

CCR Update: What's Next?!

Midwest Environmental Compliance Conference
Kansas City Convention Center

Subtitle



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CCR Rule

- In April 2015, USEPA finalized the CCR Rule
- Established requirements for CCR disposal in utility waste landfills (UWLs) and surface impoundments (ash ponds)
- Response to TVA Kingston Plant CCR release in December 2008



Background

- USEPA CCR Rule
 - Prescriptive
 - “Phase-oriented”
 - No risk assessment process
 - No review/approval process
 - One size fits all
 - Open to interpretation

Where We've Been

- Surface Impoundment Closures
- Ash Handling Improvements
- Groundwater Monitoring System Certification

Where We're Going – Groundwater Monitoring

- Detection Monitoring

- 8 rounds of groundwater sampling to establish background should be complete
- If there are statistically significant increases (SSIs) in downgradient wells, assessment monitoring is triggered

- Assessment Monitoring

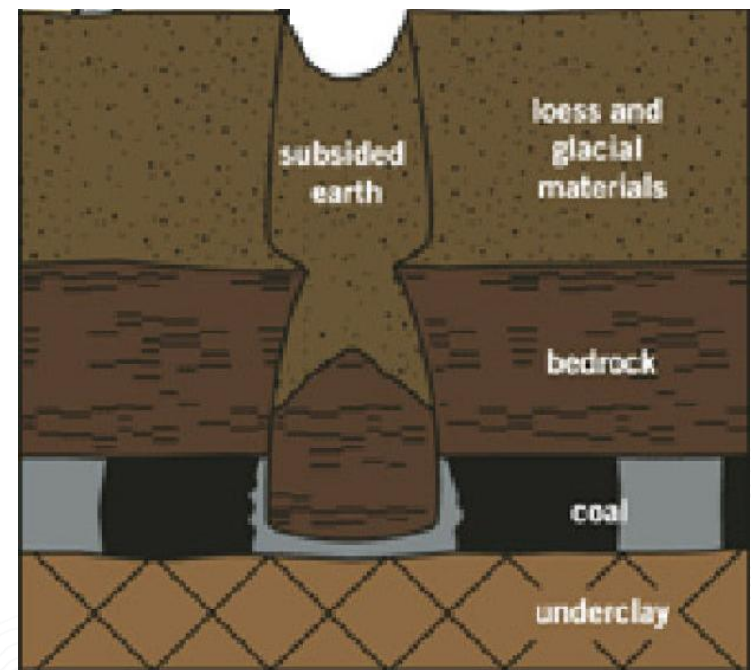
- Establish Groundwater Protection Standard (GWPS)
 - GWPS higher of a) background or b) MCL
- Exceedances of GWPS determined during assessment monitoring phase
- If you have exceedances of GWPSs, you move from assessment monitoring to corrective action

Where We're Going – Unstable Area Certification

- Certification required by October 2018
- UWL siting criteria:
 - placement above the uppermost aquifer
 - proximity to wetlands
 - proximity to fault areas
 - seismic impact zone
 - avoidance of unstable areas
- First four apply only to new UWLs, fifth applies to both new and existing UWLs

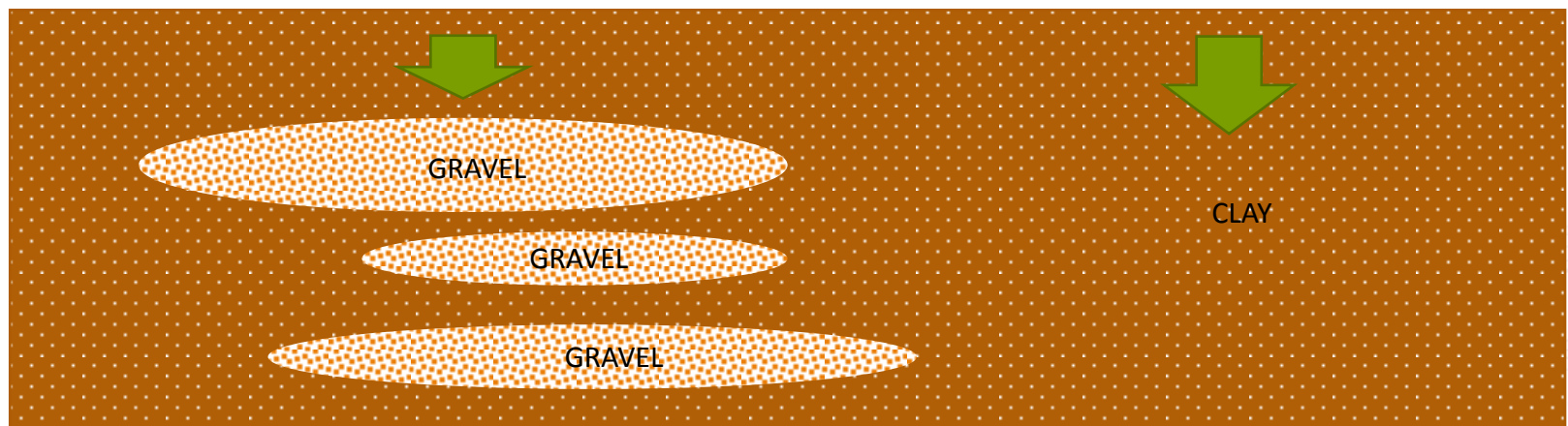
What Constitutes Unstable Areas?

- Mine subsidence – this is probably more likely for UWLs constructed at mine mouth power plants.



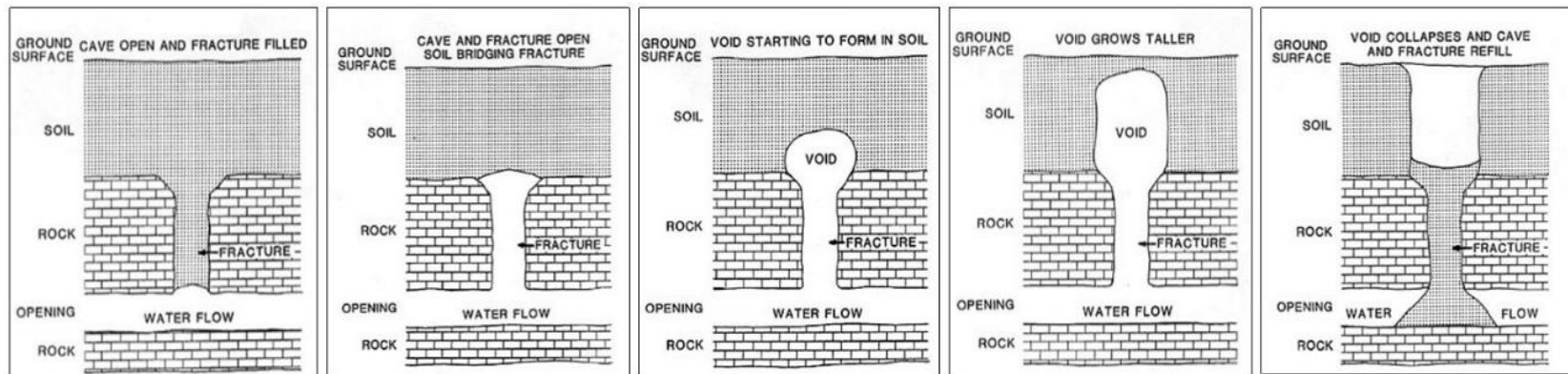
What Constitutes Unstable Areas?

- Differential settlement – probably more likely for UWLs constructed in alluvial settings where part of footprint is underlain by soft clays and part is underlain by stronger alluvial gravels.



What Constitutes Unstable Areas?

- Karst – formation of sinkholes beneath the UWL.



What Constitutes Unstable Areas

- In all cases, the concern is that the integrity of the landfill liner system may be compromised.

Certification of Landfill Stability

- GeoEngineers has developed techniques to produce high resolution 3D imagery of UWLs using Electrical Resistivity Tomography (ERT) and Multi-Channel Analysis of Surface Waves (MASW).



Coming Changes

Water Infrastructure Improvements for the Nation (WIIN) Act

- Provides for state CCR Permit Programs
- Provides USEPA the authority to review and approve state CCR Permit Programs
- State programs must be “as protective as” USEPA CCR Rule
- In “non-participating states,” USEPA must implement a permit program

Proposed Amendments to National CCR Regulations

- Addresses provision of Final Rule that were remanded back to EPA by the D.C. Circuit Court
- Provides states, under the WIIN Act, the ability to set certain alternative performance standards
- Provides for flexibilities in state CCR Permit Programs
- Clarifies non-groundwater releases with respect to corrective action
- Provides restriction for height of vegetation with respect to slope protection

Proposed Amendments to National CCR Regulations

- Adds boron to Appendix IV
- Allows CCR in final cover systems for units closing with waste-in-place
- Allows alternative closure for facilities with continued need to manage non-CCR waste streams
- Out for comment through April 30

State Programs - Missouri

- MO Senate measure passed which would give MDNR authority to establish rules and approve target levels for a state CCR program
- Similar MO House bill has not yet reached the chamber floor
- MDNR working on state CCR regulations and holding stakeholder group meetings

State Programs - Kansas

- EPA conditionally approved Kansas Solid Waste Management Plan in October 2015
- Kansas SWMP incorporates by reference federal CCR Rule
- Approval conditioned on Kansas adopting federal minimum CCR standards
- Until process is complete, existing state laws regulations, and permitting authority govern CCR disposal

Questions?

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