

# MOAB UMTRA PROJECT

## URANIUM MILL TAILINGS REMEDIAL ACTION

### MOAB, UTAH



*Panoramic view of Moab UMTRA Site (March 20, 2024)*



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UMTRA Liaison/Technical Inspector

**MTPSC Status Update**

**04.23.2024**

# INTRODUCTION & PURPOSE

The UMTRA Liaison/Technical Inspector position, as established by Grand County Resolution 3198 and located within the Grand County Planning and Community Development Department (P&CD), serves as an independent and neutral figure regarding activities utilizing a conditional use permit (CUP) through Grand County.

The UMTRA Liaison/Technical Inspector provides observations, reports, and other applicable duties to the following sites:

- The Moab UMTRA Site and associated Crescent Junction Disposal Site
- Oilfield Water Logistics at Danish Flats
- Westwater Farms/Armada Water Solutions at Harley Dome
- IACX Helium Processing Plant at Harley Dome

The UMTRA Liaison/Technical Inspector works with a variety of entities and committees to ensure full transparency and accurate reporting. This position is currently funded through Grant DE-EM0005196 and has a period of performance through February 4, 2025.

# UMTRA SITE MAP



Google Maps – Image not to scale

# OBSERVATION POINT #1

JAN 2024

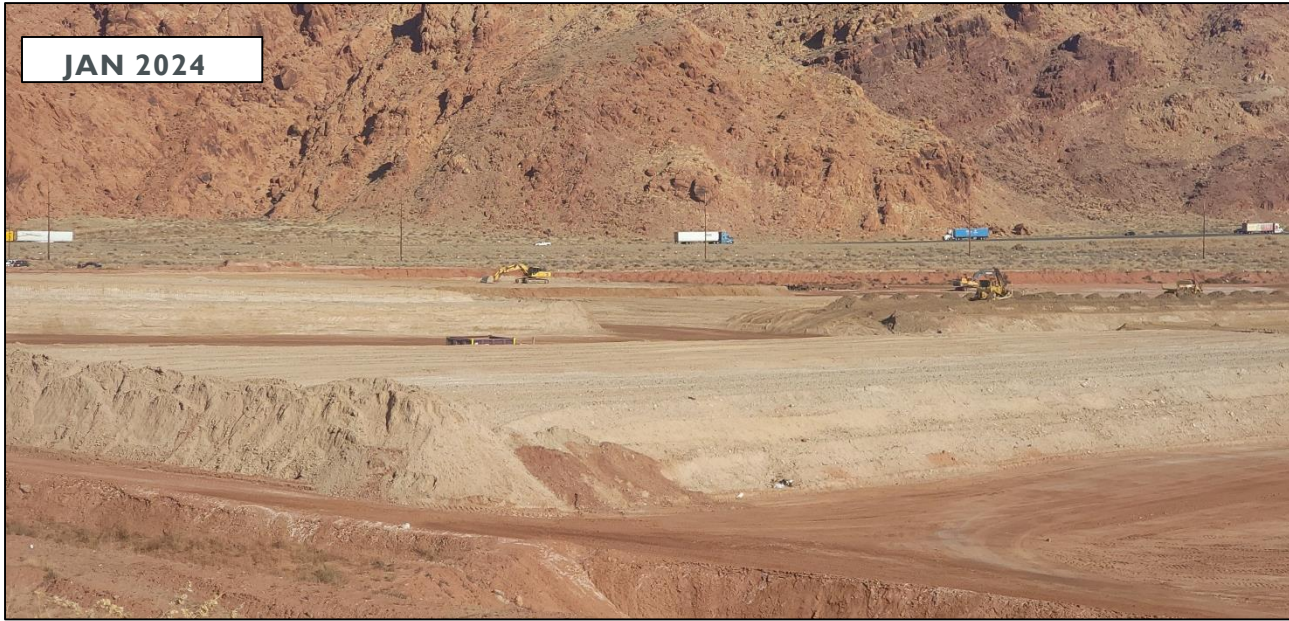


MARCH 2024



## OBSERVATION POINT #2

JAN 2024



MARCH 2024



# OBSERVATION POINT #4

JAN 2024



MARCH 2024



# OBSERVATION POINT #5

JAN 2024



MARCH 2024



# OBSERVATION POINT #6

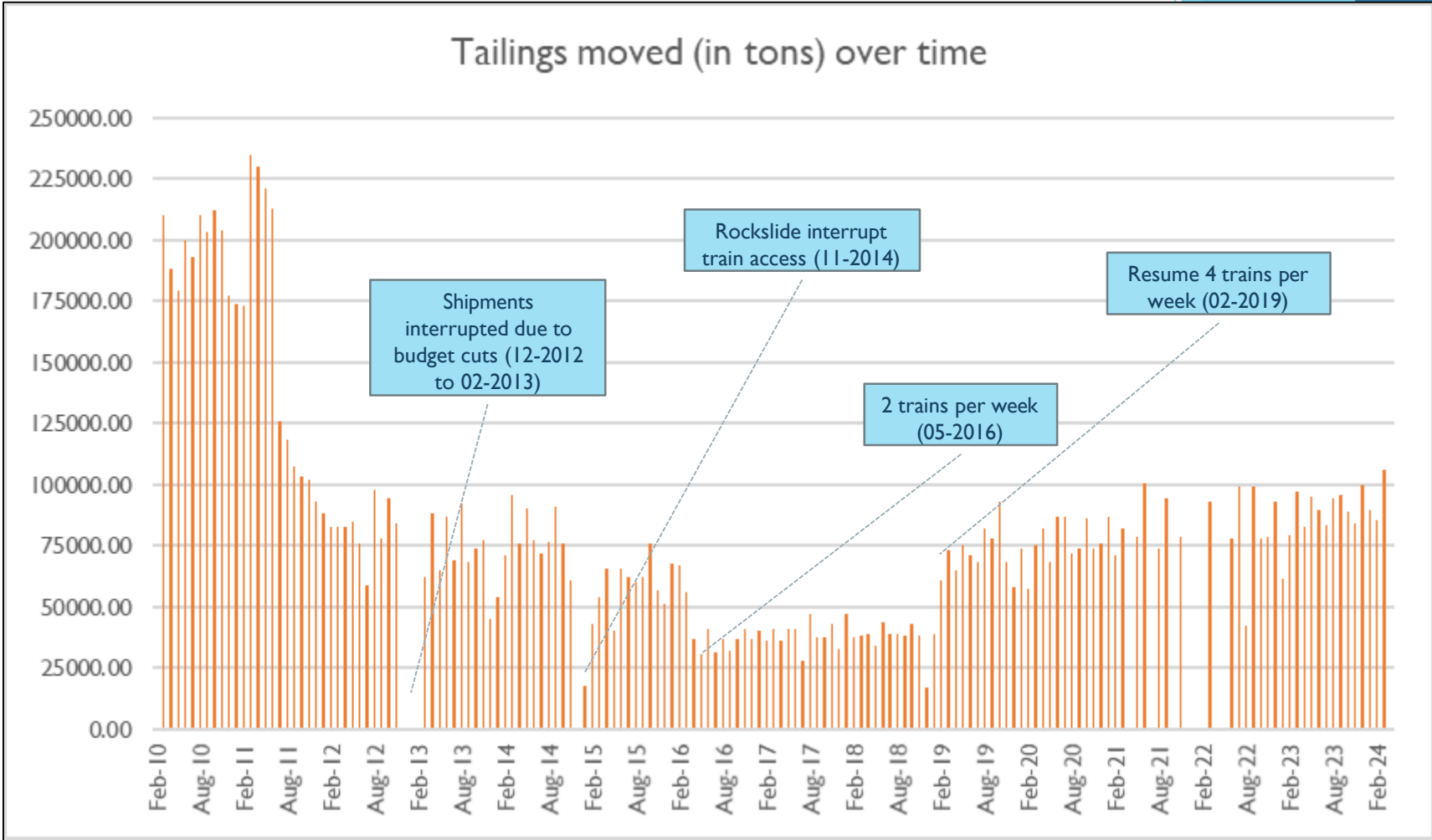
JAN 2024



MARCH 2024



# TAILINGS SUMMARY - OVERALL



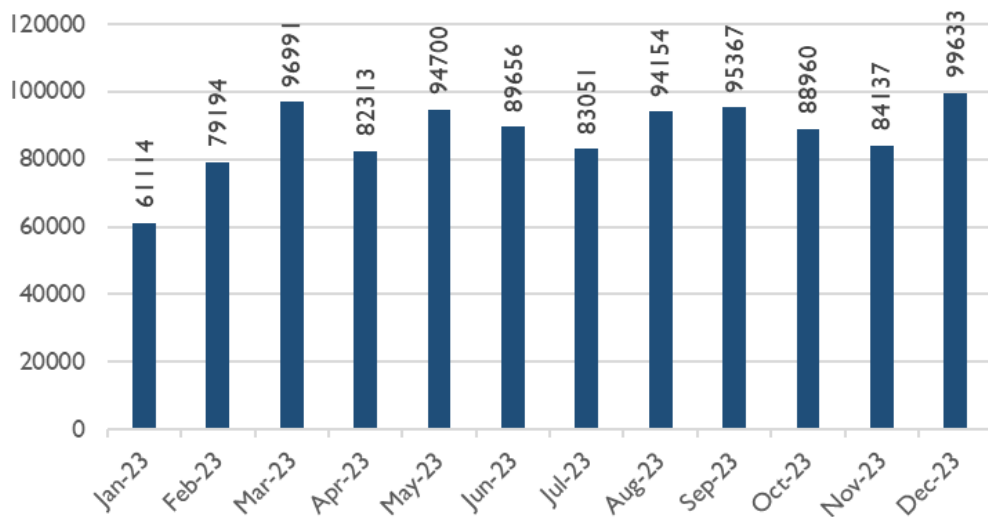
- At the end of March 2024, approximately 14.2 million tons of tailings and mill debris has been shipped to the Crescent Junction site for disposal. Approximately 89,503 tons of tailings and mill debris were moved in March 2024 (end of 1Q24).
- Indicates that 89.2% of the estimated 16 million total tonnage contained at the Moab UMTRA site has been removed since the beginning of the project.
- The Moab UMTRA Project continues to operate on a regular schedule of four (4) trains per week.

## TAILINGS SUMMARY - YEARLY OVERALL & 2023

### Total Tailings: 2010 - 2023



### UMTRA Tailings Removed in 2023



- To further provide a clearer picture of tailings removal over time, two (2) preliminary graphs have been created.
- The first graph demonstrates approximately thirteen (13) years of tailings removal and the second graph shows tailings removal for 2023.
- The graph on the previous slide demonstrates tailings removal since data collection began but presented in monthly intervals.
- These graphs are preliminary as there are some gaps in data that need to be identified and once located, the appropriate graphs will be updated.

# GROUNDWATER REMEDIATION

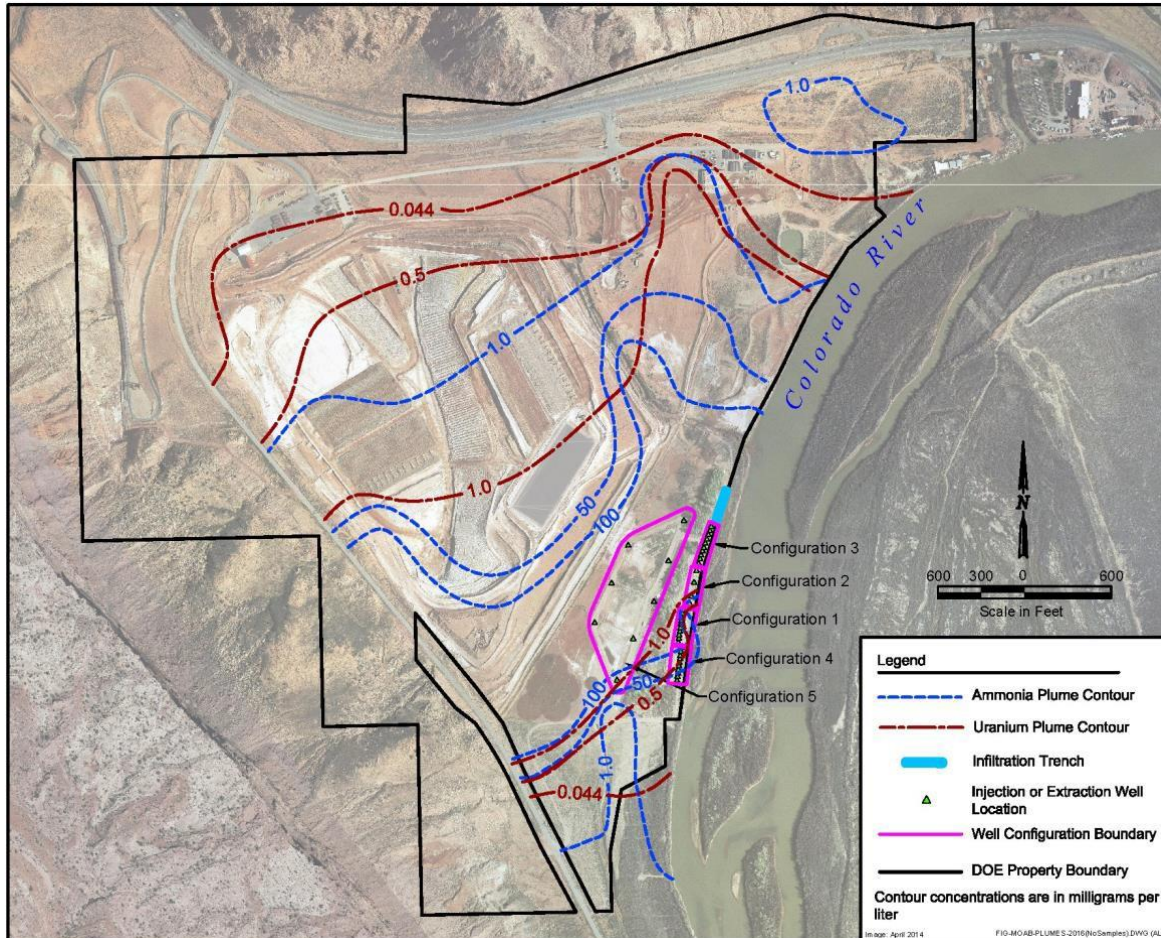
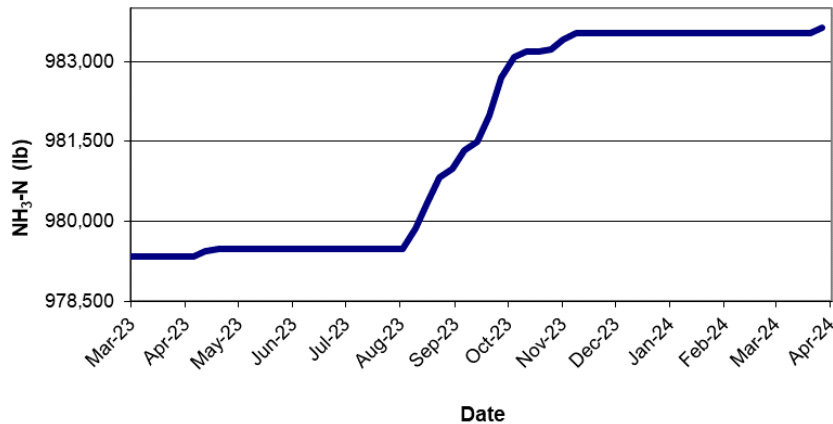


Image: [https://www.gjem.energy.gov/general/interim\\_gw\\_action.htm](https://www.gjem.energy.gov/general/interim_gw_action.htm)

- In 2003, DOE implemented an interim action system at the Moab site to address concerns regarding elevated ammonia and uranium concentrations in groundwater discharging to the Colorado River. A total of five well configurations are used to reduce the amount of ammonia and uranium that discharges to the river.
- Groundwater extraction is through Configuration 5 wells, which are located closer to the tailings pile.

# GROUNDWATER REMEDIATION

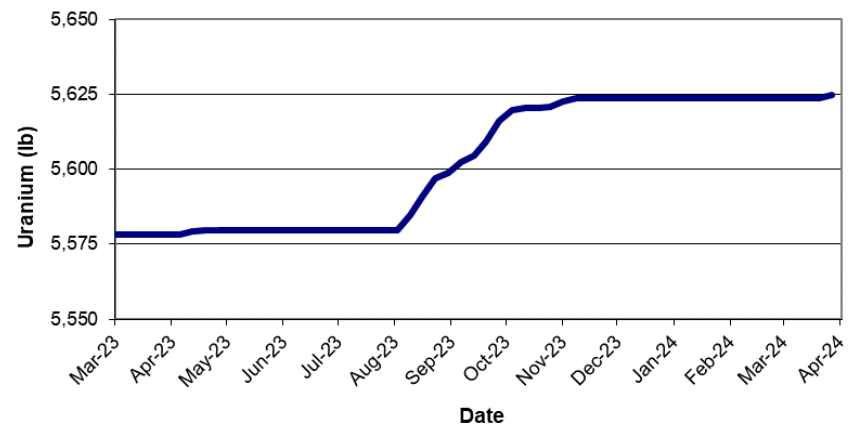
Interim Action Groundwater System  
Cumulative Mass of Ammonia Extracted



Over the life of the Project, extraction has prevented **983,535** pounds of ammonia and **5,624** pounds of uranium from reaching the river.

Freshwater (diverted river water) is injected through wells in Configuration 4 as an additional way of minimizing the discharge of ammonia to the Colorado River. So far in 2023, more than 112,579,269 gallons of water has been injected.

Interim Action Groundwater System  
Cumulative Mass of Uranium Extracted



# AIR MONITORING & GROUNDWATER REMEDIATION DATA SUMMARY

Ammonia Extraction (in lbs)	APR-23	MAY-23	JUNE-23	JULY-23	AUG-23	SEPT-23	OCT-23	NOV-23	DEC-23	JAN-24	FEB-24	MAR-24
	979483	979483	979483	979483	980985	982695	983410	983536	983536	983535	983535	983627
Difference (in lbs)	148	0	0	0	1502	1710	715	126	0	-1	0	92
Uranium Extraction (in lbs)	APR-23	MAY-23	JUNE-23	JULY-23	AUG-23	SEPT-23	OCT-23	NOV-23	DEC-23	JAN-24	FEB-24	MAR-24
	5580	5580	5580	5580	5599	5616	5625	5625	5625	5624	5624	5625
Difference (in lbs)	2	0	0	0	19	17	9	0	0	-1	0	1

Moab Site - Radioparticulates (mrem)			
Station No.	2Q23	3Q23	Diff
MSP-0102-RP	2.15	Not Available At This Time	N/A
MSP-0105-RP	2.49		
MSP-0114-RP	2.46		
MSP-0117-RP	2.05		
MSP-0118-MEI	3.38		
MSP-0119-RP	1.69		
MSP-0122-RP	1.77		
MSP-0123-RP	1.76		
MSP-0129-RP	3.29		

Crescent Junction Site - Radon (pCi/L)			
Station No.	2Q23	3Q23	Diff
CJ-RN-1	<Background	Not Available At This Time	N/A
CJ-RN-2	<Background		
CJ-RN-2A	0.39		
CJ-RN-3	<Background		
CJ-RN-4	0.52		
CJ-RN-5	0.19		
CJ-RN-6	0.33		
CJ-RN-7	0.35		
0301	<Background		

Moab Site - Radon (pCi/L)			
Station No.	2Q23	3Q23	Diff
MO-RN-1	0.46	Not Available At This Time	N/A
MO-RN-2	1.9		
MO-RN-3	0.54		
MO-RN-4	1.09		
MO-RN-5	0.75		
MO-RN-6	1.18		

Crescent Junction Site - Radioparticulates (mrem)			
Station No.	2Q23	3Q23	Diff
0306	1.59	Not Available At This Time	N/A
0307	1.98		
0308	1.78		
0309	1.98		

# RESOURCES

## Online

- <https://www.energy.gov/em/moab/moab-umtra-homepage>
- <https://www.grandcountyutah.net/257/Moab-UMTRA-Project>
- <https://www.grandcountyutah.net/206/Moab-Tailings-Project-Site-Futures-Commi>
- Moab UMTRA Project Five-Year Site Plan FY's 2022-2026 (DOE): <https://www.gjem.energy.gov/documents/Five-YearSitePlan22.pdf>
- Moab UMTRA Project Surface Water and Groundwater Project Documents <https://www.energy.gov/em/moab/surface-water-and-groundwater>
- **Public meetings**
- *Moab Tailings Project Steering Committee, quarterly (April 23, July 23, October 22, 2024)*
- *Site Futures Committee: 2013, 2018, and 2023*
- **UMTRA Reading Room (Library)**
- **Contact Grand County's UMTRA Liaison at** [jthacker@grandcountyutah.net](mailto:jthacker@grandcountyutah.net)

QUESTIONS?