

Memorandum

Date: 29 June 2020

To: Ray Butts – Gulf Power Company

From: Lane Dorman, P.G. (FL) and Ben Amos, Ph.D., P.E. (FL) – Geosyntec

Consultants, Inc.

Subject: Remedy Selection Semi-Annual Progress Report

Gypsum Storage Area, Gulf Power Company, Plant Crist, Pensacola, Florida

Geosyntec Consultants, Inc. (Geosyntec) prepared this memorandum in accordance with 40 CFR §257.97(a) to provide a semi-annual progress update on the remedy selection process for the Gypsum Storage Area (GSA) coal combustion residuals (CCR) unit at Gulf Power Company (Gulf Power) Plant Crist in Pensacola, Florida. An assessment of corrective measures (ACM) was completed to evaluate remedial options to address statistically significant levels (SSLs) of total radium observed in GSA groundwater, as documented in the 2019 Annual Groundwater Monitoring and Corrective Action Report (Report)¹. The most recent Remedy Selection Semi-Annual Progress Report (Update) was provided on 30 December 2019.

Since completion of the Report, the following additional evaluation and monitoring activities have been performed:

- continued groundwater monitoring;
- continued assessment of the nature and extent of SSLs;
- evaluation of temporal constituent concentration trends; and
- assessment of the contributions of naturally-occurring total radium to observed groundwater detections.

These activities, which will be documented in the 2020 Annual Groundwater Monitoring and Corrective Action Report, will aid Gulf Power in remedy selection.

Additional evaluation regarding long term management of the GSA is also needed due to Gulf Power's plans to convert two coal-fueled units to natural gas-fueled units before the end of 2020, as documented in the *Ten Year Power Plant Site Plan 2020-2029*. As part of this conversion, Gulf Power is considering the closure of the GSA, which will affect the potential corrective measures

¹ In 2019, the GSA CCR groundwater monitoring well network was reassessed and monitoring wells MW-202, MW-203, MW-204, and MW-205 were reclassified as upgradient to the CCR unit. As a result, cobalt is no longer an SSL at the GSA as documented in the Report.

available to the GSA CCR unit. As such, additional evaluation regarding the long-term management strategy of the GSA will be conducted prior to selecting the remedy.

As remedy selection continues, operation of an existing groundwater extraction system at the facility will transition to serve as a temporary corrective measure for the GSA CCR unit. The goals of the temporary corrective measure are to promote hydraulic containment and constituent mass removal until a final remedy is selected and implemented.

A final groundwater remedy will be selected pursuant to the requirements identified in 40 CFR §257.97. As remedy selection continues, groundwater assessment monitoring will be performed in accordance with 40 CFR §257. Depending on the timing of remedy selection, semi-annual progress updates will continue to be prepared.

This update was prepared in accordance with the requirements of 40 CFR Part 257 under the supervision of the undersigned State of Florida licensed Professional Engineer and Professional Geologist.

Benjamin K. Amos, Ph.D., P.E. Florida Professional Engineer No. 82837 Lane Dorman, P.G.

Florida Professional Geologist No. PG2861