

2100 Commonwealth Avenue, Suite 100 Ann Arbor, Michigan 48105 PH 734.332.8004 FAX 3734.332.8063 www.geosyntec.com

October 15, 2021

Via Email

Mr. Nicholas M. Reidenbach, P.E. Civil/Structural Principal Specialist Engineer DTE Electric Company One Energy Plaza Detroit, MI 48226

## Subject: Five-Year Regulatory Compliance Reporting: Structural Stability Assessment Monroe Power Plant Fly Ash Basin Facility Monroe, MI

Dear Mr. Reidenbach:

This letter presents Geosyntec Consultants of Michigan, Inc.'s (Geosyntec's) five-year periodic structural stability assessment for DTE Electric Company's (DTE's) Monroe Power Plant Fly Ash Basin (FAB). The periodic structural stability assessment of the FAB is required under the United States Environmental Protection Agency (USEPA) Coal Combustion Residual (CCR) Rule (CCR Rule) published on 17 April 2015 (40 CFR 257.73(d)(1)). Under the CCR Rule:

"The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein."

The initial structural stability assessment was documented in a letter dated October 17, 2016. To complete the periodic assessment, Geosyntec has reviewed many documents and conducted site inspections, including the following:

- Assisted with operations at the FAB including developing a CCR Fill Plan.
- Conducted the annual inspections per the CCR Rule as part of §257.83 "Inspection Requirements for CCR Surface Impoundments of the CCR Rule". As part of the annual inspections conducted since 2016, Geosyntec reviewed construction documents, operating records, operational procedures, and instrumentation results at the FAB.

2021-CHE8242J-502-13-2021-10-15-Structural Stability Letter

Mr. Nicholas M. Reidenbach October 15, 2021 Page 2

- Designed and provided construction quality assurance for the flattening of the slopes on the southern side of the FAB.
- Attended annual face-to-face meetings for the Emergency Action Plan.
- Performed the five-year periodic safety factor assessment as part of §257.73(e). The periodic safety factor assessment indicated that the FAB embankment meets the minimum safety factor criteria per §257.73(e).

Based on the annual inspection results, periodic safety factor assessment, and other work since 2016, Geosyntec concludes that the Monroe FAB facility was "designed, constructed, operated, and maintained with generally accepted good engineering standards."

## QUALIFICATIONS OF LICENSED PROFESSIONAL ENGINEER

John Seymour is a qualified licensed professional engineer with over 40 years of experience in civil and geotechnical engineering associated with dams.

## CERTIFICATION

I, John Seymour, am a qualified licensed professional engineer in Michigan have evaluated the FAB and hereby certify that the structural stability assessment has been conducted in accordance with the requirements of §257.73(d).

Certified by:

Date



John Seymour, P.E. Michigan License Number 620103356 Senior Principal

2021-CHE8242J-502-13-2021-10-15-Structural Stability Letter

engineers | scientists | innovators