



# Seismic Design of Tailings Dams – OSM's Perspective

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# Office of Surface Mining

- ⇒ One of eight bureaus in the U.S. Department of the Interior
- ⇒ Charged with regulating coal mining and reclamation
- ⇒ Established by the Surface Mining Control and Reclamation Act of 1977 (SMCRA)

# SMCRA

- ⇒ Consists of two major sections
  - Title IV – Abandoned Mine Land reclamation
  - Title V – Regulatory program for active mining and reclamation

# Regulatory Program under SMCRA

- ⇒ First established in 1978
- ⇒ Many of current regulations were promulgated in 1983
- ⇒ Federal rules serve as a model for establishment of state regulatory programs
  - Results in “level playing field” across US

# State Regulatory Programs

- ⇒ Most states with coal production have primacy
  - Only 2 exceptions
  - When states have primacy, OSM (Federal government) has only oversight role
- ⇒ State programs established through state law and regulation

# Seismic Design Requirements

- ⇒ Based in great degree on MSHA's regulations at 30 CFR 77.216 (incorporated by reference)
- ⇒ NRCS Technical Release 60 requirements
- ⇒ Permitting requirements are at 30 CFR 780.25
  - Certified design by a qualified person (e.g., P.E.)

# Dam Performance Standards

- ⇒ Set out in regulations at 30 CFR 816.49, 816.81 and 816.84
- ⇒ Similar regulations for underground mines at 30 CFR 817.49, 817.81 and 817.84
- ⇒ 1.5 static safety factor, 1.2 seismic safety factor
- ⇒ Regular inspections

# State Program Requirements

- ⇒ Similar to Federal regulations based on no less effective test
- ⇒ Jason Stoltz from Kentucky Department of Surface Mining Reclamation and Enforcement can discuss specifics of Kentucky's program

# Contact information

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