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CCR LANDFILL ANNUAL INSPECTION DECEMBER 2024

Byproduct Storage Area C.D. McIntosh Power Plant Lakeland Electric

Prepared for

City of Lakeland - Department of Electric Utilities

501 East Lemon Street
Lakeland, FL 33801

Prepared by

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Project GLW8098

January 15, 2025

CCR Landfill Annual Inspection - December 2024

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Project Number: GLW8098
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1. INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) conducted the annual coal combustion residual (CCR) landfill inspection of Byproduct Storage Area B (BSA-B) at Lakeland Electric's C.D. McIntosh Power Plant (MPP) on December 11, 2024. The inspection and this report are intended to comply with the requirements of 40 CFR §257.84.

2. AVAILABLE INFORMATION REVIEW (§257.84(b)(1)(i))

Pursuant to §257.84(b)(1), Geosyntec reviewed available information regarding the condition and status of BSA-B including operating records. The documents reviewed include:

- Solid Waste Closure Permit (No. 0425997-001-CP-01), August 2023.
- Closure and Post-Closure Care Plan, September 2022.
- Run-On and Run-Off Control System Plan, October 2021.
- Long Term Maintenance Plan, November 2024.
- Operating Records: Routine Inspection Logs

3. INSPECTION SUMMARY (§257.84(b)(1)(ii))

Samuel Stafford, PE of Geosyntec conducted a visual inspection of BSA on December 11, 2024. The visual inspection consisted of traversing the BSA on foot to observe cover conditions, exterior slope conditions, presence of erosional features, vegetative conditions, stormwater management system conditions, presence of potential slope stability concerns and any other signs of distress or malfunction.

At the time of the visit, the site was under closure construction with some cover soil grading and placement of sod. The closure construction typically consisted of regrading some areas of the BSA, installing a gas collection system, geomembrane liner, geocomposite drain material on the slopes, two feet of cover material and sod. Most of the site was vegetated with sod with some areas near the down drains under construction.

4. CHANGES IN GEOMETRY (§257.84(b)(2)(i))

Geosyntec reviewed recent aerial photography and inspection records for changes in geometry of BSA. The primary changes in geometry are due to material regrading and closure construction. As stated above, closure construction activities were on-going during the annual inspection.

5. APPROXIMATE VOLUME OF CCR (§257.84(b)(2)(ii))

The volume of materials in BSA-B is estimated at approximately 2.91 million cubic yards based on the Closure and Post-Closure Care Plan.

6. STRUCTURAL WEAKNESS OR DISRUPTING CONDITIONS (§257.84(2)(iii))

No indications of actual or potential structural weakness were noted during the 2024 annual inspection or during the review of available information.

7. CHANGES AFFECTING STABILITY OR OPERATIONS (§257.84(2)(iv))

No changes from the previous inspection conducted on December 12, 2023, were observed that may affect the stability or operation of the BSA. Operations have ceased and closure construction is on-going and nearing completion.

8. SUMMARY

Based on our review of available information noted above and our December 11, 2024, observations, the design, operation, maintenance, and closure of the BSA appear to be consistent with recognized and generally accepted good engineering standards.