

October 15, 2021

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. The CCR Rule, which became effective on October 19, 2015 (with amendments in 2018 and 2020), 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. Removal of CCR in accordance with the written closure plan was completed between June and November 2020. A final remedy for groundwater has not yet been selected. This October 2021 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 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; the Closure Plan was updated on July 15, 2020. This updated Closure Plan was implemented from June to November 2020 and included removal and off-site disposal of CCR source material from the RRPP BAB and decontamination of the unit. A final groundwater remedy has not yet been formally selected.

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 (Appendix III constituents) 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 pursuant to §257.95 of the CCR Rule. Groundwater within the groundwater monitoring system was sampled and analyzed for all constituents listed in Appendix IV on April 6, 2018 with the initial semiannual assessment monitoring event being completed on May 30, 2018. In accordance with §257.93 (h), on October 15, 2018, it was determined that arsenic and lithium (Appendix IV constituents) were present at SSIs above their respective groundwater protection standards (GWPSs) at one or more down gradient well locations at the RRPP BAB during the initial 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 groundwater collection system extraction wells maintain groundwater hydraulic control around the entire perimeter of the RRPP BAB.

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 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), respectively. 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 (to close the RRPP BAB by CCR removal with offsite CCR disposal) was completed from June to November 2020. CCR-affected groundwater will continue to be captured by the continued operation of the interim already-in-place groundwater collection system while selection of a final remedy is evaluated (see below).

Semi-Annual Remedy Selection Progress Report—October 2021

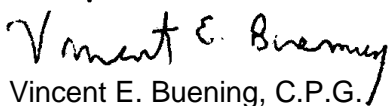
As stated above, DTE Electric is currently proactively managing the potential groundwater migration pathway at RRPP BAB using an installed groundwater extraction system around the perimeter of the RRPP BAB as an interim measure. Now that CCR source materials have been removed, DTE Electric will continue to operate this interim groundwater extraction system at least until the effect of the source material removal actions on groundwater quality are assessed through subsequent groundwater sampling activities. As described in the updated closure plan (July 15, 2020), if the interim groundwater extraction system is deemed effective by engineering evaluation, the system will be formally selected as part of the final groundwater remedy per §257.97 at least 30-days after the public meeting required under §257.96(e) is held. If selected, the system will continue to be operated until the risk of migration of CCR constituents from the RRPP BAB to receptors is effectively mitigated, and groundwater monitoring data demonstrate that groundwater concentrations of Appendix IV constituents are below relevant GWPSs for three consecutive years of semiannual groundwater monitoring in accordance with §257.98(c).

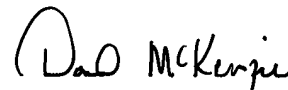
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DTE Electric will continue semiannual assessment monitoring as specified in §257.95 and annual nature and extent monitoring will continue for the RRPP BAB CCR unit per §257.95(g)(1). Groundwater monitoring will be performed in accordance with the existing Quality Assurance Project Plan – DTE Electric Company River Rouge Power Plant Bottom Ash Basin (the QAPP) (TRC, July 2016; revised August 2017) and statistically evaluated per the Groundwater Statistical Evaluation Plan – DTE Electric Company River Rouge Power Plant Coal Combustion Residual Bottom Ash Basin (Stats Plan) (TRC, October 2017).

Sincerely,

TRC


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