



Coal Combustion Residuals (CCR) Rule

Updated Draft Rule

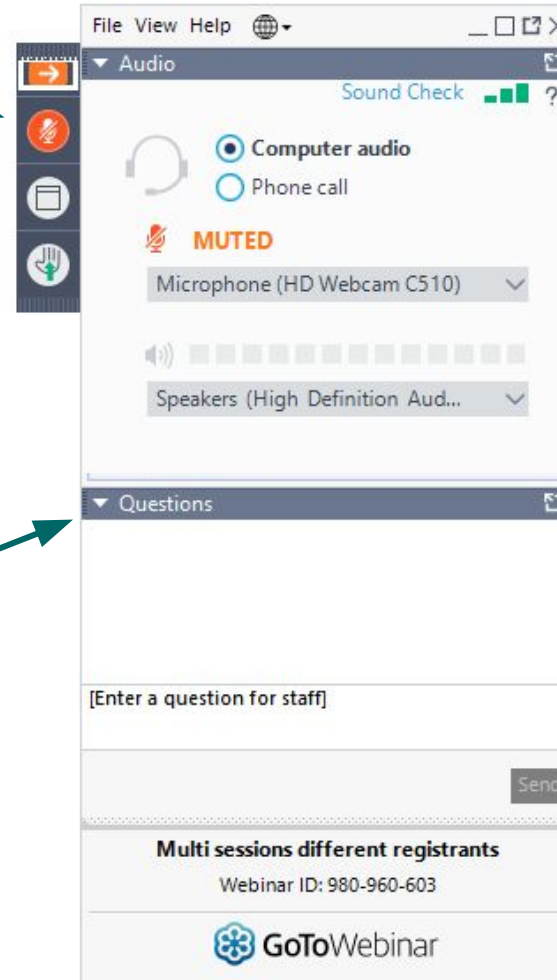
January 9, 2024



Clean Air, Safe Water,
Healthy Land for Everyone



- Muted



- Use the Question Tool





Executive Sponsor: Julie Riemenschneider, Director, Waste Programs Division

Section Manager: Terry Baer, Solid & Hazardous Waste

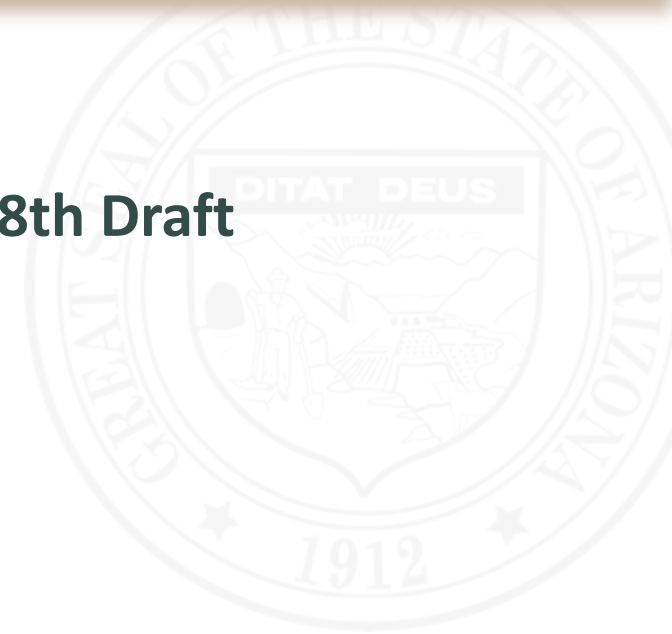
Project Manager: Robin Thomas, P.E., Solid & Hazardous Waste

Rule Writer: Mark Lewandowski, Waste Programs Division

Technical Support: Naida Wallstrom, P.E., Senior Geotechnical Engineer and
Mike Ploughe, P.G., Senior Hydrogeologist



- 1. Introductions**
- 2. Coal Combustion Residuals (CCR) Rule: Overview of Dec 18th Draft**
- 3. Changes to the Draft Rule**
 - **Protection of Groundwater**
 - **Dam Safety**
 - **Permits and Public Participation**
 - **Fees**
- 4. Timeline for Rulemaking and Program Approval**
- 5. Resources for More Information**
- 6. Questions**

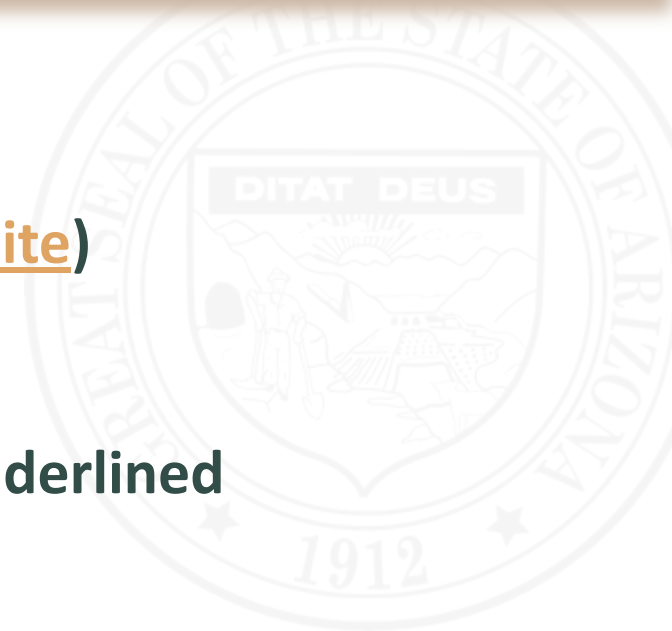




December 18th CCR Draft Rule - Overview

Draft Rule - Overview

- **First draft-Sept. 8, 2023 (still available on [ADEQ website](#))**
- **Current draft-Dec. 18, 2023 (now available on [ADEQ website](#))**
- **Housekeeping/technical changes**
 - **Reader aids removed; official proposed rule will be underlined**
 - **Former sections 1000 and 1001 combined;**
 - **Incorporation by reference language changes requested by EPA**
 - **Section 1010.01(A) and (B) switched**
 - **Article 17 to go back to CCR only**





Changes to the Draft Rule

– Groundwater Monitoring and Corrective Action

R18-13-1005. Groundwater Monitoring and Corrective Action

Clarification Regarding non-CCR constituent monitoring:

B. “The Director may require monitoring for constituents or pollutants not listed in appendix III based on information that non-CCR waste has been placed in a CCR unit. **[The owner or operator may propose to the Director that monitoring for non-CCR constituents be based on the owner or operator’s most recent aquifer protection permit. Monitoring requirements for non-CCR constituents at existing and new CCR units, including alert levels, discharge limitations, compliance schedules, and temporary cessation or plans shall be no more stringent than required to satisfy the requirements of A.R.S. Title 49, Chapter 2, Article 3, and Articles 1 and 2 of 18 A.A.C. 9.]”**

R18-13-1005. Groundwater Monitoring and Corrective Action

Clarification Regarding Alternate Source Demonstrations

Alternate Source Demonstrations (ASDs) are optional analyses conducted by a CCR facility which attempt to “Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality”. ASDs are certified by the facility professional engineer.

- ASDs are subject to ADEQ approval in accordance with the draft rule as enumerated in R18-13-1005 (C-E).
- ASDs would be treated as minor permit modifications subject to licensing time frames (LTFs) per R18-13-1017(F)(3)



Changes to the Draft Rule

- Surface Impoundments and Dam Safety

Surface Impoundments and Dam Safety

- Section 40 CFR 257.74(d)(1)(v)(B) was amended as follows, to match the inflow design requirements of 40 CFR 257.82(a)(3).

(B) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

 - (1) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or
 - (2) 1000-year flood [or 0.5 PMF, whichever is greater] for a significant hazard potential CCR surface impoundment; or
 - (3) 100-year flood [or 0.25 PMF, whichever is greater] for a low hazard potential CCR surface impoundment.”
- Language about notifications while implementing an emergency action plan, R18-13-1003.02: Additional Emergency Action Plan Requirements for CCR Surface Impoundments, was consolidated.
- R18-13-1004(E)(1) was amended to include (b) from the ADWR Rules:

(b) Include a control structure to avoid head cutting and lowering of the spillway crest for spillways excavated in soils or soft rock. In the alternative, the design may provide evidence acceptable to the Director that erosion during the inflow design flood will not result in a sudden release of the reservoir.

Surface Impoundments and Dam Safety

- R18-13-1006: Closure and Post-Closure Care was amended as follows:
40 CFR 257.100 through 40 CFR 257.104, revised as of December 14, 2020 (and no future editions) is incorporated by reference, and on file with ADEQ. on file with ADEQ, and modified by adding paragraph (4) to 40 CFR 257.104(b) as follows: **“(4) Inspection and monitoring, as required by § 257.83(b), as amended, shall continue throughout the post-closure care period.”**
- Section R18-13-1010.01(B)(1) language was changed to read:
An application shall include plans for the excavation of the CCR surface impoundment down to the level of the natural ground at the maximum section **or the maximum depth of the CCR surface impoundment whichever is greater**. Upon approval of the Director, additional breaches may be made. This provision shall not be construed to require more than total removal of the embankment regardless of the flood magnitude.
- R18-13-1010.01(B)(6) language was changed to read:
Reduction of a high or significant hazard potential CCR surface impoundment to an **unregulated size** shall be approved pursuant to R18-13-1017 under the following circumstances:
- R18-13-1010.01(C)(2)(b) was amended to include (iii) from the ADWR Rules.
(iii) That the sides of the breach will be excavated to a slope ratio that is stable and not steeper than 1 horizontal to 1 vertical.



Changes to the Draft Rule

– Permits and Public Participation

R18-13-1010 Permit Application Requirements for CCR Facilities

- B. The time for application submittal shall be as follows:
1. An application for an initial CCR facility permit shall be submitted within 180 days after the effective date of CCR program approval. An application for an initial CCR facility permit may be submitted prior to CCR program approval as allowed under A.R.S. § 49-891(F).
 2. An application for new CCR unit or lateral expansion of a CCR unit shall be submitted before beginning construction. Construction may not begin until the Director issues a permit or modification authorizing construction.
 3. For a renewal permit as required under R18-13-1016(A).

A.R.S. 49-891(F):

F. Within one hundred eighty days after the effective date of design and operation rules adopted by the director for coal combustion residuals facilities pursuant to this section, facilities with CCR units may submit to the department a permit application covering each CCR unit at the facility. Facilities with CCR units shall submit to the department a permit application covering each CCR unit at the facility within one hundred eighty days of CCR program approval.

R18-13-1010 Permit Application Requirements for CCR Facilities

New requirement for a pre-application public meeting held by the applicant prior to permit application submittal:

- C. Prior to submitting an initial or renewal CCR facility permit application, the owner or operator shall hold a public meeting in order to solicit questions from the community and inform the community of the permit. The owner or operator shall notify ADEQ, provide adequate public notice for the meeting and submit a summary of the meeting including a list of attendees and any voluntarily submitted addresses to the Department.

R18-13-1013 CCR Facility Permit Issuance or Denial

A. The Director shall issue CCR facility permits after EPA program approval, based upon the information obtained by or made available to the Department, if the Director determines that the permit requires the owner or operator to comply with A.R.S. Title 49, Chapter 4, this Article and Article 17. The procedures in this Article related to permit applications are applicable before EPA program approval, except that the licensing time frames requirements of 18 A.A.C. 1 do not apply until EPA program approval.

R18-13-1017 Modification of a CCR Facility Permit

E. Major permit modifications. A major modification is one that substantially alters the CCR unit or its operation requiring a material change to a substantive term, provision, requirement, or a limiting parameter of a permit, or one that could substantially impact human health or the environment.

Examples of major permit modifications R18-13-1017(E):

REMOVED: Reduction of post-closure care period

R18-13-1017 Modification of a CCR Facility Permit

F. Minor permit modifications

- Consolidated the example modifications to the groundwater program under (F)(3)
- Removed (F)(9) related to reduction in frequency/stringency of monitoring, maintenance, inspection, sampling, record keeping, and reporting activities
- Added interim measures needed during the corrective action program

R18-13-1017 Modification of a CCR Facility Permit

F. Minor permit modifications

3. Change to a groundwater sampling and analysis program including the following:
 - a. A change in the statistical method for evaluating groundwater monitoring data required by § 257.93(f)(6);
 - b. A change to an alternative groundwater sampling and analysis frequency pursuant to 257.94(d) or 257.95(c);
 - c. Demonstration of an alternative source of a statistically significant increase over background levels for a groundwater constituent per 257.94(e) or 257.95(f);
 - d. Assessment of corrective measures pursuant to 257.96 or extension of time for preparation pursuant to 257.96(a);
 - e. A change from detection to assessment monitoring or a return to detection monitoring from assessment monitoring.
 - f. Changes to an approved groundwater monitoring system, including reducing the number of groundwater monitoring wells, or making changes in location, depth, or design of groundwater monitoring wells required by the permit.



Changes to the Draft Rule

– CCR Program Fees

A.A.C. R18-13-1021 Fees

A. Table 2 Facility Annual Registration Fees

| CCR Unit Annual Registration Fees | |
|---|------------------|
| CCR Surface Impoundment | \$17,450 each* |
| CCR Landfill | \$13,150 each* |
| Approved CCR Multi Unit System | \$21,860* |
| Closed CCR Unit subject to post-closure | \$10,200 each* |

* Adjust by Consumer Price Index inflator after January 1, 2026

A.A.C. R18-13-1021 Fees

B. Table 3 CCR Facility Permitting Fees

| CCR Permitting Application Fees and Maximum Fees | | |
|--|-------------------------|--------------|
| License Type | Initial Fee* | Maximum Fee* |
| CCR Facility Permit (new or renewal) | \$20,000 | \$200,000 |
| Major Modification | \$10,000 | \$100,000 |
| Minor Modification | \$5,000 | \$50,000 |
| Administrative Modification | \$1,500 Flat Fee | N/A |

E(1): Processing charge modified to **\$244/hour**

A.A.C. R18-13-1021(E)(4) use of CPI Inflator

From and after **January 1, 2026**, the amounts in Table 2, Table 3, and paragraph (E)(1) above, shall be updated annually before January 1 of each year by the following method:

- a. On or about October 15 before the calendar year to be updated, ADEQ shall use the United States Bureau of Labor Statistics CPI Inflation Calculator at bls.gov/data/inflation_calculator.htm, as follows unless updated:
 - i. Insert the current fee or hourly rate in the first box.
 - ii. Insert September of the calendar year 13 months previous in the before-inflation box. Insert the previous September in the after-inflation box.
 - iii. Select “Calculate”. The new fee or hourly rate for the billing period beginning January 1 will be shown.



CCR Rule - Next Steps

What Comes Next?

**Final Rule and Governor's
Regulatory Review Council
(GRRC) Approval**

September 2024

**Preamble Drafting/EPA
review**

January/February 2024

Previous Stakeholder
Meetings on July 27 and Sept
19, 2023



**Today's Meeting
January 9, 2024**

**Rule Effective,
Submit Program to
EPA for approval**

November 2024

**Notice of Proposed
Rulemaking (NPRM)**

estimated March 2024



EPA CCR web page epa.gov/coalash

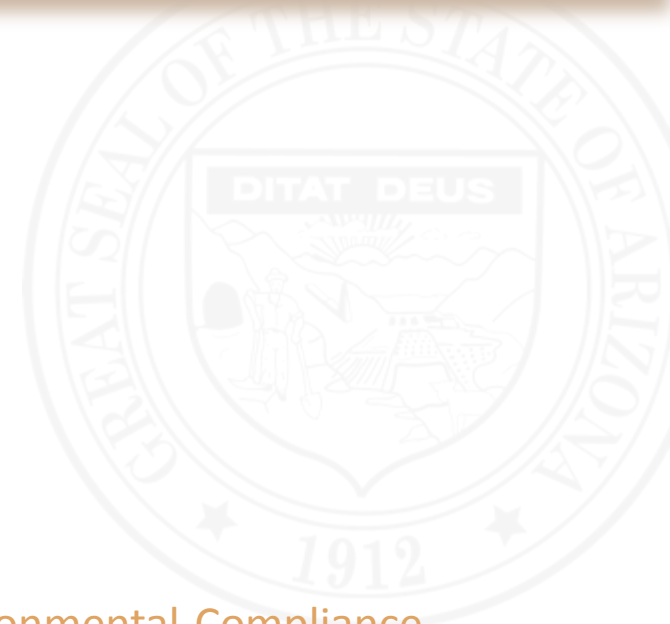
ADEQ rulemaking web page azdeq.gov/CCR-Rulemaking

Arizona Utilities web pages:

- Arizona Electric Power Cooperative ccr.azgt.coop/
- Arizona Public Service aps.com/en/Utility/Regulatory-and-Legal/Environmental-Compliance
- Salt River Project ccr.srpnet.com/
- Tucson Electric Power tep.com/ccr/

Arizona Dept of Water Resources Dam Safety Rules: [A.A.C. R15-12-1201 et seq.](#)

ADEQ email: wasterulemaking@azdeq.gov

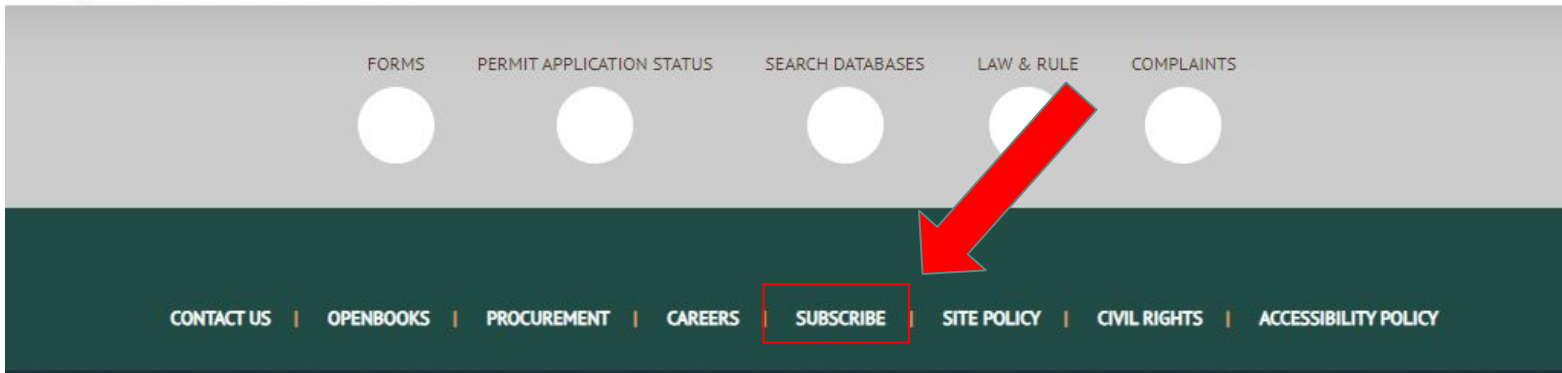


Subscribe to Receive Notifications

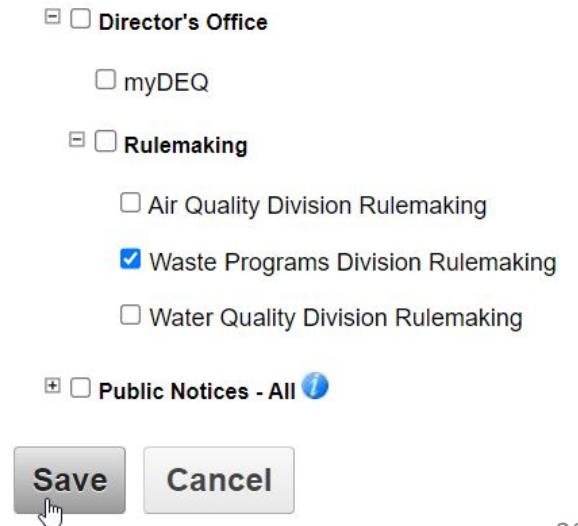
1. Go to www.azdeq.gov/



2. Scroll down to the bottom of the webpage and click "Subscribe"



3. Enter your email and follow the prompts
4. Scroll down and click: Waste Programs Division Rulemaking and save your preferences



Comments or Questions?

Please submit
comments through
our comment
portal here

For General Information:

Waste Rules Email:
wasterulemaking@azdeq.gov



Clean Air, Safe Water,
Healthy Land for Everyone
