

Moab Uranium Mill Tailings Remedial Action (UMTRA) Project

Project Update and Tailings Transportation Options

June 5, 2008

Public Meeting

Grand Center, Moab, Utah

Donald Metzler, Federal Project Director



Agenda

- Project scope, timeline, and costs
- Tailings transportation options
- Material handling design and animation video
- Recent project activities at Moab site
- Crescent Junction disposal cell design and recent activities
- Proposed 2019 completion date
- Comments and questions



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Project Scope

- Relocate approximately 12 million cubic yards (16 million tons) of uranium mill tailings and other contaminated materials from Moab site to the Crescent Junction, Utah, location for permanent disposal
 - Predominantly by rail
- Actively remediate ground water at the Moab site
- Remediate vicinity properties that exceed regulatory standards

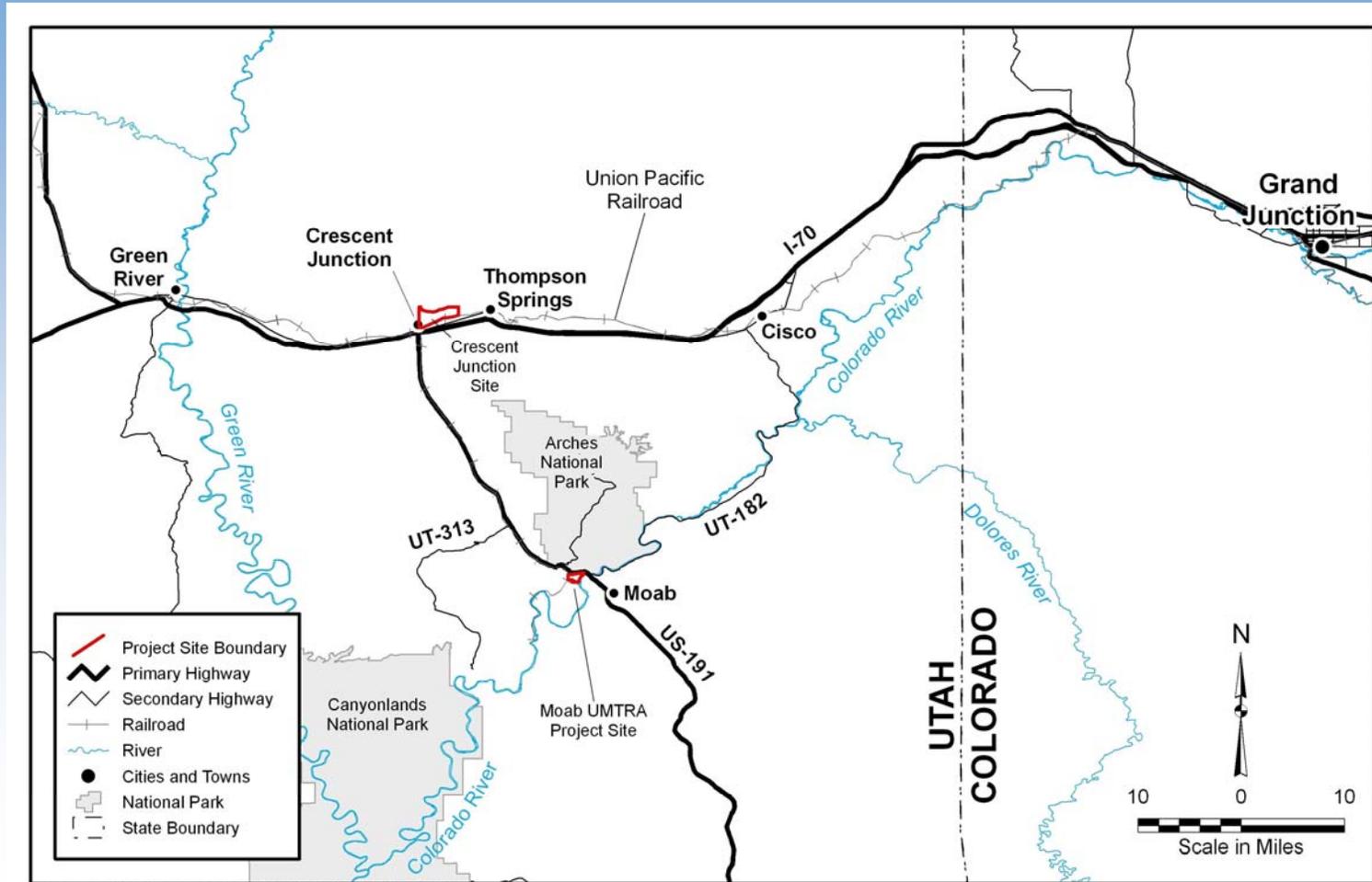


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Location of Moab UMTRA Project Site and Crescent Junction Disposal Site



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Project Timeline From 2007

- Remedial Action Contract (RAC) awarded to EnergySolutions — June 2007
 - Finalize designs and install the material handling system and initiate tailings movement
- Technical Assistance Contract (TAC) awarded to S&K Aerospace, Inc. — June 2007
 - Provide technical and administrative support services to DOE, continue the ground water remediation efforts, and assess vicinity properties
- Independent safety review of RAC hillside load out design — November 2007
- DOE approval of final designs for material handling and disposal — January 2008

Project Timeline From 2007 (continued)

- Began waterline construction at Crescent Junction — February 2008
- Department of Interior permanently transferred 500 acres of land at Crescent Junction to DOE for disposal cell — March 2008
- Final Remedial Action Plan presents the basis for constructing a disposal cell at Crescent Junction
 - Submitted to U.S. Nuclear Regulatory Commission (NRC) — March 2008
 - NRC approval — summer 2008
- Approval to begin long-lead procurement — May 2008



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Project Timeline From 2007 (continued)

- Begin infrastructure construction at Moab and Crescent Junction — June 2008
- Select transportation method — July 2008
- Begin construction of transportation infrastructure — September 2008
- Begin tailings haul — depends on transportation method selected
- Project completion date — 2028



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Project Costs

- Current year funding: \$39 million, which includes funding not spent last year
- Next year requested funding: projected at \$30 million
- Funding projected at \$30 million per year after 2009, but dependent on annual Congressional appropriations



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Transportation Options for 2028

- Predominantly rail — current plan
 - Begin tailings haul late 2009, depending on Union Pacific schedule
 - Phase 1: one train per day, Monday through Friday, with 17 railcars carrying 68 containers
 - Phase 2 begins late 2012: one train per day, Monday through Thursday, with 34 railcars carrying 136 containers
 - Each container loaded with 39.5 tons of tailings
 - Oversized material transported by truck



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Transportation Options for 2028 (continued)

■ All truck

- Begin tailings haul late 2008
- 139 trips up to Crescent Junction and back will be made by haul trucks each day
- 31 trucks
- Ship Monday through Thursday, use Friday as make-up day
- Each container loaded with 32 tons of tailings (highway transport limit without special permit)



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Evaluation of 2028 Options

■ Advantages

• Rail

- Potentially safer for public because avoids putting trucks on U.S. Highway 191
- Each container can be loaded with more tailings
- Uses less fuel to move tailings

• Truck

- No infrastructure directly associated with trucks; therefore, tailings haul could begin sooner
- Utilizes more labor, so potentially higher local employment



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Evaluation of 2028 Options (continued)

■ Issues

- Rail
 - Longer infrastructure construction time
 - Hillside construction details not well established
- Truck
 - Increases amount of vehicle traffic on U.S. Highway 191 by up to 9.5 percent in some portions
 - Extent of highway improvements undetermined and could be costly
 - Range from additional emergency turnouts and a traffic light at State Route 279 to widening the remaining portions of U.S. Highway 191 to four lanes and building an overpass over SR 279
 - Truck accident could shut down project for prolonged period



Status of Evaluation

- Safety is our highest priority
- Public input being sought on transportation methods
- Union Pacific Railroad negotiations
 - Crossing and switch upgrades
 - Hillside loading configuration
 - Union Pacific requested signed agreement by June 15
- Utah Department of Transportation (UDOT) discussions
 - Highway access permit
 - Improvements needed on U.S. Highway 191
 - UDOT traffic analysis on Highway 191; results by mid-June



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Status of Evaluation (continued)

- Evaluate costs for each option
 - Rail charges by weight per container with a fuel surcharge; costs for rail upgrades has some uncertainty
 - Fuel charges for diesel continue to increase; costs for highway improvements has some uncertainty
- Anticipate making a decision on transportation method this summer



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Material Handling Animation Video



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Recent Project Activities at Moab Site

- Remediated 29 acres of contaminated soils in the northwest corner; brings total on site to 99 acres
 - Dust control efforts
- Flood planning and mitigation
 - River reached temporary peak on May 23 at 41,000 cubic feet per second, recorded at the Cisco gage



Water level in Moab Wash crossing on May 23. Sandbags prevent water from reaching road on south side that leads to well field.



Level of river near well field on May 23. Sandbags were placed along riverbank to reinforce berm.



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Recent Project Activities at Moab Site (continued)

■ Interim Remedial Action Ground Water System

- Addresses elevated ammonia levels in ground water
- 41 remediation wells extract contaminated ground water
- 110 million gallons extracted as of end of May
- 487,000 pounds of ammonia and 2,100 pounds of uranium removed to date



Configuration1 well vaults in interim action system.

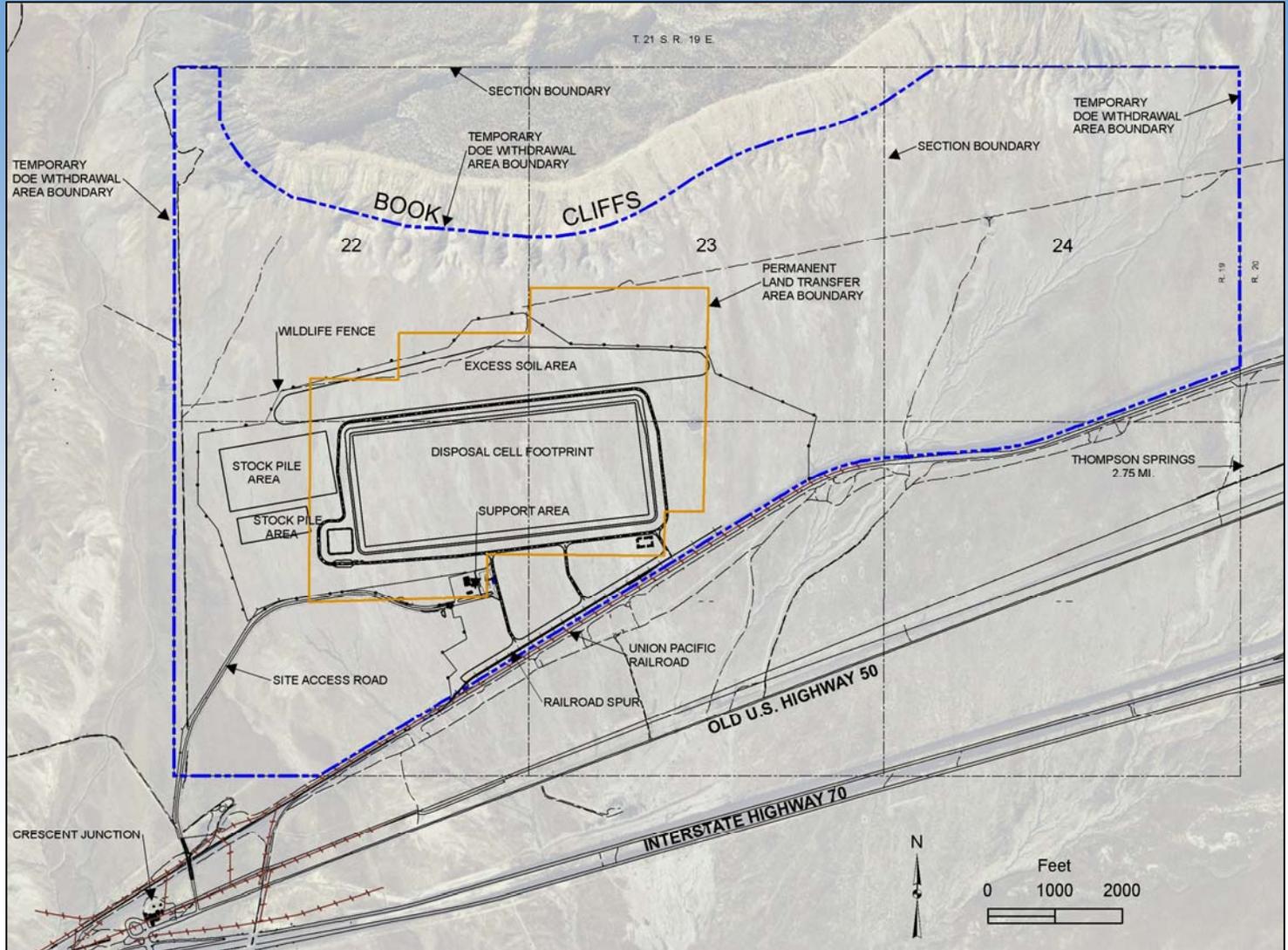


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Crescent Junction Disposal Cell



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Crescent Junction Disposal Cell (continued)

- Depth of excavation: ~25 ft
- Above-ground height of contaminated materials: ~20 ft
- Multi-layered cover: ~8-ft thick
 - Rock cover source will likely be similar to that used on Green River, Utah, uranium mill tailings disposal cell
- Volume of tailings and contaminated materials: ~12 million cy
- Permanent land transfer area: 500 acres; additional 1,800 acres in temporary withdrawal area



Recent Project Activities at Crescent Junction Site

- Installed 21-mile, 6-inch waterline from the Green River to Crescent Junction site
 - Provide construction water for compaction and dust control
 - Permanent intake to be installed fall 2008
- Building construction water storage pond adjacent to disposal cell location
 - 15 feet above ground
 - 9-million-gallon pond



Construction of water storage pond at Crescent Junction site



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Proposed 2019 Completion Date

- Congress is seeking to move project completion date to 2019
- DOE amended Record of Decision in February 2008 to allow flexibility in the transportation method
- RAC prepared Alternatives Analysis in March 2008 for transportation options
- DOE preparing Report to Congress that provides annual funding requirements; due on June 26
 - Transportation options considered viable are all rail, all truck, and a combination of truck and rail
 - Costs are roughly the same for all options, considering the uncertainties



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Comments and Questions

- DOE would like your input
- Ways to provide input:
 - Comment form
 - Email: moabcomments@gjem.doe.gov
 - Toll-free project hotline: 1-800-637-4575
- Visit the Moab UMTRA Project website at www.gjem.energy.gov/moab



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