BSA were evaluated by comparing recent aerial photographs, past inspection results, past topography, and the December 22, 2021 visual inspection. The primary changes in geometry are due to material regrading and temporary capping of the BSA. Soil material stockpiles on the top of the northern portion were reclaimed and placed over CCRs in the southern portion of the BSA. A recent aerial photograph of the BSA is provided on Figure 2 (dated February 2022).

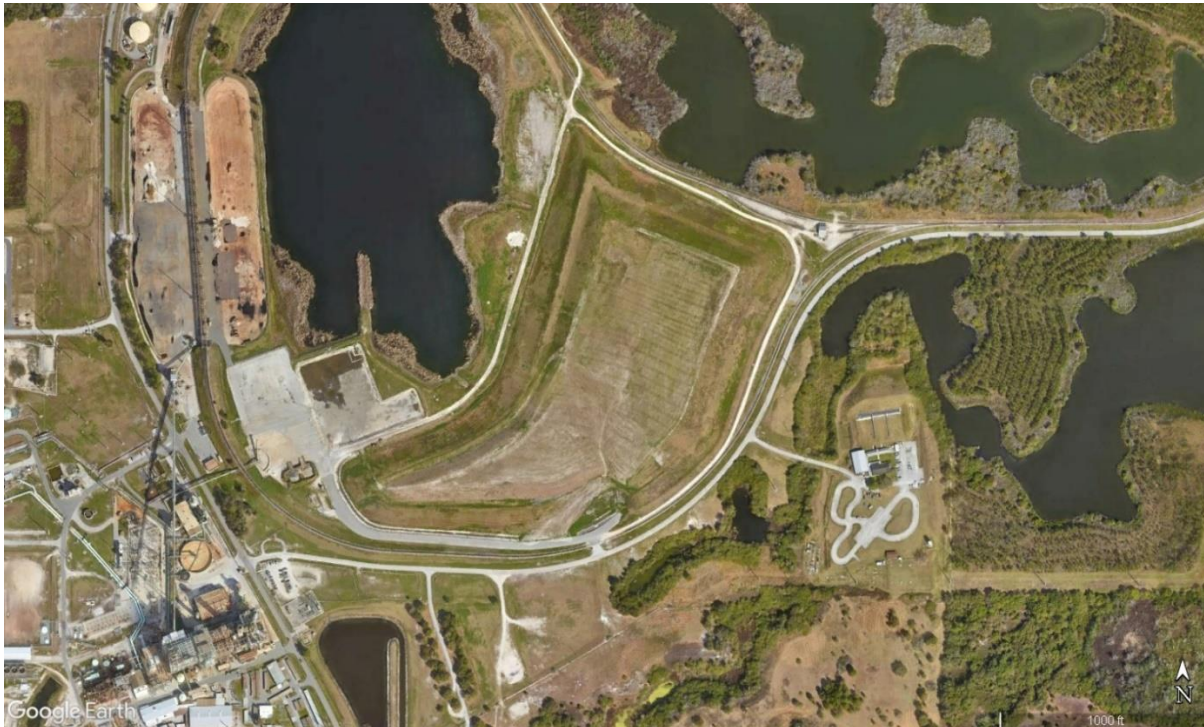


Figure 2: Figure 2 - Aerial Photograph (Google Earth²)

² Google Earth Pro, 28°05'00.0"N, 81°55'00.0"W, imaged dated February 2022, <http://www.google.com/earth/index.html>, assessed January 3, 2023.

APPROXIMATE CCR VOLUME - §257.84(B)(2)(II)

The volume of materials in the BSA at the time of the inspection is estimated to be approximately 2.96 million cubic yards based on past topographic survey information, updated disposal records, previous capacity analyses, and other information provided by Lakeland Electric.

STRUCTURAL WEAKNESS/DISRUPTING CONDITIONS - §257.84(B)(2)(III)

No indications of actual or potential structural weakness were noted during the December 14, 2022 inspection or during the review of available information.

CHANGES AFFECTING STABILITY OR OPERATIONS - §257.84(B)(2)(IV)

Based on the December 14, 2022 inspection and review of the available information, no changes from the previous inspection (conducted on December 22, 2021) that may affect the operations or stability of the BSA were observed.

CONCLUSION

Based on the review of the available information noted above, the December 14, 2022 field observations, and subsequent discussions with Lakeland Electric, the BSA's design, construction, operation, and maintenance appear to be consistent with recognized and generally accepted good engineering standards. If you have any questions or comments about this report, please do not hesitate to contact us.

Golder Associates USA Inc.



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wsp **GOLDER**

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