

December 11, 2023

Ms. Michelle Lloyd
U.S. Environmental Protection Agency
Office of Land and Emergency Management (OLEM) Docket
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Attn: Docket ID No. EPA-HQ-OLEM-2020-0107; FRL-7814-05-OLEM

RE: Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments. 88 FR 77941 (November 14, 2023)

Dear Ms. Lloyd:

The Pennsylvania Department of Environmental Protection (DEP) submits this comment letter in response to notice of data availability (NODA) entitled *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments* published by the U.S. Environmental Protection Agency (EPA) on November 14, 2023 (88 FR 77941) (NODA).

## **Comments Related to the Risk Analysis**

As part of the publication in 88 FR 77941, EPA provided a supplemental risk assessment in support of the 2023 proposed rule. DEP does not have any significant comment on the data and information presented as a component of the NODA. While the EPA has concluded that leaching from both legacy surface impoundments and CCRMUs (coal combustion residuals management units) has the potential to adversely affect groundwater quality and cause risks to future receptors, Pennsylvania has previously, in 2010, promulgated regulations specifically pertaining to the beneficial use of coal ash, 25 Pa. Code, Chapter 290, which include strict analytical standards and criteria that must be met for CCR to serve a legitimate beneficial use purpose.

The beneficial use of residual wastes, including flue gas desulfurization materials; coal ash that has been disposed of by being placed in an impoundment or other waste disposal unit; or coal ash that has been mixed with flue gas desulfurization materials, is regulated under DEP's residual waste regulations found at 25 Pa. Code, Chapter 287, Subchapter H. DEP's beneficial use program, applicable to both the beneficial use of residual waste and the beneficial use of coal ash, is not based on a mass-based numerical value. Rather, both beneficial use programs are based on a combination of criteria that establish a legitimate beneficial use opportunity for the materials, coupled with location-based criteria that place specific limitations on areas where beneficial use can occur, and chemical and physical characterization requirements for the materials to ensure that the beneficial use does not harm or present a threat of harm to the public

health and safety or the environment. With few exceptions, the beneficial use of residual waste, including the unencapsulated beneficial use of CCR, is performed pursuant to the terms and conditions of a permit or other authorization issued by DEP.

DEP's regulations relating to coal ash require that persons intending to beneficially use coal ash in an unencapsulated manner first demonstrate that the coal ash does not exceed the maximum acceptable leachate levels identified in 25 Pa. Code § 290.201 (relating to coal ash certification). In addition, persons intending to beneficially use coal ash in an unencapsulated use must ensure that the following provisions are satisfied:

- a. Demonstrate that the coal ash satisfies the physical characteristics for the intended use;
- b. Develop and implement a water quality monitoring plan, in accordance with 25 Pa. Code § 290.301 (relating to water quality monitoring) and, if applicable, 25 Pa. Code, Chapters 86 90 if either more than 10,000 tons of coal ash per acre or more than 100,000 tons of coal ash in total will be used as structural fill at a coal mining activity site or at an abandoned mine land site, or for lesser volumes of coal ash where site conditions warrant; and
- c. Coal ash may not be placed within 8 feet of the water table, except where coal ash is used for mine subsidence control, mine fire control or mine sealing under 25 Pa. Code § 290.106(a)(7) (relating to other beneficial uses).

DEP's existing beneficial use program pertaining to both coal ash and residual waste is as protective as the provisions provided in EPA's 2015 CCR Rule and the revisions proposed by EPA to its definition of beneficial use on August 14, 2019. In situations where material other than freshly generated coal ash (i.e., legacy CCR) is proposed for beneficial use, DEP holds the materials to the same standards as those for the freshly generated coal ash. This includes ensuring that metals and other cations, nonmetals and anions, and sulfate meet certain standards derived from DEP or EPA under the Safe Drinking Water Acts. This also includes performing a detailed chemical analysis that fully characterizes the composition of the legacy CCR on representative samples for leachable concentrations of aluminum, ammonia, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chloride, chromium, cobalt, copper, fluoride, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, nitrate, nitrite, potassium, selenium, silver, sodium, sulfate, thallium, vanadium and zinc.

The only parameter that is currently not required by DEP regulation to demonstrate compliance with beneficial use regulations from those that were included in EPA's Risk Analysis is Lithium. It is DEP's understanding that Lithium is currently not subject to any proposed or promulgated National Primary Drinking Water Regulation. It is possible that Lithium's existence on EPA's Contaminants Candidate List may result in future regulation under the Safe Drinking Water Act (SDWA), at which point DEP would, by regulatory reference, require demonstration of compliance with any established waste classification standard for material to meet the standard required for beneficial use in the Commonwealth.

## Comments Related to Information About Legacy CCR Surface Impoundments and CCR Management Units

Due to the limited duration of the public comment period pertaining to the NODA, compilation of detailed information pertaining to the identified potential legacy CCR surface impoundments or potential CCRMUs in the docket was not feasible. Alternatively, DEP has conducted outreach to all six of its Regional Offices and has coordinated responses to provide what information we currently possess relating to the aforementioned legacy surface impoundments (SIs) and CCRMUs. The accompanying file, titled "PA DEP Legacy SIs and CCRMUs by Region EPA-HQ-OLEM-2020-0107-0892," contains information that conveys general information that EPA has solicited. In some instances, DEP was able to provide more detailed information (for example, ranges of depth to ground water, estimates of CCR volume, etc.), based upon our existing records. DEP was also able to determine that, to the best of our knowledge, certain potential legacy SIs or CCRMUs do not exist where source information within the docket indicated they might. Regardless, it is important to emphasize that the accompanying file primarily serves to convey to EPA what information exists withing the various DEP offices, should additional information or more detailed discussions be sought by EPA regarding these units.

DEP is not aware of any additional potential legacy SIs or CCRMUs that were not already identified by EPA in the docket.

DEP appreciates the opportunity to comment on EPA's NODA. Thank you for your time and consideration of these comments.

Respectfully,

Jessica Shirley
Jessica Shirley

Interim Acting Secretary