The final Coal Combustion Residuals (CCR) rule, published by the U.S. Environmental Protection Agency (EPA) on April 17, 2015 and effective October 19, 2015, will impact disposal units in different ways depending on various factors such as structural integrity, environmental impacts, location, size and usage. What type of unit do you have?

<table>
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<th>EXISTING ACTIVE IMPOUNDMENT: Unit that is in operation and receiving wet CCR at the effective date of the rule</th>
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<td><strong>Structural Criteria (257.73 - 257.83)</strong></td>
<td>The critical implementation timeframe requirement is to demonstrate that the minimum structural integrity and factors of safety are met. If they are not identified as being met, the CCR impoundment, if active, must stop receiving CCR and close within 6 months. Requirements for both inactive and active impoundments include compiling a history of construction, installing a permanent survey marker, completing an initial hazard potential classification assessment, performing an initial structural stability assessment and initial safety factor assessment, and developing an emergency action plan (EAP).</td>
<td>Not applicable</td>
<td></td>
</tr>
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<td><strong>Location Criteria (257.60 - 257.64 &amp; subpart A)</strong></td>
<td>Verify that impoundment is not located: 1. Within 1.52 meters (5 feet) of uppermost aquifer (257.60) 2. In wetland jurisdiction (257.61) 3. In a fault area (257.62) 4. In a seismic impact zone (257.63) 5. In an unstable area (257.64) 6. In a floodplain (40 CFR Part 257, subpart A) 7. In an endangered species habitat (40 CFR 257, subpart A)</td>
<td>Verify that the landfill is not located in an unstable area (257.64)</td>
<td></td>
</tr>
<tr>
<td><strong>Run-on and Run-off Controls (257.81)</strong></td>
<td>Not applicable</td>
<td></td>
<td>Owners are required to develop run-on/run-off control plans. Controls are designed to minimize the amount of surface water entering the landfill, minimize erosion, minimize surface water impacts, minimize storm water run-off and mitigate leachate generation.</td>
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<td><strong>Liner Criteria (257.71)</strong></td>
<td>Impoundment must be lined with 2 feet of compacted soil with K&lt;1x10-7 cm/s or equivalent alternative liner in accordance with new rule.</td>
<td>Not applicable</td>
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<td><strong>Groundwater Monitoring and Corrective Action (257.90 - 257.98)</strong></td>
<td>Demonstrate that concentrations of constituents have not exceeded the groundwater protection standards (for constituents listed in Appendix IV of rule).</td>
<td></td>
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**POTENTIAL ACTIONS**

| Structural Criteria (257.73 - 257.83) | Owner/operators can implement stabilization methods such as installing a cement bentonite slag containment wall to maintain the structural integrity of the unit. Conduct a structural integrity assessment, including calculations of factors of safety under various loading conditions. | Not applicable |
| Location Criteria (257.60 - 257.64 & subpart A) | Verify that the upper aquifer has at least 1.52 meters (5 feet) separation with the installation of piezometers or wells. Complete a location assessment to include wetlands/floodplain/endangered species survey and seismic survey including stability and fault mapping review. | Complete a location assessment to include stability review |
| Liner Criteria (257.71) | Have a qualified professional verify whether CCR unit is either lined or unlined. Owner/operator must document whether or not CCR surface impoundment was constructed with any one of the following: (1) liner with a max k. of 1x10-7 cm/sec, (2) composite liner that meets requirements of 257.70(b) or (3) an alternative liner that meets the requirements of 257.70(c). | Not applicable |
| Groundwater Monitoring and Corrective Action (257.90 - 257.98) | Install the groundwater monitoring system; develop the groundwater sampling and analysis program; initiate the detection monitoring program; and begin evaluating the groundwater monitoring data for statistically significant increases over background levels. Minimum of eight independent samples for each background and downgradient well must be collected and analyzed no later than 24 months after the effective date. Monitoring databases can help manage groundwater monitoring data and ease the development of routine RCRA reports, along with supporting trend plots, data summary tables and statistical analysis information. | |

**RULE EXEMPTIONS AND ALTERNATIVES**

<p>| Closure Exemption (257.100) | Not applicable | Inactive CCR impoundments that are able to complete dewatering and capping operations by April 17, 2018 are exempt. | Not applicable |
| Beneficial Use Exemption | Beneficial use of CCR, including such usage as in roadway, cement, agriculture, wallboard and fillers will be exempt from the rule. Owner/operators can evaluate beneficial use of CCR as practical. | |
| Alternative Closure Requirements (257.103) | Owner/operators may continue to receive CCR in active impoundments provided they have no other available alternative and meet the requirements stated in 257.103. The impoundment may remain open for no longer than 5 years after the initial certification. The unit may also continue to receive CCR if the owner/operator certifies that the facility will cease operating coal-fired boilers by a certain date. | Not applicable | Owner/operators may continue to receive CCR in existing landfills provided they have no other available alternative and meet the requirements stated in 257.103. The landfill may remain open for no longer than 5 years after the initial certification. The unit may also continue to receive CCR if the owner/operator certifies that the facility will cease operating coal-fired boilers by a certain date. |</p>
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<td>Fugitive Dust (257.80)</td>
<td>Prepare fugitive dust control plan — must identify and describe the CCR fugitive dust control measures the owner/operator will use to minimize CCR from becoming airborne at the facility.</td>
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| Record Keeping (257.105) | - Owner/operator must maintain files of all information required in a written operating record at their facility.  
- Unless specified, each file must be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, record or study.  
- Owner/operator may comply with requirements in one recordkeeping system provided the system identifies each file by the name of each CCR unit. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks or on microfiche.  
- Owner/operator must submit to the state director and/or appropriate tribal authority any demonstration or documentation required by this subpart, if requested, when such information is not otherwise available on the owner/operator’s publicly accessible internet site. | | |
| Notification (257.106) | - Required notifications must be sent to the relevant state director and/or appropriate tribal authority before the close of business on the day the notification is required to be completed.  
- Notifications specified in this section must be sent to the state director and/or appropriate tribal authority within 30 days of placing in the operating record.  
- Owner/operator must notify the state director and/or appropriate tribal authority when information according to 257.106 has been placed in the operating record and on the owner or operator’s publicly accessible internet site.  
- Notification requirements are applicable to location restrictions, design criteria, operating criteria, groundwater monitoring and corrective action, closure and post-closure care. | | |
| Internet Requirements (257.107) | Owner/operator must maintain a publicly accessible CCR website containing the information specified in this section. The website must be titled “CCR Rule Compliance Data and Information.” | | |

**NOTE:**
Information obtained from 40 CFR Part 257.

**Are you excluded? If you fall under any of these categories, the CCR regulation will not apply to you:**
1. Landfill units that haven’t received CCR since the effective rule date of October 19, 2015.
2. Units at facilities that haven’t produced electricity since the effective rule date of October 19, 2015.
3. Units not related to electric utilities or independent power generation.
4. Any CCR waste that is used beneficially is exempt.

**FOR MORE INFORMATION, CONTACT:**

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**John Reichling**
(404) 720-1388  

![Jon Welch](image2.jpg)  
**Jon Welch**
(617) 452-6332
Next Steps for Impoundments

Will existing impoundment cease receiving CCR prior to effective date of new EPA rule?

Inactive impoundment

Active impoundment

Active impoundments not in compliance with the rule must stop receiving CCR. Both active and inactive impoundments not in compliance with the rule must initiate closure within 6 months of determination of non-compliance.

Active impoundments not in compliance with new rule must cease receiving CCR. Active and inactive impoundments must initiate closure within 6 months of determination of specific non-compliance. Closure must be completed within 5 years.

Inactive impoundments:
1. Can complete closure within 3 years of rule effective date to gain exemption from rule requirements, or
2. Must initiate closure of the CCR unit no later than 2 years after the most recent receipt of CCRs or any non-CCR waste stream or no later than 2 years after the most recent date that CCRs was removed from the unit for the purpose of beneficial use, whichever is later. Additional time for closure may be requested by Owner/operator.

Active impoundments in compliance with the rule may continue to receive CCR.
Inactive impoundments:
1. Can complete closure within 3 years of rule effective date to gain exemption from rule requirements, or
2. Must initiate closure of the CCR unit no later than 2 years after the most recent receipt of CCRs or any non-CCR waste stream or no later than 2 years after the most recent date that CCRs was removed from the unit for the purpose of beneficial use, whichever is later. Additional time for closure may be requested by Owner/operator.

Active impoundments not in compliance with new rule may continue to receive CCR until an alternative disposal option is identified for a maximum duration of 5 years after rule publication. The unit may also continue to receive CCR if the owner/operator certifies that the facility will cease operating coal-fired boilers by a certain date.

Structural Criteria
Can required minimum factor of safety be demonstrated or achieved by retrofitting (within 18 months of rule publication date)?

Can impoundment be retrofitted or can engineering demonstrations be made within 42 months of rule publication date to meet location criteria?

Liner Criteria
Is impoundment lined with two feet of compacted soil with K<1X10^-7 cm/s or equivalent alternative liner in accordance with new rule?

Is impoundment located:
1. Within 1.5 m of uppermost aquifer?
2. In wetland jurisdiction?
3. In a seismic impact zone?
4. In an unstable area?
5. In a fault area?
6. In a floodplain?
7. In an endangered species habitat?

Location Criteria
Is a groundwater sampling and monitoring system in place?

Has groundwater sampling detected concentrations of constituents listed in Appendix IV of rule at statistically significant levels above groundwater protection standard?

Liner Criteria
Is impoundment lined with two feet of compacted soil with K<1X10^-7 cm/s or equivalent alternative liner in accordance with new rule?

A groundwater monitoring, sampling and analysis plan must be planned and implemented in accordance with new rules within 30 months of rule publication date.

Are alternative disposal options available?

- Characterize the nature and extent of the release.
- Install additional monitoring wells.
- Within 90 days, initiate an assessment of corrective action.

Active impoundments in compliance with new rule may continue to receive CCR.
Next Steps for Landfills

**Existing Landfill**

- **Location Criteria**: Is landfill located in an unstable area?
  - **Y**: Owner has 42 months to retrofit or make demonstrations and to comply with run-on and run-off requirements within 18 months.
  - **N**: Unit is exempt.

**New Landfill/Lateral Expansion**

- **Location Criteria**: Is landfill located:
  1. Within 1.5 m of uppermost aquifer?
  2. In wetland jurisdiction?
  3. In a seismic impact zone?
  4. In an unstable area?
  5. In a fault area?
  6. In a floodplain?
  7. In an endangered species habitat?

**Can landfill be retrofitted or can engineering demonstrations be made within 42 months of April 17, 2015, to meet location criteria?**
- **Y**: Owner has 18 months to prepare initial run-on and run-off control system plan.
  - Operation of the unit can begin if all other requirements under the CCR rule are met within 6 months of the publication date, including fugitive dust controls, weekly inspections, record keeping and public notification via a website.
- **N**: No CCR can be placed in unit.

**Is it lined with composite or alternative composite liner?**
- **Y**: Owner will have up to six months after the landfill has been found non-compliant to start the closure process, with October 19, 2016, being the deadline to develop a closure plan, unless the owner conforms to an alternative closure procedure.
- **N**: Owner has 30 months to meet groundwater monitoring and corrective action requirements.

**Does unit contain leachate collection and removal system?**
- **Y**: If there is no liner, the unit must initiate closure within 6 months of determination. Closure must be completed within 5 years with potential for extension.
- **N**: A leachate collection and removal system is required.

**Does it meet applicable groundwater monitoring and corrective action criteria?**
- **Y**: Owner has up to 42 months to retrofit or make demonstrations and to comply with run-on and run-off requirements within 18 months.
- **N**: Operation of the unit can begin if all other requirements under the CCR rule are met within 6 months of the publication date, including fugitive dust controls, weekly inspections, record keeping and public notification via a website.