Container truck approaching Crescent Junction dumping area with UMTRA train in background.

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

- Continued 4 trains per week to CJ during the 1st calendar quarter
- Jan 74 k tons, Feb 57 k tons & Mar 75 k tons
- Moved about 65% of est. total tonnage since project inception by end of March
- Operations continuing during CV-19

Observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 3198.
Moab Regular Funding
(Million $)

FY 18: Moved 469 K tons
FY 19: Moved 709 K tons = +51%

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

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

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 3198. *ARRA $ all came in FY09. Liaison estimated FY20 tonnage at 862,000 tons by combining CY 19 and FY 20 months.
Tailings Removed (000 tons per month)

- Shipments curtailed Dec 2012 – Feb 2013 due to funding cuts
- Shipments interrupted by rock slide
- Started 4 trains per week Feb 4 2019.

201,000 tons per month with ARRA

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 3198.
Tailings Removed (000 tons per month)

- Monthly Tons Slide 2 of 2 (Oct 2019 →)
- 1st Quarter 2020 average tons/month = 67 K

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 3198.
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

Move Tailings

GW Remediation

VP Remediation

Site Reclamation

2/4/19
Project doubles trains shipped.

Jan thru Dec CY 2019 shipments were 83% over the CY 2018 average.

CY18 tons (451.8) averaged 37.7 K /month
CY19 tons (829.8) averaged 69.1 K /month
Impacts Around Moab: 19Q1-19Q4

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 120 mREM, or 28% above CJ background of 92 mREM.

Impacts Around CJ: 19Q1-19Q4

mREM = milli-Roentgen Equivalents in Man, biological dose equivalent, sum of L4Q
Airborne Radioparticulates

Total DCG for 19Q1 – 19Q4

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

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.

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

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 3198.
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 reported totals of over 935,000 pounds of ammonia & more than 5,100 pounds uranium extracted as of April 2020 *(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 3198.
To Learn More

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

- **Public meetings**
  - Moab Tailings Project Steering Committee, quarterly (Jan 28, May 26 (cancelled), July 28 and Oct 27, 2020)
  - Site Futures Committee, 2013 and 2018

- **UMTRA Reading Room (Library)**

- **Grand County’s UMTRA Liaison**
  - Working part time from home -- email at rvonkoch@grandcountyutah.net
  - or phone 435-259-1795

5/18/2020