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October 11, 2016

Mr. Joseph Garavaglia
Environmental Management & Resources
DTE Electric Company
One Energy Plaza, 655 G.O.
Detroit, MI 48226-1221

Subject: Belle River Power Plant Coal Combustion Residual (CCR) Surface Impoundment
Liner Design Evaluation—Bottom Ash Basins and Diversion Pond

Dear Mr. Garavaglia:

DTE Electric Company manages coal combustion residuals generated at the Belle River Power Plant (BRPP) in two parallel-operated bottom ash sedimentation basins with drainage flowing through a surface ditch to a diversion pond. Together, the bottom ash basins and diversion pond are considered surface impoundments according to the Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments (federal CCR rule). TRC has reviewed available information for the construction of the bottom ash basins and diversion pond to evaluate whether the existing surface impoundment liner systems meet the requirements for existing lined surface impoundments as required in Title 40 Code of Federal Regulations (CFR) 257.71.

The existing BRPP surface impoundment bottom ash basins were constructed by incising into native clay and by extending sidewalls above ground surface approximately 2.5 feet by compacting clay berms around the perimeter of each basin. The diversion pond was constructed by incising into the native clay. Even though laboratory permeability tests performed on samples collected from this native clay indicate that the hydraulic conductivity of surrounding clay soils is less than 10^{-7} cm/sec, these basins were not constructed in accordance with the requirements of 40 CFR 257.71. Therefore, these bottom ash basins are considered unlined existing surface impoundments and are subject to the requirements of 40 CFR 257.101(a).

Sincerely,

TRC Environmental Corporation

David B. McKenzie, P.E.
Senior Engineer



10/11/16

Graham Crookford
Senior Consultant