



A CMS Energy Company

Date: January 14, 2019

To: Margie Ring, Delegated Representative of the State Director  
Michigan Department of Environmental Quality

From: Harold D. Register, Jr., P.E.

RE: Notification of Appendix IV Constituent Exceeding Groundwater Protection Standard per §257.95(g)

Consumers Energy reported in the 2017 Annual Groundwater Monitoring and Corrective Action Report for the DE Karn Bottom Ash Pond CCR Unit that at least one Appendix III constituent was observed in at least one downgradient monitoring well above background (January 31, 2018). TRC performed an Alternate Source Demonstration for the parameters and did not find strong enough evidence within 90 days to determine that there was another source for the observation of constituents above background. Therefore, Consumers Energy commenced an Assessment Monitoring Program for the DE Karn Bottom Ash Pond CCR Unit pursuant to 40 CFR 257.95 that included sampling and analysis of groundwater within the groundwater monitoring system for all constituents listed in Appendix IV.

The results from the assessment monitoring were used to establish a groundwater protection standard for each constituent and determine that the following Appendix IV constituents were detected at statistically significant levels above the federal groundwater protection standards established pursuant to §257.95(h) as follows:

- Arsenic

While the RCRA CCR Rule references maximum contaminant levels (MCLs) and federal groundwater protection standards for non-MCL constituents to govern as a minimum national threshold to achieve, the following Appendix III and IV constituents were also observed in at least one monitoring event at levels above Michigan's current generic Part 201 criteria:

- Boron
- Chloride
- Sulfate
- Total dissolved solids
- Arsenic
- Lithium
- Molybdenum

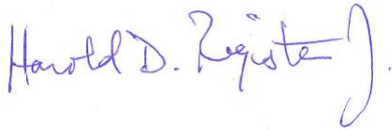
Comparison of observed constituent concentrations to Michigan's current generic Part 201 criteria has not been evaluated relative to statistical limits testing and only based on direct

**“Appendix IV Constituent Exceedence Certification  
DE Karn Bottom Ash Pond CCR Unit”  
January 14, 2019  
Page 2**

comparison between an observation and the respective numerical criterion. Further analysis will be included in the Response Action Plan that will be submitted to MDEQ by March 15, 2019 in conformance with requirements of newly enacted Michigan Public Act 640 of 2018.

Consumers Energy will continue groundwater monitoring and reporting activities required by §257.95(h). The 2018 Annual Groundwater Monitoring and Corrective Action Monitoring Report will be certified on January 31, 2019 and posted to the public compliance website no later than March 2, 2019.

This notice satisfies the recordkeeping requirement to provide notification for identifying Appendix IV constituent(s) that exceed the groundwater protection standard as required by §257.105(h)(8) by placing this notice in the operating record. This notice will be posted to the public CCR compliance website no later than February 13, 2019.



\_\_\_\_\_  
Signature

January 14, 2019

\_\_\_\_\_  
Date of Certification

Harold D. Register, Jr.  
\_\_\_\_\_  
Name