

Semi-Annual Progress Report-01 Selection and Design of Corrective Remedy Clinch River Ash Pond 1

**Clinch River Plant
Appalachian Power Company
Carbo, Virginia**

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1.0 BACKGROUND

The Ash Pond 1 at the Clinch River Plant was initially not subject to the federal CCR rule (40 CFR Part 257) because it was an inactive impoundment and would be closed by October 2018. Pond 1 consequently became subject to 40 CFR Part 257, as amended in October 2016 to include Extension of Compliance Deadlines for Certain Inactive Impoundments.

Sampling and analyses of groundwater pursuant to 40 CFR §257.95 from the monitoring network installed pursuant to 40 CFR §257.91 identified the following Appendix IV constituent at statistically significant levels above the respective groundwater protection standards (GWPS): barium, cobalt, lead, lithium, molybdenum and nickel.

AEP determined that there are two technically feasible alternatives for remediating the groundwater at the pond.

Alternative #1: Source Removal with Monitored Natural Attenuation

Alternative #2: Groundwater Extraction, Treatment and Surface Water Discharge

Alternative #2A: Groundwater Extraction and Treatment at the Downgradient Edge of the Unit

Alternative #2B: Groundwater Extraction and Treatment at the Downgradient Edge of the Unit with Upgradient Barrier

Alternative #2C: Groundwater Extraction and Treatment at the Upgradient Unit Boundary.

The Assessment of Corrective Measures report was prepared and posted to the Operating Record on December 11, 2019. A public meeting was conducted on December 19, 2019 in the town of Lebanon, Virginia to discuss the remediation technologies that are technically feasible for the specific site conditions at pond 1. A 30-day public comment period started on December 19 and ended on January 20, 2020. No public comments were received during the 30-day period.

2.0 PURPOSE

This semiannual report is required by 40 CCR §257.97 and describes AEP's progress in selecting and designing the corrective measure(s) discussed in the ACM Report.

This report covers the period from: January 20, 2020 – July 20, 2020.

3.0 PROGRESS

During the period, AEP made progress in evaluating of the selected corrective measure alternative.

AEP installed and sampled additional wells as part of the Nature and Extent study to evaluate the migration of the constituents.

With respect to Groundwater Extraction and Treatment alternative work, AEP hired an engineering firm to develop a preliminary design of the Groundwater Extraction and Treatment project for evaluation of this option. The engineering work started in June 2020.

AEP conducted the semi-annual groundwater sampling and testing during this report period.

4.0 PLANNED WORK

AEP will continue to work on the evaluation of the groundwater extraction and treatment project.

AEP will sample and test all of the monitoring wells as part of the semi-annual requirement.

AEP will submit another progress report by January 20, 2021.