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October 15, 2019

Mr. Chris Scieszka
DTE Electric Company
One Energy Plaza, 410 G.O
Detroit, Michigan 48226

Subject: Semi-Annual Progress Report-Remedy Selection and Design
River Rouge Power Plant Coal Combustion Residual (CCR) Bottom Ash Basin (BAB)

Dear Mr. Scieszka:

On April 17, 2015, the United States Environmental Protection Agency (USEPA) published the final rule for the regulation and management of Coal Combustion Residuals (CCR) under the Resource Conservation and Recovery Act (RCRA) (the CCR Rule), as amended July 30, 2018. The CCR Rule, which became effective on October 19, 2015 (amendment effective August 29, 2018), applies to the DTE Electric Company (DTE Electric) River Rouge Power Plant (RRPP) Bottom Ash Basin (BAB). As presented below, a written closure plan was developed, a groundwater monitoring system was installed, groundwater monitoring was performed, an interim groundwater measure was designed and installed (groundwater collection system), and an Assessment of Corrective Measures (ACM) was completed between October 2016 and April 2019 for this CCR unit. This Semi-Annual Progress Report, prepared as a requirement of §257.97(a) of the CCR Rule, describes DTE Electric's progress toward selecting and designing the final remedy for the RRPP BAB.

BAB Initial Written Closure Plan

On October 17, 2016, in accordance with the schedule defined in Section 257.102(b)(2) of the CCR Rule, DTE Electric placed an Initial Written Closure Plan for the BAB into the Operating Record. In this Closure Plan, DTE proposes to close the RRPP BAB by CCR removal and offsite disposal, including decontamination of the unit and backfilling/surface grading to restore the former BAB area to pre-operation conditions. CCR removal and off-site disposal is an option for the site, offering certainty of source control and a high level of long-term performance and reliability in protecting groundwater quality.

Groundwater Monitoring and Assessment of Corrective Measures

In accordance with the schedule defined in 40 CFR §257.90(b)(1), a groundwater monitoring system was installed from June 2016 through June 2017 around the RRPP BAB as required by 40 CFR §257.91, and background groundwater monitoring well sampling was completed between August 2016 and September 2017 as required by 40 CFR §257.93. As documented in the January 31, 2018 *Annual Groundwater Monitoring Report for the River Rouge Power Plant,* covering calendar year 2017 activities, DTE Electric noted that boron, fluoride, and pH were observed within groundwater at one or more

downgradient monitoring wells with statistically significant increases (SSIs) above background limits in the September 22, 2017 detection monitoring event. In response, DTE Electric initiated an assessment monitoring program for the RRPP BAB CCR unit pursuant to §257.95 of the CCR Rule that included sampling and analyzing groundwater within the groundwater monitoring system for all constituents listed in Appendix IV on April 6, 2018 with the first semiannual assessment monitoring event being completed on May 30, 2018. On October 15, 2018, it was determined that, pursuant to §257.93 (h), that arsenic and lithium were present at SSIs above their respective groundwater protection standards (GWPSs) at one or more down gradient well locations at the RRPP BAB CCR unit during the first assessment monitoring event.

DTE Electric took proactive measures to address the affected groundwater by designing, installing, and operating (since March 2, 2018) an interim measure groundwater collection system to mitigate any potential risk of migration of groundwater away from the BAB. The installed collection system maintains groundwater hydraulic control within the RRPP BAB CCR unit, and groundwater around the entire perimeter of the RRPP BAB is now captured by the extraction wells.

While continuing to operate the groundwater collection system, DTE Electric, as required under §257.95(g), placed a Notification of Appendix IV Constituents at Statistically Significant Levels Above the Groundwater Protection Standards in the RRPP BAB CCR unit operating record on November 14, 2018. An Assessment of Corrective Measures (ACM) was initiated on January 14, 2019, and a notification was placed in RRPP's operating record per §257.95(g)(3) and §257.105(h)(9). DTE Electric prepared and placed the ACM into the RRPP operating record on April 14, 2019 in accordance with the schedule and notification requirements of §257.96. The preferred alternative in the ACM was to close the RRPP BAB by CCR removal with offsite CCR disposal and to address the CCR-affected groundwater by operating an interim groundwater collection system (see below).

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As stated above, DTE Electric is currently proactively managing the potential groundwater migration pathway at RRPP BAB CCR unit using an installed groundwater extraction system around the perimeter of the RRPP BAB as an interim measure. This ground water extraction system may be selected as part of the final remedy, and DTE Electric will continue to operate this groundwater extraction system until such time that CCR source materials are removed (as described in the October 17, 2016 initial written closure plan). In addition, if the groundwater extraction system is selected as part of the final remedy, the system will be operated until the risk of migration of CCR constituents from the RRPP BAB CCR unit to receptors is effectively mitigated and groundwater monitoring data demonstrate that groundwater concentrations of Appendix IV constituents are below relevant GWPSs.

Currently, DTE Electric is evaluating conceptual closure strategies for the River Rouge BAB, so that, in accordance with 40 CFR §257.101(a)(1), CCR placement within the BAB will cease no later than October 31, 2020 and so that closure can be initiated within 30 days of the known last receipt of CCR or non-CCR waste streams within the BAB [40 CFR §257.102(e)(1)(i)]. The development of BAB closure strategies will consider necessary diversion of non-CCR wastewater and stormwater streams to and/or

from the BAB and removal of BAB infrastructure so that the BAB may be effectively drained and residual CCR may be removed.

Once engineering evaluations and initial design work for the BAB closure are completed, the final remedy for RRPP BAB will be formally selected per §257.97 at least 30-days after the public meeting required under §257.96(e) is held.

Sincerely,

TRC Environmental Corporation

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