They’re here!
Review of the new federal regulations for CCR
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National Practice Lead, CCP Management
http://www.flyash.info/
Agenda
01 Overview/Applicability of the Rule
02 Surface Impoundments
03 Landfills
04 Beneficial Use
05 CCR Piles
06 Groundwater Monitoring Systems
07 Recordkeeping, Notifications, and Publicly Accessible Internet Site
Overview/Applicability of the Rule
Overview of The Final CCR Rule

01 Published Draft Rule June 2010

02 Prepublication of final CCR rule issued December 19, 2014

03 Final CCR rule published in the Federal Register
   April 17, 2015

04 Final CCR rules will be effective 6 months after publication
   October 14, 2015
Overview of The Final CCR Rule

Final CCR Rule

Preamble: Pages 1 (21302) to 167 (21467)
Final Rule: Pages 167 (21467) to 201 (21501)

Perspective from the EPA on the Preamble

“The final definition makes extremely clear the impoundments that are covered by the rule, so an owner or operator will be able to easily discern whether a particular unit is a CCR surface impoundment.” [Final CCR Rule, Page 57 (21357)]
Changes from Pre-Publication Version

1. Clarifying that only coal mines will be excluded from the definition of a coal ash landfill — the regulatory text, as originally written, would have excluded all underground and surface mines

2. Adding language to clarify coal ash surface impoundments could either retrofit with a composite liner or close — the original version did not allow facilities the option to retrofit (just hinted to it in the preamble)

3. Added language to clarify all groundwater results are to be posted to the CCR website

4. Revising paragraphs outlining requirements for facility owners when a deficiency or release from a coal ash unit is identified during an assessment or inspection

5. Deleting potentially confusing language for the time frames to complete closing surface impoundments

6. Revisions to clarify that lead does not have an MCL
## Compliance Deadlines

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Deadline to Comply</th>
<th>Description of Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Restrictions (257.60-257.64)</td>
<td>October 17, 2018</td>
<td>- Complete demonstrations for placement above the uppermost aquifer, wetlands, fault areas, seismic impact zones, and unstable areas</td>
</tr>
<tr>
<td>Design Criteria (257.71)</td>
<td>October 17, 2016</td>
<td>- Document whether unit is lined or unlined</td>
</tr>
<tr>
<td>Structural Integrity (257.73)</td>
<td>December 17, 2015</td>
<td>- Install a permanent marker</td>
</tr>
<tr>
<td></td>
<td>October 17, 2016</td>
<td>- Compile a history of construction</td>
</tr>
<tr>
<td></td>
<td>April 17, 2017</td>
<td>- Complete initial assessments (hazard potential classification, structural stability, &amp; safety factor)</td>
</tr>
<tr>
<td></td>
<td>April 17, 2017</td>
<td>- Prepare emergency action plan</td>
</tr>
<tr>
<td>Air Criteria (257.80)</td>
<td>October 19, 2015</td>
<td>- Prepare a fugitive dust control plan</td>
</tr>
<tr>
<td>Run-on &amp; Run-off Controls (257.82)</td>
<td>October 17, 2016</td>
<td>- Prepare an initial run-on and run-off control plan</td>
</tr>
<tr>
<td>Hydrologic and Hydraulic Capacity (257.82)</td>
<td>October 17, 2016</td>
<td>- Prepare initial inflow design flood control system plan</td>
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<tr>
<td>Inspections (257.83)</td>
<td>October 19, 2015</td>
<td>- Initiate weekly inspections of the CCR unit</td>
</tr>
<tr>
<td></td>
<td>October 19, 2015</td>
<td>- Initiate monthly monitoring of instrumentation</td>
</tr>
<tr>
<td></td>
<td>January 18, 2016</td>
<td>- Complete initial annual inspection of CCR unit</td>
</tr>
<tr>
<td>Groundwater Monitoring and Corrective Action</td>
<td>October 17, 2017</td>
<td>- Install the groundwater monitoring system; develop the groundwater sampling &amp; analysis program; initiate the detection monitoring program; and begin evaluating the groundwater monitoring data for statistically significant increases</td>
</tr>
<tr>
<td>(257.90-257.98)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closure and Post-Closure Care (257.103-257.104)</td>
<td>October 17, 2016</td>
<td>- Prepare written closure and post-closure plans</td>
</tr>
<tr>
<td>Recordkeeping, Notification, and Publicly</td>
<td>October 19, 2015</td>
<td>- Conduct required recordkeeping; Provide required notifications; Establish CCR Website</td>
</tr>
<tr>
<td>accessible website (257.105-257.107)</td>
<td></td>
<td></td>
</tr>
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</table>
Implementation Timeline for Existing CCR Surface Impoundment

- April 2015
  - Rules Published in Federal Register

- October 2015
  - CCR Rule Effective

- December 2015
  - Initial fugitive dust control plan
  - Initiate weekly inspections (WI)
  - Initiate monthly monitoring of instrumentation (MI)
  - Establish CCR website (Recordkeeping / Notification)

- January 2016
  - Initial annual inspection (AI) of the CCR surface impoundment
  - Install permanent marker
  - Notification of intent to initiate closure (inactive SI)

- October 2016
  - Document lined or unlined (LI) assessment
  - Compile a history of construction
  - Complete structural integrity assessment
  - Initial inflow design flood control system plan
  - Prepare closure and post-closure care plans

- April 2017
  - Prepare emergency action plan

- October 2017
  - Groundwater hydrogeological setting
  - Install the groundwater monitoring system
  - Develop the groundwater monitoring program
  - Conduct baseline monitoring

- October 2018
  - Complete location restrictions criteria demonstration: for wetlands, fault areas, seismic impact zones, unstable areas, aquifer separation
On a pond by pond basis (landfill, pile, etc.), determine the approach to comply with the Rule and develop a plan to achieve implementation. This can start now.
No definition of a previously closed surface impoundment in the rule. Older closed units are defined in the preamble as exempt if capped or “otherwise maintained”—provided they no longer impound liquid.
Term Definition

**CCR Surface Impoundment**
1. A natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.

**Inactive CCR Surface Impoundment**
- CCR surface impoundment that no longer receives CCR on or after 180 days after publication date and still contains both CCR and liquids on or after 180 days after publication date.

**Existing (active) CCR Surface Impoundment**
- CCR surface impoundment that receives CCR both before and after 180 days after publication date, or for which construction commenced prior to 180 days after publication date and receives CCR on or after 180 days after publication date.

**New CCR Surface Impoundment**
- CCR surface impoundment that first receives CCR or commences construction after 180 days after publication date.
“If the walls or shell of the unit alone provide sufficient structural support to maintain the structural integrity of the unit under these conditions, the unit can be considered a tank. Accordingly, if the unit is not capable of retaining its structural integrity without supporting earthen materials, it must be considered a surface impoundment.”
What is an inactive surface impoundment?

- In the process of closure and no longer contains liquid on the effective date of the rule, and
- is maintained during the closure process so that it can no longer impound liquids,

Then the unit is **not an inactive CCR surface impoundment**.
If an existing impoundment receives no CCR on the “effective date” AND Completes dewatering and closure activities (in accordance with the final rule) within 3 years of publication date, THEN It is not subject to CCR requirements With the exception of:
• the air criteria for fugitive dust
• The inspection & monitoring requirements, and
• The record keeping requirements (including CCR website)

Notification of intent to initiate closure

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**Closure in Place**
Final cover must include 18-inch infiltration layer (minimum permeability $10^{-5}$ cm/sec) under a 6-inch erosion layer that can sustain vegetation (alternatives are acceptable)

**Clean Closure**
Remove all CCR from the unit and decontaminate all areas affected by releases from the impoundment, including the bottom liner, if applicable.

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**Dewatering**
• Eliminating free liquids by removing liquid wastes and solidifying the remaining wastes and waste residues
• Stabilizing remaining wastes sufficient to support the final cover system.
How Closure is Triggered for an Existing Impoundment?

01 Known final receipt of waste or final removal of CCR from the unit for beneficial use

02 Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity

03 CCR unit fails to meet any of the following technical criteria:
   • 18 months - If a CCR surface impoundment cannot demonstrate the minimum factors of safety regarding structural integrity of the CCR unit.
   • 30 months - If an unlined CCR surface impoundment is found to contaminate groundwater in excess of a ground water protection standard; or
   • 42 months - If the CCR unit has been sited inappropriately; i.e., cannot meet the applicable location criteria;
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<thead>
<tr>
<th>Assessment Condition</th>
<th>Safety Factor (minimum)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>long-term, maximum storage pool loading condition</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>maximum surcharge pool loading condition</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>seismic condition</td>
<td>1.00</td>
<td>2% exceedance in 50 years</td>
</tr>
<tr>
<td>liquefaction condition</td>
<td>1.20</td>
<td>for dikes constructed of soils that have susceptibility to liquefaction</td>
</tr>
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</table>
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Presence of Liner
- 18 months – document if impoundments include documented liner
- 3 acceptable alternatives that include at least 2 feet of material with a permeability not exceeding $10^{-7}$ cm/sec.

<table>
<thead>
<tr>
<th>Liner Option</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Soil Liner</td>
<td>2 ft of soil ($\leq 10^{-7}$ cm/sec)</td>
</tr>
<tr>
<td>Composite Liner</td>
<td>30 mil geomembrane (GM) over 2 ft of soil ($\leq 10^{-7}$ cm/sec)</td>
</tr>
<tr>
<td>Alternate Liner</td>
<td>30 mil GM over lower component (flow rate = 2 ft of soil, $\leq 10^{-7}$ cm/sec)</td>
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- If impoundment liner meets criterion, groundwater impact will not trigger closure.
How Closure is Triggered for an Existing Impoundment?

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Presence of Liner

- 18 months – document if impoundments include documented liner
- 3 acceptable alternatives that include at least 2 feet of material with a permeability not exceeding $10^{-7}$ cm/sec.

Liner Option

- Soil Liner 2 ft of soil ($\leq 10^{-7}$ cm/sec)
- Composite Liner 30 mil geomembrane (GM) over 2 ft of soil ($\leq 10^{-7}$ cm/sec)
- Alternate Liner 30 mil GM over lower component (flow rate = 2 ft of soil, $\leq 10^{-7}$ cm/sec)

In Final CCR Rule, per Section 257.95(g)(5), an unlined CCR SI found to contaminate the groundwater must close or retrofit.

- If impoundment liner meets criterion, groundwater impact will not trigger closure.
How Closure is Triggered for an Existing Impoundment?

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Location Restrictions
• 5 ft separation from uppermost aquifer (or seasonal high groundwater)
• Wetlands
• Fault areas
• Seismic impact zones
• Unstable areas
Once Closure is Triggered…

1. Known final receipt of waste or final removal of CCR from the unit for beneficial use

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3. CCR unit fails to meet any of the following technical criteria:
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   - 42 months - If the CCR unit has been sited inappropriately; i.e., cannot meet the applicable location criteria;

   • Owner must initiate closure of the CCR unit within 30 days
   • Note that final receipt of waste refers to • CCR or • any non-CCR wastestream
Once Closure is Triggered…

1. Known final receipt of waste or final removal of CCR from the unit for beneficial use

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Owner must initiate closure of the CCR unit within 2 years

Owner must initiate closure of the CCR unit within 30 days
Once Closure is Triggered…

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Owner must initiate closure of the CCR unit within 30 days

Owner must initiate closure of the CCR unit within 2 years

2 year extensions are possible provided that there is a reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use.
Once Closure is Triggered…

1. Known final receipt of waste or final removal of CCR from the unit for beneficial use
   - Owner must initiate closure of the CCR unit within 30 days

2. Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity
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3. CCR unit fails to meet any of the following technical criteria:
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   - 30 months - If an **unlined** CCR surface impoundment is found to contaminate groundwater in excess of a groundwater protection standard; or
   - 42 months - If the CCR unit has been sited inappropriately; i.e., cannot meet the applicable location criteria;
   - Owner must initiate closure of the CCR unit within 6 months
Once Closure is Triggered...

1. Known final receipt of waste or final removal of CCR from the unit for beneficial use
2. Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity
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Owner must initiate closure of the CCR unit within 30 days.

Owner must initiate closure of the CCR unit within 2 years.

Owner must initiate closure of the CCR unit within 6 months.

Alternative Closure Requirements (extensions) are available if, alternate disposal capacity is not available:
- Pond can remain in use up to 5 more years.
- Owner continues its efforts to obtain additional capacity.
- Owner complies with all other requirements.
- Owner prepares Annual Progress Report.

Owner must initiate closure of the CCR unit within 30 days.
Once Closure is Triggered…

1. Known final receipt of waste or final removal of CCR from the unit for beneficial use

2. Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity

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   - 42 months - If the CCR unit has been sited inappropriately; i.e., cannot meet the applicable location criteria;

Owner must initiate closure of the CCR unit within 6 months

Alternative closure requirements (extensions) are available if…

- Extension for alternative disposal capacity does not apply if structural integrity FOS are not met.
- Pond can remain in use up to 5 more years
- Owner continues its efforts to obtain additional disposal capacity
- Owner complies with all other requirements
- Owner prepares Annual Progress Report
Closure Period of a Surface Impoundment

Initial Closure Period
5 years is allowed to complete impoundment closure

Extensions
• For Impoundments >40 acres → Up to 5, 2-year extensions possible
• For impoundments <40 acres → 1, 2-year extension is possible
Retrofitting Criteria

To retrofit an existing CCR surface impoundment, the owner or operator must:

• First remove all CCR, including any contaminated soils and sediments from the CCR unit; and

• Comply with the requirements in § 257.72 (Design criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment).

• A CCR surface impoundment undergoing a retrofit remains subject to all other requirements of this subpart, including the requirement to conduct any necessary corrective action.
Landfills
### Term Definition

<table>
<thead>
<tr>
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<th>Definition</th>
</tr>
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</table>
| CCR Landfill             | 1. An area of land or an excavation that receives CCR and is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave.  
2. Includes sand and gravel pits and quarries that receive CCR, CCR piles.  
3. Any practice that does not meeting the definition of a beneficial use of CCR. |
| Existing (active) CCR Landfill | • CCR landfill that receives CCR both before and after publication date, or  
  • for which construction commenced prior to 180 days after publication date and  
  • receives CCR on or after 180 days after publication date. |
| New CCR Landfill         | CCR landfill or lateral expansion of a CCR landfill that first receives CCR or commences construction after 180 days after publication date. |
| Overfill                 | New CCR landfill constructed over a closed CCR surface impoundment.                                                                      |
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**New CCR Landfill**
- CCR landfill or lateral expansion of a CCR landfill that first receives CCR or commences construction after 180 days after publication date.

**Overfill**
- New CCR landfill constructed over a closed CCR surface impoundment.
How Closure is Triggered for an Existing Landfill?

01 Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or removes the known final volume of CCR from the CCR unit for the purpose of beneficial use

02 Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity

03 CCR unit fails to meet the following technical criteria:
   • 42 months - If the CCR unit cannot demonstrate that the CCR unit is located in a stable area; unless…
     – The owner or operator demonstrates that recognized and generally accepted engineering practices have been incorporated into the design of the CCR Landfill to achieve the integrity of the structural components of the CCR landfill will not be disrupted.
Once Closure is Triggered…

1. Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or removes the known final volume of CCR from the CCR unit for the purpose of beneficial use

2. Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity

3. CCR unit fails to meet the following technical criteria:
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Owner must initiate closure of the CCR unit within 30 days
Once Closure is Triggered…

1. Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or removes the known final volume of CCR from the CCR unit for the purpose of beneficial use

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Owner must initiate closure of the CCR unit within 30 days.

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2 year extensions are possible provided that there is a reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use.
Once Closure is Triggered…

1. Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or removes the known final volume of CCR from the CCR unit for the purpose of beneficial use

   Owner must initiate closure of the CCR unit within 30 days

2. Two years after the most recent receipt of CCR or removal of CCR for beneficial use for idled CCR units with remaining capacity

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3. CCR unit fails to meet the following technical criteria:
   - 42 months - If the CCR unit cannot demonstrate that the CCR unit is located in a stable area; unless…

   Owner must initiate closure of the CCR unit within 6 months

   Alternative Closure Requirements (extensions) are available if… alternate disposal capacity is not available
   - Landfill can remain in use up to 5 more years
   - Owner continues its efforts to obtain additional capacity
   - Owner complies with all other requirements
   - Owner prepares Annual Progress Report
Closure Period of a Landfill

Initial Closure Period:

6 months is allowed to complete landfill closure (assumes phased closure)

Extensions:

For landfills not triggered by failure to meet location restrictions
→ Up to 2, 1-year extensions possible
CCR Landfill: Also refer to the preamble page 200 (specifically 202-203)

• Existing CCR landfill means a CCR landfill that receives CCR both before and after effective date, or for which construction commenced prior to effective date and receives CCR on or after effective date.

• A CCR landfill has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to effective date.
Existing Landfill – What is existing?

- Having a permit to install does not grandfather an entire footprint in as existing
- Each phase needs to receive CCR or have construction initiated by the effective date

- Move groundwater wells to edge of active limits of waste
- Can the future cell become part of the existing landfill?
- Undeveloped cells are considered lateral expansions
Beneficial Use Criteria

Beneficial use of CCR means the CCR meet all of the following conditions:

01 The CCR must provide a functional benefit;

02 The CCR must substitute for the use of a virgin material, conserving natural resources that would otherwise need to be obtained through practices, such as extraction;

03 The use of the CCR must meet relevant product specifications, regulatory standards or design standards when available, and when such standards are not available, the CCR is not used in excess quantities; and

04 When unencapsulated use of CCR involving placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases to groundwater, surface water, soil and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use.
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Ash Consolidation – Must Be Beneficial

Ash Consolidation
Use CCR from existing Surface Impoundment (SI) to construct crown/cover system for inactive SI.

01 The CCR must provide a **functional benefit**;
02 The CCR must **substitute** for the use of a **virgin material**;
03 The use of the CCR must meet relevant **product specifications**…
04 When unencapsulated use of CCR involving placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate ...or that **environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks** for human and ecological receptors during use.
CCR Piles

CCR pile or pile means any non-containerized accumulation of solid, non-flowing CCR that is placed on the land. CCR that is beneficially used off-site is not a CCR pile.

- A non-containerized pile is subject to all of the requirements of a landfill.
- An example of a “pile” that is not yet beneficially used is unconsolidated CCR placed on the land, that have been designated by the CCR facility to be transferred to another location for subsequent beneficial use (e.g., use as road bed, closure construction) in the near future. Therefore subject to the disposal rule.
• The use of the phrase “non-containerized” is not intended to require that all activities occur within tanks or containment structures, but merely that concrete measures have been adopted to control exposures to human health and the environment.

• This could include placement of the CCR:
  – Protect Groundwater: On an impervious base, such as asphalt, concrete, or a geomembrane
  – Protect Surface Water: Leachate and run-off collection
  – Protect Air: Wall or wind barriers
CCR Piles

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Nevertheless, EPA agrees that not every activity that involves the management of CCR must occur in a unit that meets all of the technical requirements of a CCR landfill (e.g., groundwater monitoring).
Groundwater Monitoring System
Groundwater Monitoring and Corrective Action

Applicability
• All CCR landfills (except inactive landfills that are not subject to the CCR Rule)
• All surface impoundments and lateral expansions (except inactive surface impoundments that will close within 36 months of the Rule)

Overview
• Within 30 months of publication
  - Install groundwater monitoring system
  - Conduct 8 monitoring events (must account for seasonal and spatial variability)
• Semiannual detection monitoring can trigger assessment monitoring (one statistical failure of Appendix III)
• If Assessment monitoring identifies presence of Appendix IV constituent above Groundwater Protection Standards (GWPS), then an Assessment of Corrective Measure is triggered.
• Leads to Implementation of Corrective Action Program

<table>
<thead>
<tr>
<th>Appendix III Constituents</th>
<th>Appendix IV Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boron</td>
<td>Antimony</td>
</tr>
<tr>
<td>Calcium</td>
<td>Arsenic</td>
</tr>
<tr>
<td>Chloride</td>
<td>Barium</td>
</tr>
<tr>
<td>Fluoride</td>
<td>Beryllium</td>
</tr>
<tr>
<td>pH</td>
<td>Cadmium</td>
</tr>
<tr>
<td>Sulfate</td>
<td>Chromium</td>
</tr>
<tr>
<td>Total dissolved solids (TDS)</td>
<td>Cobalt</td>
</tr>
<tr>
<td></td>
<td>Fluoride</td>
</tr>
<tr>
<td></td>
<td>Lead</td>
</tr>
<tr>
<td></td>
<td>Lithium</td>
</tr>
<tr>
<td></td>
<td>Mercury</td>
</tr>
<tr>
<td></td>
<td>Molybdenenum</td>
</tr>
<tr>
<td></td>
<td>Selenium</td>
</tr>
<tr>
<td></td>
<td>Thallium</td>
</tr>
<tr>
<td></td>
<td>Radium 226 and 228 combined</td>
</tr>
</tbody>
</table>
Groundwater Monitoring and Corrective Action (cont.)

30 Months

- Inactive Surface Impoundment
  - Close & Cap within 36 months?
    - Yes
      - $257 Not Applicable
    - No
      - Active Surface Impoundment, CCR LF, LID Expansion
- Characterize Hydrogeology $257.01(h)
  - Install SW Monitor Sys. $257.01(e) (d)(6)
  - Develop GWM Program $257.03
- Detection Monitoring $257.04
  - 8 Background (baseline) Events App III + IV
    - App II SVS above GWM
      - Yes
        - 90 days to implementation
      - No
        - SSI of App II + III? $257.01(d)(c)(a)
          - Yes
            - Alternative Source Demonstration $257.05(h)
            - Successful?
              - Yes
                - Assessment Monitoring $257.05
              - No
                - Assessment Monitoring $257.05
                - 2 Events with no App II SSI + No App IV Above Background?
                  - Yes
                    - Alternative Source Demonstration $257.05(h)
                  - No
                    - Characterize Nature & Extent Install New M/W(s) $257.06
                    - Fail
                      - Alternative Source Demonstration $257.05(h)
                      - Succeeded
                        - Yes
                          - Assessment Monitoring $257.05
                          - App IV SSI Above GWM? $257.95(g)
                            - Yes
                              - Assessment Monitoring $257.05
                              - App III or App IV Above Background but Below GWM? $257.95(l)
                                - Yes
                                  - Assessment Monitoring $257.05
                                - No
                                  - Close per $257.101(c)
                    - Succeeded
                      - No
                        - Close per $257.101(c)
  - Fail
    - Close per $257.101(c)

90 Days

- Establish GWPS for Detected App IV
- Evaluate Potential Corrective Measures
- Public Meeting

90 Days (+ potential 60 day extension)

- Review of Necessity $257.07
- Evaluation Report + Implementation Schedule
- Implement Corrective Action Program $257.08

DRAFT

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Groundwater Monitoring and Corrective Action

• **Q:** Are aquifers that do not yield a usable quantity or quality of groundwater covered by the rule’s definition of “aquifer” which is limited to those “capable of yielding usable quantities of groundwater to wells or springs.”

• **A:** The requirement to construct a unit with a base located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer would not apply to geologic formations that are incapable of yielding usable quantities of groundwater to wells or springs. However, consistent with the final CCR regulations, as well as the part 258 regulations on which the CCR regulations are based, the quality and value of an aquifer should be a site-specific determination. **Usable water in an aquifer typically includes all groundwater currently used or potentially available for drinking water and other beneficial uses (e.g., industrial or agricultural use), whether or not it is particularly vulnerable to contamination.** The Agency is unable to judge the resource value of an aquifer based on a generic scale of significance because of the variability of aquifers on a site-by-site basis.
07

Recordkeeping, Notifications, and Publicly Accessible Internet Site
CCR Recordkeeping

Operating Record
Files that must maintain all information required by Rule in a written operating record at their facility.

- Retained for at least five years
- More than one CCR unit may use one recordkeeping system
- For existing CCR units, …no later than 6 months after publication date
- For new CCR units, …no later than the date of initial receipt of CCR

CCR Website
Within 6 months of the Rule’s publication date, establish and maintain a publicly accessible internet site (CCR website)
Thank you

Please contact us for more information

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