

October 12, 2018

AECOM Project No.
60587593

Basin Electric Power Cooperative
294 County Road 15
Beulah, North Dakota 58523

Engineer's Certification of Placement Above the Uppermost Aquifer Demonstration, Existing Emergency Holding Ponds, EPA Final CCR Rule, Laramie River Station, Wheatland, Wyoming

1. Purpose

The purpose of this document is to certify that the Placement Above the Uppermost Aquifer Demonstration for the BEPC Laramie River Station existing Bottom Ash Ponds is in compliance with the Aquifer location requirements specified in the Final CCR Rule at 40 CFR § 257.60. Presented below is the project background, summary of findings, limitations and certification.

2. Background

According to 40 CFR § 257.60(a) of the EPA Final CCR Rule, any new CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevation (including the seasonal high water table). The "uppermost aquifer" is defined by 40 CFR § 257.40 as the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary. This definition includes a shallow, deep, perched, confined or unconfined aquifer, provided it yields usable water.

3. Summary of Findings

Based on groundwater data, historic construction drawings, geotechnical analyses, and examination of site geology and hydrogeology, the existing Bottom Ash Ponds will meet the requirements of 40 CFR §257.60(a), as the unit has greater than 5 feet of separation between the base of the unit and the upper limit of the uppermost aquifer, as specified in 40 CFR § 257.60(a).

4. Certification

I, Jeremy Thomas, being a Registered Professional Engineer in good standing in the State of Wyoming, do hereby certify, to the best of my knowledge, information, and belief, that the information contained in this certification has been prepared in accordance with the accepted practice of engineering and that the information contained herein is accurate as of the date of my signature below. I further certify, for the above-referenced CCR Unit, that the demonstration regarding the location of the base of the CCR Unit greater than 1.52 meters above the upper limit of the uppermost aquifer meets the requirements of 40 CFR § 257.60(a).

Jeremy M. Thomas

Printed Name

October 12, 2018

Date

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