

**FOUR CORNERS POWER PLANT
CLOSURE PLAN §257.102(b)
RETURN WATER POND (RWP)
FC_ClosPlan_013_20200331**

Closure Plan Contents §257.102(b)(1)

The owner or operator of a CCR unit must prepare a written closure plan that describes the steps necessary to close the CCR unit at any point during the active life of the CCR unit consistent with recognized and generally accepted good engineering practices. The written closure plan must include, at a minimum, the information specified in paragraphs (b)(1)(i) through (vi) of this section.

SITE INFORMATION	
Site Name / Address	Four Corners Power Plant / End of County Road 6675, Fruitland, NM 87416
Owner Name / Address	Arizona Public Service / 400 North 5 th Street, Phoenix, AZ 85004
CCR Unit	Return Water Pond (RWP)
Location	36° 41' 05" N, 108° 29' 33" W
Reason for Initiating Closure	Permanent cessation of coal-fired boiler(s) by a date certain
Final Cover Type	N/A
Closure Method	Closure by removal
CLOSURE PLAN DESCRIPTION	
(b)(1)(i) – A narrative description of how the CCR unit will be closed in accordance with this section.	The Return Water Pond (RWP) is a new coal combustion residual (CCR) unit used to collect, store, and return various water flows to the Four Corners Power Plant. The RWP consists of two cells – the Flue Gas Desulfurization (FGD) cell and the Return Water Pond cell, collectively referred to as the “RWP.” The RWP has a surface area of 5.1 acres and a storage capacity of 38.6 acre-feet (at elevation 5379 feet). The RWP features a composite liner system consisting of a primary geomembrane liner, a geosynthetic drainage layer, a secondary geomembrane liner, and a geosynthetic clay liner.

	<p>The RWP will be closed by removing the CCR from the pond. The water remaining in the pond at the time of closure will be allowed to evaporate, leaving behind a concentration of CCR and CCR-impacted material on top of the liner. After the impounded water is evaporated, the liner materials will be folded and removed for disposal in the on-site Dry Fly Ash Disposal Area (DFADA), an existing CCR landfill.</p>
<p>(b)(1)(ii) – If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.</p>	<p>Applicable. CCR removal operations will consist of dewatering the existing pond via evaporation and removing the remaining CCR deposits using conventional excavators and loaders. The liner materials will be released from the anchor trench, cut into sections, folded inward to enclose any CCR solids, secured, and then removed and transported to the DFADA. APS expects that the RWP will be decontaminated by removing the CCR and primary liner system.</p> <p>The remaining excavation will be filled and graded with soil by bulldozing in the perimeter berms.</p>
<p>(b)(1)(iii) – If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this section.</p>	<p>Not applicable. The RWP will be closed by removing the CCR impounded at the time of closure.</p>
<p>INVENTORY AND AREA ESTIMATES</p>	
<p>(b)(1)(iv) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.</p>	<p>Flue gas desulfurization (FGD) materials will be stored in the FGD cell portion of the RWP. The FGD cell is expected to be operated independently of the RWP cell. The FGD cell will be emptied by vacuum truck as needed to</p>

	maintain capacity. The maximum volume of CCR ever on site over the active life of the RWP is expected to be 5.24 acre-feet (the volume of the FGD cell up to the freeboard elevation).
(b)(1)(v) – An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this section at any time during the CCR unit’s active life.	The inside area of the RWP at crest elevation (EL 5381 feet) is 5.5 acres.
CLOSURE SCHEDULE	
(b)(1)(vi) – A schedule for completing all activities necessary to satisfy the closure criteria in this section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps/milestones that will be taken to close the CCR unit, and the estimated timeframes to complete each step or phase of CCR unit closure. If closure timeframe is anticipated to exceed the timeframes specified in paragraph §257.102(f)(1) of this section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph §257.102(f)(2).	
The milestone and the associated timeframes are initial estimates. Some of the activities associated with the milestones will overlap. Amendments to the milestones and timeframes will be made as more information becomes available.	
Initial Written Closure Plan Completed	March 31, 2020
Receipt of Final Waste	December 31, 2031
Closure Activities Initiated	January 31, 2032
Complete Dewatering	October 31, 2032
Estimated Completion of Closure Activities	October 31, 2033

Certification Statement 40 CFR § 257.102(b)(4) – Initial Written Closure Plan for a CCR Surface Impoundment

CCR Unit: Arizona Public Service; Four Corners Power Plant; Return Water Pond

I, David E. Mickanen, being a Registered Professional Engineer in good standing in the State of New Mexico, 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 information contained in the initial written closure plan dated March 31, 2020 meets the requirements of 40 CFR § 257.102.

David E. Mickanen, P.E.

Printed Name

March 31, 2020

Date



