

WASTE MANAGEMENT INC. OF FLORIDA North Manatee Recycling and Disposal Facility 14415 County Road 39 Duette, FL 34219

February 17, 2021

Mr. Jon McGee
District Manager
Waste Management Inc. of Florida
North Manatee Recycling and Disposal Facility
14415 County Road 39, Duette, FL 34219

RE: 2021 Landfill Inspection Report EPA 40 CFR Parts 257 and 261 North Manatee Recycling and Disposal Facility 14415 County Road 39, Duette, FL 34219

## Background:

NMRDF is a Class III landfill located in northern Manatee County, on a 208-acre property at 14155 County Road 39 in Duette, Florida. The site lies within Sections 1 and 6, Township 33 South, and Ranges 21 and 22 East in Manatee County, Florida. The main entrance of the facility is located at latitude 29°30′41.6″N, longitude 82°8′48.0″W. The permitted footprint of the landfill is approximately 112 acres. Features of the landfill include a geo-composite liner, a leachate collection and transmission system, a limited gas collection system, and storm water improvements. As part of the permitting and approval process, the landfill design has been subject to, but not limited to, slope stability analysis, subgrade settlement analysis, and leachate generation modeling. Construction of landfill cells follow an approved quality assurance plan. Completed cells are certified by a qualified professional engineer prior to the placement of waste. All technical specifications and certifications are maintained as part of the operating record.

At this time, eight cells (cells 1-8) are constructed. Cells 5 and 8 are currently being filled and Cells 1-4 have received a 2-foot clay cover top deck and Cells 1 – 5 have geosynthetic side slope and top deck temporary covers. Cells 1-4 received CCR material in 2017 and 2018. CCR material was not received in 2019 or 2020.

## **Annual Inspection Results:**

On February 17, 2021, existing cells 1-4 were inspected by Ashley Evans, P.E. The inspection was performed consistent with recognized and generally accepted good engineering standards and included the following elements:

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- (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); and
- (ii) A visual inspection of the cells containing CCR waste to identify signs of distress or malfunction of the landfill unit. The visual inspection included:
  - 1. The landfill perimeter and associated berms
  - 2. Exterior and interior side slopes
  - 3. Access roads
  - 4. Condition of cover
  - 5. The working face
  - 6. Storm water infrastructure

## Review of Available Information

On May 11, 2018, the site ceased acceptance of CCR waste. In July 2018, site staff observed potentially unstable behavior in a localized area of the Tampa Electric Company (TECO) material block fill located approximately 10-feet down-slope on the exterior south slope of the landfill. The TECO material was excavated and backfilled with structural fill as the area of potentially unstable behavior was assumed to be surficial. In September 2018, WM decided to cease acceptance of all TECO materials at the site primarily due to H2S concerns. During September through November, laboratory analyses were conducted to evaluate the CCR material properties and a preliminary slope stability analysis was performed by Geosyntec. During a site visit on December 7, 2018, Geosyntec CCR specialist and engineers performed a site inspection and observed no evidence unstable areas on the exterior slopes. The preliminary stability analysis concluded the site had a sufficient minimum factor of safety of 1.9.

In May 2019, the site constructed a 40-mil geosynthetic temporary cover system for Cells 1-4 on the top deck and remaining sideslopes. This cover system was welded to the previously constructed sideslope geosynthetic cover systems. The areas where CCR was placed have since remained covered by geosynthetics and additional wastes have not been disposed in these areas.

## Visual Inspection

No evidence of cracking, excess settlement, cell geometry changes or sloughing was noted with exterior/interior slopes. No actual or potential structural weakness of the cells were noted. In addition, no existing conditions are disrupting or have the potential to disrupt the operation and safety of the landfill cells.

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Cover material was in good condition. No other malfunctions of the landfill construction or maintenance were observed. Temporary geosynthetic cover systems, rain flaps, and wind defender covers have been constructed over the existing CCR material placed in Cells 1 and 4 to isolate rainfall infiltration in this area. These cover systems were in good condition. Access roads were well maintained as were stormwater components. Drainage features were clear of debris.

The overall condition of the landfill was very good. Weekly inspections performed by a qualified staff person were discussed and were consistent with the annual inspection observations.

The approximate volume of CCR material at the time of inspection was 601,000 tons.

This report was prepared in accordance with the requirement of EPA 40 CFR Parts 257 and 261 Federal Regulation Volume 80, 21302 (April 17, 2015). If you have any questions or concerns regarding any of the information presented above, please feel free to contact me.

Sincerely,

Ashley Evans, P.E.

P.E. License # 71630

Market Area Engineer

Waste Management, Inc. of Florida