

CCR Construction Certification

Basin Electric Power Cooperative
Laramie River Station

Bottom Ash Pond 1

AECOM Project No.: 60609386
March 18, 2021

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Laramie River Station Bottom Ash Surface Impoundment CCR Retrofit Completion Revision History

Revision No.	Revision Date	Section Revised	Summary of Revision(s)
0	3/18/2021		Original Document

1. Background

The purpose of this CCR Construction Certification (Certification) is to document the Bottom Ash Pond 1 (BAP 1) retrofit construction was completed in accordance with the Retrofit Plan dated January 9, 2020 and that the work was performed in accordance with the Coal Combustion Residuals Rule (CCR Rule). The following sections provide background information on the facility and related regulatory requirements.

1.1 Facility Information

Name of Facility	Laramie River Station (LRS)
Name of CCR Units	Bottom Ash Pond 1 (BAP 1)
Name of Operator	Basin Electric Power Cooperative
Facility Mailing Address	347 Grayrocks Road, Wheatland, WY 82201
Location	Approximately five (5) miles northeast of Wheatland, WY
Facility Description	Laramie River Station (LRS) is owned by Missouri Basin Power Project (MBPP) and operated by Basin Electric Power Cooperative (Basin Electric). LRS consists of three (3) 570 megawatt (MW) units. Unit 1 went online in 1980, Unit 2 went online in 1981 and Unit 3 went online in 1982.

1.2 Regulatory Requirements

This certification has been developed for LRS BAP 1 in accordance with 40 CFR 257.102 (k). The CCR Rule requires preparation of a certification upon completion of the construction verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in 40 CFR 257.102(k)(2).

2. Retrofit Description

The retrofit of BAP 1 was performed in accordance with the CCR Rule and recognized and generally accepted good engineering practices. Plan items required under the CCR Rule described in this section constitute the narrative description of the specific measures that were taken to retrofit the CCR Unit, description of CCR removal procedures, estimated volume of CCR removed, and estimated surface area of the Units that affected by the retrofit.

2.1 Retrofit Description

The majority of the CCR and CCR impacted materials in BAP 1 were removed from BAP 1 and placed in Bottom Ash Pond 3 (BAP 3). A total of approximately 300,000 CY of material were removed from BAP 1. Approximately 35,000 CY of material were placed in the East Emergency Holding Pond (EHP-E). Materials included bottom ash, other CCR materials, non-CCR sludge materials from the site operations, the existing rip rap and cover material, and the existing membrane liner system. Upon removal of these layers, the exposed subgrade was visually inspected for the presence of any CCR materials or any other materials which needed to be removed to prepare the subgrade for the proposed construction. Once the subgrade was prepared, a liner system consisting of a geocomposite clay liner system (GCL) was installed. A synthetic membrane liner was then installed to create a composite liner system in accordance with section 257.71 of the CCR Rule.

2.2 CCR Removal

CCR and CCR contaminated soils and sediments were removed and placed into the eastern portion of EHP-E and BAP 3 by mechanical methods. Once all CCR containing materials had been removed, any free water was removed from the surface of the existing membrane system and was pumped into an existing CCR Unit. The membrane liner system was then removed and disposed of in other CCR Units at the site. Since a membrane liner system was in place below the impoundments, no CCR contaminated soils or sediments were observed below the previous liner system.

2.3 CCR Volumes

A total of 302,555 CY of material were removed from BAP 1. Approximately 35,000 CY were consolidated into the EHP-E with the remaining 267,555 CY being placed into BAP 3.

2.4 CCR Unit Area

The final area of retrofit for BAP 1 based on as-built construction records was 15.1 acres.

3. Engineering Certification

Certification Statement 40 CFR § 257.102(k)(4) – Completion of Retrofit Activities for an Existing CCR Surface Impoundment

CCR Unit: Basin Electric Power Cooperative; Laramie River Station; Bottom Ash Pond 1.

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. I certify, for the above-referenced CCR Unit, that the completion of retrofit activities is in accordance with the retrofit plan dated January 9, 2020 prepared pursuant to 40 CFR § 257.102(k)(2) and the requirements of 40 CFR § 257.102.

Jeremy Thomas
Printed Name

March 18, 2021
Date

