Moab UMTRA
Uranium Mill Tailings Remedial Action

Looking east, July 8, 2019

MTPSC Status Update
by Russ von Koch
Grand County UMTRA Liaison
Highlights

- Funds supporting 4 trains per week
- 65 K tons moved in April, 75 K tons in May & 71 K tons in June
- Total tailings removed thru June = 9.797 million tons (> 61%)
- Removing some mill debris w RRM
- Groundwater remediation halted during Colorado River high water

Observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 3170.
FY 18: Moved 468 K tons
FY 19: Moved 480 K tons by 6/30; perhaps 700 K by EOFY?

ARRA* American Recovery and Reinvestment Act of 2009, aka “Stimulus” Funding

FY 19 $144 m for four other non-defense sites. Moab has second highest $ of five non-defense sites.

Tailings shipment and funding information provided by Moab UMTRA. Other observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 3170.
61% of Tailings Removed
Keeping Tonnage up

Tailings Removed (000 tons per month)

- 201,000 tons per month with ARRA
- Shipments curtailed Dec 2012 – Feb 2013 due to funding cuts
- Shipments interrupted by rock slide
- Start 4 trains per week on Feb 4 2019

Tailings shipment and funding information provided by Moab UMTRA. Other observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 3170.
Main Project Goals

- Move tailings away from Colorado River
- Protect river by intercepting ground water contaminants
- Remediate vicinity properties (VP)
- Reclaim project sites at Moab and Crescent Junction

FY2018 tonnage averaged 39 K tons/month; April thru Jun = 70.3 K
Continuation of 2019 funding could result in earlier tailings removal (2027?) and site reclamation (2029?) than depicted above.

Move Tailings
GW Remediation
VP Remediation
Site Reclamation

2/4/19
Project doubles trains shipped.

ACTIVE REMEDIATION
1 remaining of 15

April thru June shipments were 80% over the 2018 average.
Impacts Around Moab: 18Q2-19Q1

pCi/L = picoCuries per Liter, radiation from Radon gas in the air, L4Q average
Guideline: Gamma not to exceed 100 mREM/yr above background. Gamma total for last 12 months at nearest home was 101 mREM, or 9% above CJ background of 92 mREM.
Airborne Radioparticulates

Total mREM L4Q multiple vertical axis by 10 to convert to % of alim.
i.e., 4 = 40%

DCG = Derived Concentration Guideline, a calculated estimate of radiation levels from radioparticulates

Particulates roughly track rate of tailings shipments during ARRA

SHIPMENTS CURTAILED Dec’12-Feb’13

Started reporting top 6 (prev top 4); no comparable background or guideline.

Environmental monitoring data provided by Moab UMTRA. Other observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 3170.
Ground Water Remediation

- Extraction wells between pile and river intercept contaminated ground water
- Fresh water “curtain” injected when river is low
- Side channel habitat protected seasonally with added fresh water
- Suspended during CO River Flooding

Project totals of:
> 919,000 pounds of ammonia
& nearly 5,000 pounds uranium extracted through Nov, 2018
*(kept out of river)*

- ACTIVE ground water remediation could continue 1-2 years after pile removed. Supplemental standards may be applied for PASSIVE remediation.

Well field data provided by Moab UMTRA. Other observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 3170.
Flooding
June 12, 2019
Flooding
June 12, 2019
Preparing Debris
June 25, 2019
Preparing Debris
July 10, 2019
Debris Pile
July 17, 2019
Moving Debris for Mixing w/RRM
July 10, 2019
Loading Debris & RRM
July 18, 2019
CJ RRM Unloading Area
July 11, 2019
Current Debris Unloading Area
July 11, 2019
Closer view of Older Debris Unloading Area July 11, 2019
Overview of CJ Disposal Cell
July 11, 2019
To Learn More

- **Online**
  - https://gjem.energy.gov/moab/
  - GrandCountyUtah.net ("Moab UMTRA Project")

- **Public meetings**
  - Moab Tailings Project Steering Committee, quarterly (Jan, Apr, July and Oct)
  - Site Futures Committee, 2013 and 2018

- **UMTRA Reading Room (Library)**

- **Chat with Grand County’s Liaison**
  - 259-1795 (normally at courthouse Tue, Thu)
  - rvonkoch@grandcountyutah.net