MOAB UMTRA PROJECT
MARCH, 2016

Mill Site, Moab

Disposal Cell, Crescent Junction

Lee Shenton, Grand County UMTRA Liaison

Presented at Biennial Symposium of SWANA Beehive Chapter
Springdale, Utah  March 3, 2016
Extraction of 30 tons of uranium oxide left 16 million tons tailings near the Colorado River.

Charlie Steen
Founder of Uranium Reduction Company

1959

1956

1984

Courtesy of DOE
WHY MOVE THE TAILINGS?

- Radiation and chemical hazards
- 25 million water users downstream
- Endangered species threatened locally
- 1.4 million visitors to Arches NP each year

Clean-up standards per 40CFR192, EPA
TAILINGS SHIPPED 30 MILES NORTH

Rail Bench, Moab Site

Disposal Cell, Crescent Jct

Public land with favorable geology, road and rail access
DISPOSAL CELL DESIGN

“Top of Waste” is 25 feet above grade

Tailings compacted to 1-foot layers

Monitoring wells

Mancos Shale, 2,200 feet thick so no liner required

Multi-layer rock and soil cover defends against erosion, frost heave, deep-rooted weeds, burrowing animals and radon release

15 foot berm of excavated soil, stone-clad

Cell excavated to 25 feet below grade

Cross-Section, Not to Scale
Rock slides along rail spur

>110,000 tons mill debris

Full train headed for Crescent Junction with 4,800 tons of tailings in 136 sealed containers

Rock slides along rail spur
- Removed 51% of pile since April, 2009
- Intercepted 230 mil gal groundwater
  - 4,500 pounds uranium and 860,000 pounds ammonia
- Monitoring environmental impacts
  - No public or employee exposure above limits
  - River quality being protected
- Flood controls are working well
- Remediated 13 Vicinity Properties
Tailings Removed
(Tons/Year, Millions)

Funding
(Million $)

FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17

ARRA*

Current Challenges

- Mill debris slows progress
- Disposal cell needs expansion
- More VPs need remediation
- Rock slides happen!
Future Vision for Moab Site

- Expected completion 2025
- *Site Futures Committee* takes public input, assuming DOE will transfer the Moab site
- Public wants balanced mix of community facilities, parks and commercial uses at Moab.