

Prepared For:
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**SEMIANNUAL CORRECTIVE
MEASURES PROGRESS REPORT
NOVEMBER 2023**

for

**WESTLAND ASH MANAGEMENT CELL B
MONTGOMERY COUNTY, MARYLAND**

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1. PURPOSE

Geosyntec Consultants (Geosyntec) has prepared this *Semiannual Corrective Measures Progress Report* for the Westland Ash Management Facility Cell B (the Site) located in Montgomery County, Maryland. This report provides a description of the progress of selecting and designing the remedy for the statistically significant levels (SSLs) of one or more Appendix IV constituents above the groundwater protection standards (GWPSs) for the Site. This report is required by the Federal Coal Combustion Residual Rule (CCR Rule) codified in Title 40 of the Code of Federal Regulations (CFR) Subpart D Section 257.97(a) (40 CFR§257.97(a)).

2. BACKGROUND

GenOn entered into a Consent Decree with the Maryland Department of Environment (MDE) and a group of intervenors in 2013 to complete a Nature and Extent of Contamination Study (NES) and a Corrective Measures Plan (CMP) for the two CCR landfills (Cell B and Cell C). Only Cell B is regulated by the CCR Rule because Cell C was closed prior to the Rule's effective date. Piezometers were installed during the NES to the bottom of ash at Cell B and monitored over time to verify that groundwater is not in contact with ash. Statistically significant increases (SSIs) above background groundwater concentrations were detected at compliance monitoring wells downgradient of both landfills under the NES, and also downgradient of Cell B under the CCR Rule Detection Monitoring Program in January 2018. As a result of the SSIs, an Assessment Monitoring Program was initiated at Cell B. In December 2018, statistically significant levels (SSLs) above GWPSs were identified downgradient of Cell B. GenOn monitored private wells downgradient from the site, when the landowner was willing to allow such monitoring, as required by the Consent Decree and no indication of site-related constituents were detected in those samples. GenOn has continued to monitor these private wells and there is still no indication of site-related constituents.

A Corrective Measures Plan (CMP) under the Consent Decree was submitted to MDE in June 2017 and revised in July 2018. The CMP included closure-in-place for the ash landfills, storm water management improvements, enhanced leachate treatment, and groundwater monitoring. GenOn met with MDE in November 2018 to present a closure-by-removal (deconstruction concept) for removal of ash from the site and submitted a deconstruction plan to MDE in January 2019. MDE approved the initial phase of the plan in February 2019. Plans for various phases of deconstruction were submitted to MDE in April, May, and June 2019 and approved by MDE in September 2019 and October 2020. A public meeting on the 10–15-year deconstruction plan was held on February 8, 2020. The Consent Decree was amended in August 2020 to allow for deconstruction (i.e., closure by removal) rather than closure in place.

An Assessment of Corrective Measures (ACM) for Cell B under the CCR Rule was completed in March 2019. The ACM identified a preferred remedy consisting of: (i) maintaining the geomembrane cap on the inactive side slopes of Cell B during deconstruction, (ii) removal of ash for beneficial reuse, and (iii) continued groundwater monitoring.

3. CORRECTIVE MEASURES IMPLEMENTATION ACTIVITIES

GenOn has continued to refine the NES and the CMP under the Consent Decree. In addition, the following interim Corrective Measures under 257.98(a)(3) have taken place since the ACM was completed in March 2019.

- A geosynthetic cover was installed on Cell C in 2016 and on the inactive side slopes of Cell B in 2017 to reduce leachate generation while the ash is removed for beneficial reuse¹.
- A deconstruction plan has been prepared for the ash removal. In total, 44,840.99, 92,441.15, 167,204.96, 199,950.35, and 165,103.99 tons of CCR were removed in 2019, 2020, 2021, 2022, and 2023 (to date), respectively.
- CCR placed in the northeast area of Cell B is actively being mined.
- A zero-valent iron (ZVI) leachate treatment component was added to the leachate treatment system in 2017 and the treatment media was changed to Sulfur Modified Iron (SMI III^R) in January 2020.
- Two new offsite monitoring wells (MW-24S and MW-24D) were installed downgradient of Cell B in August and September 2021. The monitoring wells were installed as close to the property line as possible.
- SSIs for some Appendix III constituents were detected at MW-24S and MW-24D following the collection of the third samples from these wells².
- One piezometer was installed in the northwest portion of Cell B in August 2021 to evaluate for potential groundwater mounding beneath Cell B. No groundwater was detected in this piezometer.
- The piezometer installed at Cell B was abandoned in February 2022 following MDE approval in January 2022.
- Groundwater Monitoring – monitoring of groundwater has continued under the Assessment Monitoring Program in accordance with the CCR Rule. Groundwater was sampled in July 2023 and is planned to be sampled in January/February 2024.

¹ It should be noted, Cell C is not regulated under the CCR Rule, but is included in this bullet to provide a complete history of the Site closure activities.

² These monitoring wells are likely affected by grout contamination, as indicated by the elevated pH and dissolved/suspended solids concentrations detected there. This may result in unrepresentative concentrations of some constituents in samples from these wells.

GenOn is coordinating these actions with MDE. Implementation of these interim corrective measures, specifically ash removal, removes the risk of potential exposure to site-related constituents through source control and thereby protect human health and the environment.

Ongoing monitoring data will continue to be assessed for changes that might require additional interim measures. Additional interim measures might include containment system improvements, such as installation of a less permeable intermediate cover on the top of Cell B to further reduce potential releases. Other existing and emerging technologies that may become available would also be considered as appropriate. It should be noted that the groundwater flow velocity at the site is very low such that changes in groundwater quality in response to interim and final corrective measures are not expected to be detectable for many years.

4. REMEDY SELECTION AND DESIGN PROGRESS

A public meeting under the Consent Decree was held on February 8, 2020. Work toward the Consent Decree remedy selection/approval by MDE and other stakeholders is ongoing.

A final remedy has yet to be selected/approved under the Federal CCR Rule. GenOn planned to hold a public meeting to discuss the results of the ACM pursuant to 40 CFR 257.96(e) in the Fall of 2019 but MDE requested that it be delayed. Planning activities are underway to facilitate a future public meeting to discuss the results of the ACM under the CCR Rule and the status of the remedy.