



OFFICE OF LAND AND EMERGENCY MANAGEMENT

WASHINGTON, D.C. 20460

September 10, 2025

Mr. Bobby Olsen
Salt River Project
P.O. Box 52025
Phoenix, AZ 85072-2025

Dear Mr. Olsen:

Thank you for contacting us about the status of the EPA denial of the alternative liner demonstration application for Coronado Generating Station in St. Johns, Apache County, Arizona. This letter is, in part, our response to your April 25, 2025, request to rescind the denial.

I. Background

The rule establishes a two-step process at 40 C.F.R. § 257.71(d). The first step (40 C.F.R. § 257.71(d)(1)) consists of an application intended to show whether the impoundment and the surrounding site have the characteristics that make it likely the applicant will be able to make the more extensive demonstration to support continued operation. The criteria in the application also are designed to ensure that the CCR surface impoundment can operate safely over the short term while the facility collects the data and conducts the analyses necessary to support the more comprehensive demonstration. The application step requires the facility to demonstrate that: (1) the impoundment is in full compliance with the applicable requirements in 40 C.F.R. part 257, subpart D; (2) the impoundment and the site possess characteristics and/or engineered components that meet specified criteria so as to result in a liner that is of good quality and in line with proven and accepted engineering practices, as required by 40 C.F.R. § 257.71(d)(1)(i)(C); and (3) there is no evidence the unit is currently leaking or is likely to leak while the demonstration is completed, which is largely shown by demonstrating that the unit appropriately remains in detection monitoring—i.e., no constituents listed in 40 C.F.R. part 257 Appendix III have been detected at a statistically significant increase (SSI) above background.

The second step (40 C.F.R. § 257.71(d)(2)) consists of the submittal of an alternate liner demonstration package intended to show that there is no reasonable probability that the operation of the surface impoundment throughout its active life will result in releases of constituents listed in 40 C.F.R. part 257 Appendix IV that exceed the groundwater protection standards at a statistically significant level (SSL). During this stage, the facility must conduct additional sampling and investigations to fully characterize the site, as well as conduct modeling of potential releases based on those data.

II. Salt River Project's Application

Salt River Project (SRP), the owner and operator of Coronado Generating Station (CGS), applied for an Alternative Liner Demonstration (ALD) for the Evaporation Pond at CGS titled "*SRP Application and Notice of Intent to Submit an Alternate Liner Demonstration in Accordance with 40 CFR § 257.71(d)(1)(ii)*" (application) on November 25, 2020. In the application SRP stated the Evaporation Pond meets all location restrictions, is not a source of groundwater contamination, and has an underlying clay unit that is 200 – 250 feet thick, acting as a natural seepage barrier. The application further asserted that due to the evidence presented, the Evaporation Pond can continue operation and will pose no reasonable probability of adverse health effects to human health or the environment. SRP also submitted additional data and analyses from further site investigations conducted in November 2021. EPA determined SRP's application to be complete on January 11, 2022.

On February 8, 2023, over two years from the initial application, EPA proposed to deny SRP's application on the grounds that SRP had failed to demonstrate that any of the three criteria in 40 C.F.R. § 257.71(d)(1)(i)(A)-(C), and listed above, had been met. The comment period for the Proposed Decision began February 8, 2023, and closed April 30, 2023.

On January 15, 2025, over five years from the initial application, EPA issued its final denial based on reviewing all available, relevant information as well as the 10 public comments received. This Final Denial was based on a determination that SRP failed to demonstrate that the Evaporation Pond: 1) is in compliance with all the requirements of 40 C.F.R. part 257, subpart D, as required in 40 C.F.R. § 257.71(d)(1)(i)(A); (2) appropriately remains in detection monitoring, as required by 40 C.F.R. § 257.71(d)(1)(i)(B); and (3) has a liner that is of good quality and in line with proven and accepted engineering practices, as required by 40 C.F.R. § 257.71(d)(1)(i)(C). Consequently, SRP was required either to 1) submit an application pursuant to 40 C.F.R. § 257.103(f)(2) within four months; or 2) cease receipt of waste into the Evaporation Pond no later than 135 days from the date of the decision (or such later date as EPA determines is necessary to address grid reliability).

On January 29, 2025, EPA received a letter from SRP titled, "*EPA's January 15, 2025, Order to Cease Using the Coronado Generating Station Evaporation Pond by May 30, 2025, is Expected to Cause Grid Reliability Issues for the Salt River Project Service Area Throughout the Summer of 2025*". This letter informed EPA that SRP would provide a detailed reliability assessment and requested EPA rescind and re-evaluate its decision.

On March 20, 2025, EPA approved SRP's request to extend the deadline to cease using the Coronado Generating Station Evaporation Pond due to grid reliability and resource concerns. To allow time for design, permits, and construction of alternative disposal capacity, the new deadline established was September 30, 2026.

On April 25, 2025, EPA received a letter from SRP requesting a rescission of the January 15, 2025, order to provide SRP an opportunity to address and resolve any concerns on SRP's Part B application and demonstration. SRP specifically raised that it has not been given the opportunity to respond to EPA's concerns about the clay formation underlying the Evaporation Pond. Moreover, SRP raised that EPA set impermissibly and impossibly high burdens to rule out all speculation as to the adequacy of the clay formation as a liner. SRP also noted that without timely rescission that it could be subject to \$90 million in costs for no meaningful environmental benefit.

III. EPA's Response

In response to SRP's April 25, 2025, request, EPA conducted a second review of the application. In this review, EPA has determined that the initial EPA review evaluated SRP's application against an overly stringent technical standard not required by the regulations. Based on the results of our analysis of the available information, EPA intends to issue a proposal to rescind the January 15, 2025, Final Denial and to approve SRP's alternate demonstration.

IV. Summary of EPA's Basis to Initiate a Process to Rescind the January 15, 2025, Final Denial

In the January 15, 2025, Final Decision, EPA stated the application was denied "because the available information fails to demonstrate that any of the three criteria in 40 C.F.R. §257.71(d)(1)(i)(A)-(C) have been met." As discussed below, in reaching this determination EPA required that the applicant demonstrate more than what is required by the regulations. Under the rationale of the January 15, 2025, Final Decision, the applicant would have had to address every conceivable potential or possibility to pass on to the next step. Such a technical standard imports a degree of certainty into an applicant's demonstration that the regulations do not require. Given site conditions here, it is not necessary to install dozens of monitoring wells around the CCR unit to adequately represent groundwater quality. Additionally, this step in the demonstration is intended to cover a period of twelve months which is of short duration when one considers, in this case, the surface impoundment in question has been in use for over four decades, - site conditions are unlikely to materially change during the review period.

1. Compliance with Groundwater Monitoring Requirements:

According to the regulations, a groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths, to obtain data that "accurately represents" the quality of background groundwater that has not been affected by a CCR unit, and groundwater passing the downgradient waste boundary of the CCR unit. 40 C.F.R. §257.91(a)(1)-(2). The SRP Evaporation Pond is a CCR surface impoundment that began operations in 1980 and is reported to extend over an area of approximately 330 acres. The groundwater monitoring system certified for this impoundment consists of two upgradient background wells and three downgradient wells. The two upgradient background wells are located to the north and southwest of the waste boundary and spaced approximately 8,000 feet (1.5 miles) apart around the perimeter. The three downgradient wells are located between 50 and 100 feet to the south of the waste boundary delineated by SRP and spaced approximately 750 feet and 1,000 feet apart around the perimeter. The wells are reported to be screened in a confined aquifer characterized as the sandstone and conglomerate of the Shinarump Member at the base of the Chinle Formation. This aquifer is reported to be first encountered between 220 feet and 250 feet beneath the impoundment. The site wells are screened at variable depths starting at 277 feet to 330 feet below ground surface, with screen lengths ranging from 50 feet to 80 feet.

In the January 15, 2025, Final Decision, EPA set too high a bar for what the applicant needed to demonstrate its data "accurately represents" the quality of background groundwater. For example, in the January 15, 2025, Final Decision, EPA stated that the screening lengths used in the wells are too long, some as long as 80 feet, which "can result in an unrepresentative groundwater sample." While this is possible, an alternate analysis indicates that it would not have been appropriate to screen the wells across the water table, as it would risk sealing off the water bearing interval located 40 or 60 feet beneath the piezometric surface. The use of longer

well screens is also considered appropriate at this site because of the use of the air rotary drilling method described by SRP. EPA also stated that screening of the center well is deeper than the other wells, “potentially representing” a separate aquifer – however EPA makes no conclusion. Again, it would not have been appropriate to screen the well across the water table, as it would risk sealing off the water bearing interval. EPA believes the length of the well screens provides an accurate characterization of groundwater quality because: 1) the aquifer being monitored is generally less than 30 feet thick, 2) the soil and rock overlying the aquifer are dry and so there is no risk of water from multiple formations mixing within the well, and 3) use of low-flow sampling techniques ensures the sample does not reflect groundwater drawn from far beyond the well screen.

Further, the groundwater monitoring regulations also require certification by a qualified professional engineer (P.E.) “that the groundwater monitoring system has been designed and constructed to meet the requirements ...” Since the original CCR rules were self-executing, EPA included the P.E. certification requirement to provide an additional level of confidence in the owner/operator’s efforts to comply. While the January 15, 2025, Final Decision discusses whether the P.E. certification submitted by SRP complied with 40 C.F.R. §257.91(f), there is no acknowledgement of the importance or even relevance of this certification. (see pp. 51-52). Upon finding the P.E. certification met the requirements, EPA should have acknowledged the relevance of having this independent assurance that the groundwater monitoring was designed and constructed in a compliant manner. This certification provides evidence to support that the groundwater monitoring system meets the applicable requirements.

The information presented in the 2020 Application appears to be sufficient to justify the number, depth, and spacing of wells installed around the Evaporation Pond. Subsequent data collected as part of the 2021 Investigation further confirmed this conclusion. In addition, due to the uniform thickness and low permeability of the Chinle Formation and the convergent flow of groundwater toward a central point, the number and placement of the wells in the groundwater monitoring network are sufficient.

In reevaluating SRP’s submission, EPA will ensure that the Agency is giving appropriate consideration to site specific factors pursuant to 40 C.F.R §257.91(b).

2. Remain in Detection Monitoring

In order to be approved to submit an ALD, an applicant must not only document that the existing groundwater monitoring program meets all requirements of 40 C.F.R. §§ 257.93–257.94, but also that the impoundment appropriately remains in detection monitoring, 40 C.F.R. § 257.71(d)(1)(i)(B)(2). —i.e., no constituents listed in 40 C.F.R. part 257 Appendix III have been detected at a statistically significant increase (SSI) above background. In the January 15, 2025, Final Decision, EPA states: “Given the deficiencies in the groundwater monitoring network ... there is no need to reach a final determination on whether SRP properly conducted its statistical analyses or adequately supported its ASD” (Final Decision pg. 54). Given the flaws in the prior decision discussed above, EPA reviewed SRP’s submission and EPA agrees that SRP’s alternate source demonstration (ASD) for exceedances of calcium appears to adequately demonstrate that elevated groundwater concentrations of this Appendix III constituent are attributable to a source unrelated to operation of the regulated surface impoundment for the reasons set forth

in SRP's application and comments on the proposed demonstration. Thus, EPA may be able to conclude that the unit is appropriately in detection monitoring.

3. Documentation That the Unit Has the Necessary Soil Characteristics or Engineering Quality

The third criterion to move to the next step in the part B process is whether the impoundment and the site possess characteristics and/or engineered components that meet specified criteria resulting in a liner that is of good quality and in line with proven and accepted engineering practices, as required by 40 C.F.R. § 257.71(d)(1)(i)(C). In 2016, the most recent sampling event, SRP collected eight samples from various depths of eight boreholes, half from around the perimeter of the Evaporation Pond and half from within an inactive impoundment east of the Evaporation Pond. Laboratory testing was conducted on the "as collected" samples for classification and index properties and hydraulic conductivity. The reported hydraulic conductivities ranged between 4.2×10^{-9} and 2.5×10^{-7} cm/s. This information, combined with an estimated clay layer thickness of 200 to 250 feet and a record of no releases over the life of the unit indicates that the SRP surface impoundment could operate in compliance over the time required to evaluate the second part of the ALD. The regulations only require that facilities provide documentation of the specifications in the application. 40 C.F.R. § 257.71(d)(1)(i)(C). Facilities are not required to demonstrate whether the alternate liner is sufficient until the demonstration phase. EPA's current review of SRP's 2020 Application and supplemental data collected as part of the 2021 investigation substantiates that the site appears to possess characteristics in line with proven and accepted engineering practices that meet the specified criteria required by 40 C.F.R. § 257.71(d)(1)(i)(C).¹

Although the January 15, 2025, Final Decision discusses the ALD criteria, it did not make a final determination on the ALD as it found that SRP failed to qualify to continue to step 2. Since completing this review, EPA has commenced the process of reviewing the ALD and will explain the basis for its decision on the ALD in a proposed and final decision in accordance with 40 C.F.R. § 257.71(d)(2)(iii)(C)(iv).

V. Conclusion

Finally, EPA is committed to ensuring that the residents in SRP's impacted service area have reliable, continuous access to electricity. EPA's priority is to restore American energy dominance while ensuring access to clean air, land, and water for every American. The Agency is also committed to lowering the cost of living for American families by removing barriers. EPA will continue to review the SRP application and at this time, believes the available information will support a decision to approve the ALD.

If you have any questions, please contact John Evans of my staff, at Evans.John.R@epa.gov or 202-438-6233.

Respectfully Submitted,

**STEVEN
COOK**

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Steven Cook
Principal Deputy Assistant Administrator (PDAA)

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¹ In the discussion of the soil characteristics, the January 15, 2025, Final Decision continued to set a technically impracticable standard by describing issues raised as “unlikely to be representative” or “could facilitate” or “possible evidence” – a standard that the regulatory-mandated liners could not meet if put under the same scrutiny. See pp. 63-68.