Moab UMTRA Project
Site History and Virtual Tour

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Site Setting
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[View of the site with labels for Matheson Wetlands Preserve, Colorado River, UMTRA Site, Arches National Park, and a view looking south]
Site Background and Scope

• Former uranium ore-processing facility 1956 to 1984
• 480-acre site, 130 acres covered by mill tailings pile
• Toe of pile is 750 ft from west bank of Colorado River
• Relocate 16 million tons of uranium mill tailings to engineered disposal cell
• Actively remediate ground water and provide endangered fish species habitat protection at the Moab site
Uranium Discovery

• Charlie Steen
  • Discovery in July 1952, Lisbon Valley
  • Carnotite \((K_2(UO_2)_2(VO_4)_2\cdot3H_2O)\) vs Uraninite \((UO_2,\text{ but often found }U_3O_8)\)
Regional Mining

- Permitted Uranium/Vanadium Mine
- Past Producer
- Prospect/Occurrence
- Uranium as Minor Associated Commodity — generally not recovered (Associated with copper, beryllium or fluorite mines or deposits)
- Uranium/Vanadium Processing Mill
- Uranium Area Boundary
- Uranium Districts
- Outcrop Area of Major Uranium-Bearing Strata
  - Upper Jurassic (includes Morrison Fm.)
  - Upper Triassic (includes Chinle Fm.)
Earliest Photo of Mill Site

1905
Mill Site Development

1957

1959
Milling Process
The End of an Era

- 1984 – Mill Closed
- 1988 – Started Decommissioning Mill
- 1989 to 1995 – Interim Cover Placed on Tailings Pile
- 1998 – Atlas Declared Bankruptcy

- 2000 – Floyd D. Spence Act amended UMTRCA Title 1
  - DOE given responsibility for remediation of the Moab site
- 2000 to 2002 – Site Characterization
- 2003 – Site Observational Work Plan (SOWP) finalized
- 2003 – Initiation of Groundwater Interim Action
  - Objective: limit ecological risk from contaminated groundwater discharging to potential endangered fish species habitat areas along the Colorado River
  - Biological Assessment
  - Biological Opinion
  - Screening Level Risk Assessment
- 2005 – Record of Decision (ROD)
2009 – Excavation: First Train 4/20/09
Drying Beds
Excavation
Scale
Lidding
Rail Bench
Crescent Junction Disposal Cell
Crescent Junction Disposal Cell
2009 – Present: Remediation of Tailings

- 2009 – First shipment of tailings on 4/20/09
- 2010 – Off-pile Remediation
- 2023 – 14M Tons shipped (to be met this fall)
- Removing approximately 1 million tons each year

Over 85% complete!
QUESTIONS?