

MOAB TAILINGS PROJECT STEERING COMMITTEE

Quarterly Meeting

Anchor Location: 125 E Center St, Moab, Utah 84532 (Commission Chambers)

Public is invited to view the Quarterly Meeting on YouTube: <https://www.youtube.com/@MTPSCGrandCo>

See below for instructions to provide public comment on Zoom

Meeting ID: 837 7557 2142

Passcode (as needed): 237385

Link: <https://us06web.zoom.us/j/83775572142?pwd=lmKqWCfX5acmchMRKWCYPuXkGfvceh.1>

AGENDA

Tuesday, January 23, 2024 at 3:00PM (MST)

A. CALL TO ORDER (3:00PM)

B. INTRODUCTIONS (Chair, Mary McGann)

C. ACTION ITEM: APPROVAL OF MINUTES (Chair, Mary McGann)

- a. October 24, 2023 Quarterly Meeting

D. CITIZENS TO BE HEARD

We are receiving public comments by phone and online through Zoom.

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Please note that when joining the meeting, you will be placed in a waiting room and will be added to the meeting by the moderator. Your comments will be recorded and are limited to a duration of three (3) minutes in length.

E. MOAB UMTRA PROJECT UPDATE (Acting DOE Federal Cleanup Director, Matthew Udovitsch)

F. COMMUNITY CAPACITY BUILDING GRANT PROGRAM (CCBGP) FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) NUMBER: DE-FOA-0003131 UPDATE AND DISCUSSION (Chair, Mary McGann)

G. AIR MONITORING AND LIAISON ACTIVITIES STATUS UPDATE (UMTRA Liaison, Jessica Thacker)

H. ACTION ITEM: DISCUSSION AND CONSIDERATION TO MODIFY MTPSC QUARTERLY MEETING DATES IN APRIL AND JULY

I. STAKEHOLDERS UPDATES

- a. Update on Stakeholder Lobbying Efforts
b. Introduction of New Stakeholders and Discussion of Changes to Existing Positions

J. FUTURE CONSIDERATIONS (Chair, Mary McGann)

- a. 2024 MTPSC Meeting Dates (April 23, July 23, October 22)

K. ADJOURNMENT

NOTE: Individuals with special needs requests wishing to attend MTPSC meetings are encouraged to contact the Grand County UMTRA Liaison at least twenty-four (24) hours in advance of these events. Specific accommodations necessary to allow participation of disabled persons will be provided to the maximum extent possible. T.D.D. (Telecommunication Device for the Deaf) calls can be answered at: 435-259-1346. Individuals with speech and/or hearing impairments may also call Relay Utah by dialing 711 or Spanish Relay Utah at 888-346-3162. Please contact the UMTRA Liaison for general requests, or any questions or comments at jthacker@grandcountyutah.net.

Dated this 22nd day of January 2024

Jessica Thacker

s/S Jessica Thacker, UMTRA Liaison

MOAB TAILINGS PROJECT STEERING COMMITTEE

Quarterly Meeting

Anchor Location: Grand County Commission Chambers 125 E Center St, Moab, UT 84532

Held virtually on Zoom and Livestreamed on YouTube

MTPSC MINUTES

Tuesday, October 24, 2023 at 3:00PM (MST)

A. CALL TO ORDER

The October 24, 2023 quarterly meeting of the Moab Tailings Project Steering Committee was called to order at 3:09pm. The following committee members were in attendance:

Rani Derasary (City of Moab), Kelly Thorton (Department of Workforce Services), Elissa Martin (Grand County Planning Department), Katie Murphy (Grand County Planning and Zoning Department), Ben Musselman (Grand Water and Sewer Service Agency), Joette Langianese (Grand County Resident Representative), Amy Tendick (National Park Service), Cora Phillips (Grand County Office of Emergency Management), Jacques Handler (Grand County Commission), and Ben Fredregill (Grand County Department of Economic Development).

The following non-committee members were in attendance:

Matt Udovitsch (DOE), Barbara Michel (DOE), Katrina Lund (North Wind Portage, Remedial Action Contract), Liz Moran (Pro2Serve, Technical Assistance Contract), Jim Ritchey (North Wind Portage, Remedial Action Contract), Russ von Koch (Site Futures Committee), Ken Pill (DOE), Ken Kiesel (North Wind Portage, Remedial Action Contract), Tom Bachtell (Pro2Serve, Technical Assistance Contract), Beth Lizan (DOE), Kenny Shaffer (Pro2Serve, Technical Assistance Contract), Steve Rima (North Wind Portage, Remedial Action Contract), Lee Tucker (DOE), Bill Winfield (Grand County Commissioner), and Jessica Thacker (Grand County UMTRA Liaison/Technical Inspector).

Per Resolution 3198 at least seven committee members were present to constitute a quorum.

B. INTRODUCTIONS

C. APPROVAL OF MINUTES

MOTION: Joette Langianese motioned to approve the minutes for the July 25, 2023 meeting. Seconded by Amy Tendick. Seven in favor – motion passes with Jacques Handler and Cora Phillips abstaining.

D. CITIZENS TO BE HEARD

No comments were received.

E. MOAB UMTRA PROJECT UPDATE

Matt Udovitsch provided a detailed project updating by introducing two new employees, Kenny Shaffer and Beth Lizan, indicating their purpose as key players in moving the project forward as well as stating that the one million milestone for 2023 had been exceeded, especially under challenging circumstances. He summarized other key milestones that had been accomplished such as the removal of historical infrastructure, the autoclave remediation and removal, finishing the Crescent Junction Disposal cell excavation, and the 90% design phase for the ET cover at the Crescent Junction site done in collaboration with the NRC. Matt Udovitsch stated that the budget request for 2024 remained the same as the previous year (\$67M). A brief discussion on the potential impact of a government shutdown on operations ensued.

Liz Moran reported that Network of National Lab for Environmental Management and Stewardship Report had been released in October and would be posted shortly. She stated this report would assist in the development of the Groundwater Compliance Action Plan (GCAP), provided a summary of the GCAP's role in site closure as well as field activities that would be completed for the study. A brief discussion on the density interaction between the freshwater, brine layer, and contaminants in the groundwater ensued. Liz Moran stated that initial observations of the hydroxy apatite study appeared to drastically reduce uranium concentrations but a final report was still being generated and further studies would require more grant funding.

Katrina Lund gave a brief overall summary of the environmental air monitoring network and gave a presentation on changes and improvements that would be made to the program starting in January 2024 such as changing the name of the program to the Environmental Radiological Monitoring to more accurately describe the program's purpose and that the names of the stations would revert to their pre-2022 names to avoid confusion. She provided reasoning for the station locations, whether they would remain stationary or be moved, and what these stations will be monitoring and the exposure potential they represent.

F. REPORT OF LOS COLONIAS PARK IN GRAND JUNCTION, COLORADO

Rani Derasary provided a brief summary of the Los Colonias Park outing and expressed appreciation to Barbara Michel for organizing the event as well as the usefulness of the park's development to provide inspiration for Site Futures consideration. Russ von Koch expressed appreciation to the DOE staff for providing a tour of the Los Colonias Park.

G. CELEBRATION OF THE MILLION TONS OF TAILINGS REMOVED IN DECEMBER

Barbara Michel stated that the second week of December was tentatively scheduled for the celebration and that Environmental Management and Legacy Management representatives were being considered. She stated she would keep the Steering Committee updated on the final schedule for the event and encouraged participation from all stakeholders.

H. DEPARTURE OF MOAB TAILINGS PROJECT STEERING COMMITTEE MEMBER, RANI DERASARY

Rani Derasary stating that due to her electing not to run for office next year (as the representative for the Moab City Council) left some uncertainty about her position on the MTPSC. She stated that she had reviewed the By-Laws on expiration date for term limits and could not find a concrete answer. Rani Derasary requested this item be discussed as a Future Consideration for the January 2024 meeting and a process be determined. Joette Langianese had expressed support for Rani Derasary to remain on in some capacity but the final determination might fall on the Moab City Council.

I. REPORT ON UMTRA LEADERSHIP MEETING

Rani Derasary stated that several stakeholders met with DOE representatives on October 11th regarding the Community Vision that had been developed through the Site Futures Committee and its viability at the UMTRA site. Russ von Koch suggested those questions and considerations be documented in the meeting minutes and can be found listed below:

- How much will it cost and the process for revegetating the site once all the dirt is removed?
- What is the process for transferring the site over to Grand County?
- Impacts of site feasibility between the previous versions of the Site Futures vision.
- Requested knowledge and feasibility to the use of the existing modular units, utility easements, and potential future infrastructure.
- Floodplain development of the site.

J. AIR MONITORING AND LIAISON ACTIVITIES STATUS UPDATE

Jessica Thacker provided a detailed presentation regarding activities observed at the Project along with a summary of air monitoring data for both sites (Moab and Crescent Junction). The full status update can be found on the Grand County Moab UMTRA website or by email at jthacker@grandcountyutah.net

A brief discussion on ammonia migration/concentrations and interaction with freshwater injection ensued. Stakeholders requested that DOE exposure limits for Radioparticulates and Radon be illustrated on future status updates. Jessica Thacker requested updated air monitoring station maps from Katrina Lund in order to provide correct figures on future presentations.

K. STAKEHOLDERS UPDATE

L. FUTURE CONSIDERATIONS

The following future considerations were provided: the April meeting location may need to be moved due to the Grand County Commission Chambers being used for the yearly audit, reminder of the Cancer Study through the Health Department, discuss and determine Rani Derasary's term limit during the January meeting, and reminder to include stakeholders in future MTPSC correspondence.

M. ADJOURNMENT

Rani Derasary adjourned the meeting at 4:15PM.

MOAB UMTRA PROJECT

URANIUM MILL TAILINGS REMEDIAL ACTION

MOAB, UTAH



Panoramic view of Moab UMTRA Site (December 30, 2023)



Prepared by:

Jessica Thacker

UMTRA Liaison/Technical Inspector

MTPSC Status Update

01.23.2024

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



OBSERVATION POINT #2

OCT 2023



DEC 2023



OBSERVATION POINT #4

OCT 2023



DEC 2023



OBSERVATION POINT #5

OCT 2023



DEC 2023



OBSERVATION POINT #6

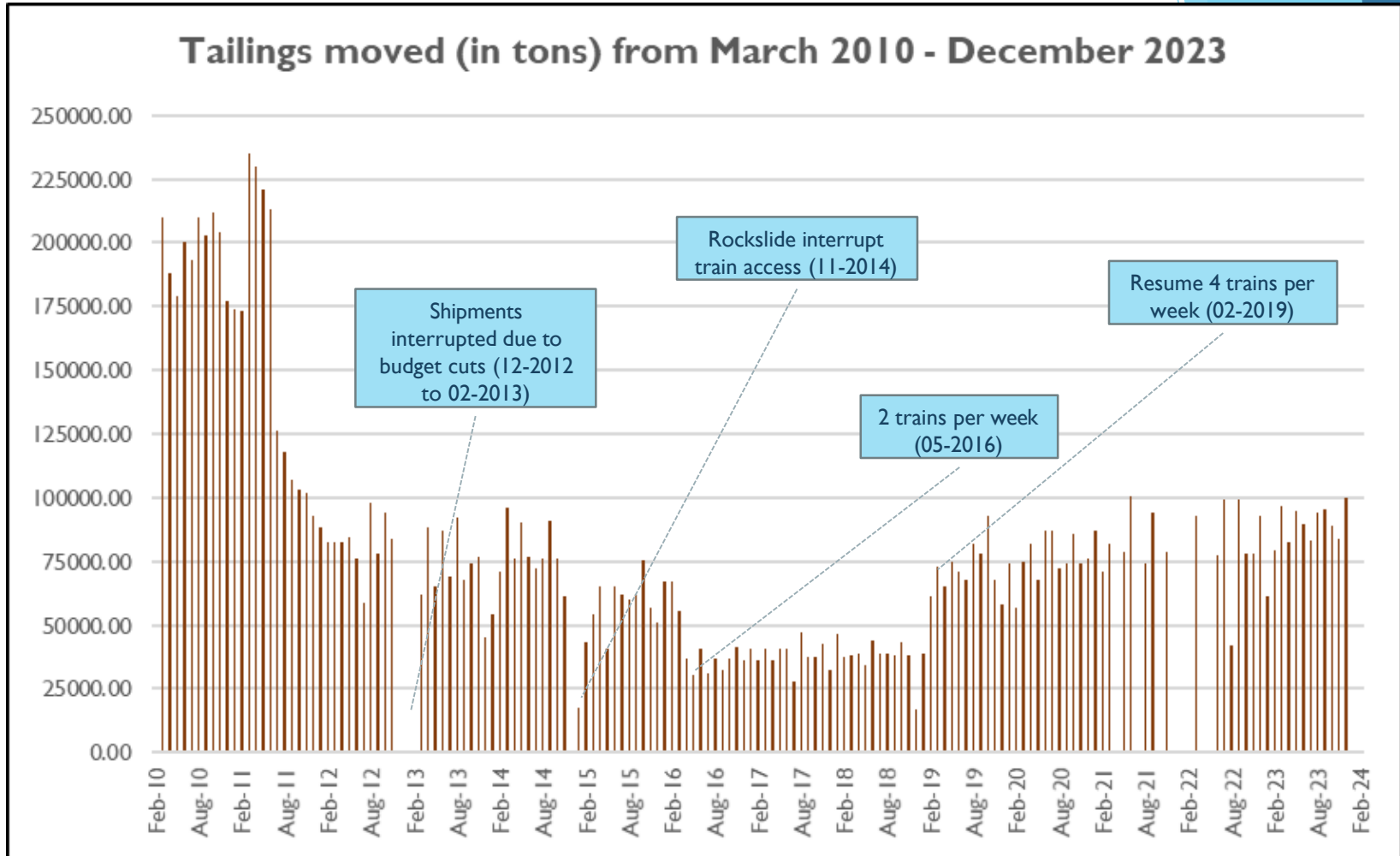
OCT 2023



DEC 2023



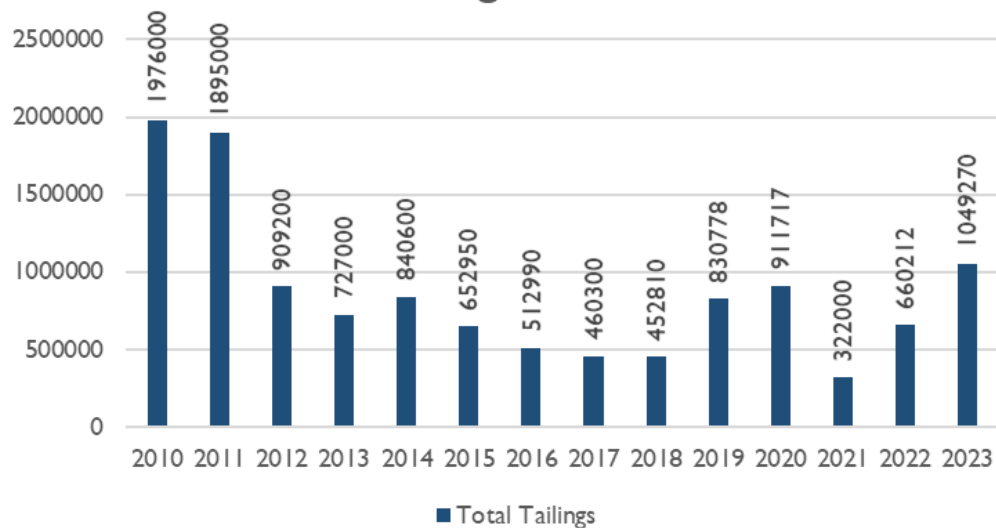
TAILINGS SUMMARY - OVERALL



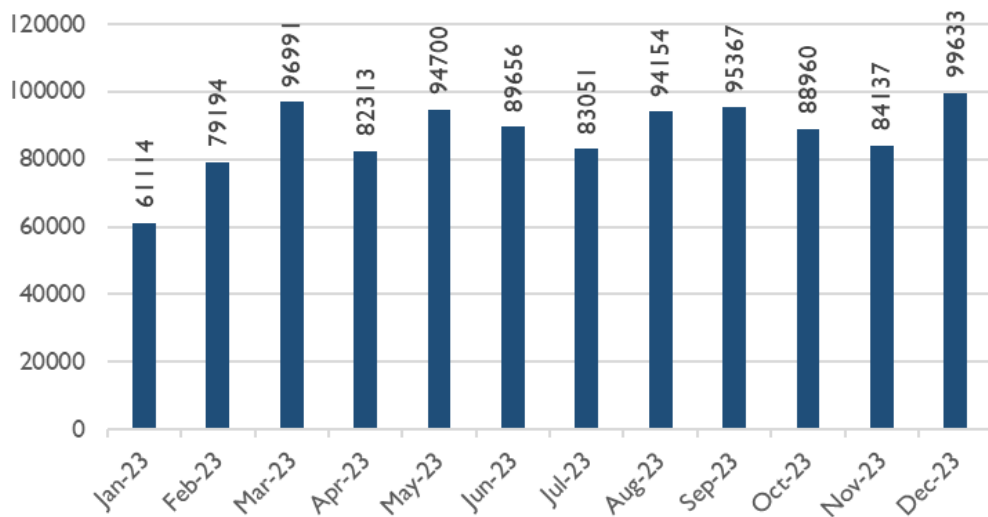
- At the end of December 2023, approximately 14.1 million tons of tailings and mill debris has been shipped to the Crescent Junction site for disposal. Approximately 99,633 tons of tailings and mill debris were moved in December 2023 (end of 4Q23).
- Indicates that 88.1% of the estimated 16 million total 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.

RADIOPARTICULATES AND RADON - 2Q23

MONITORING STATIONS

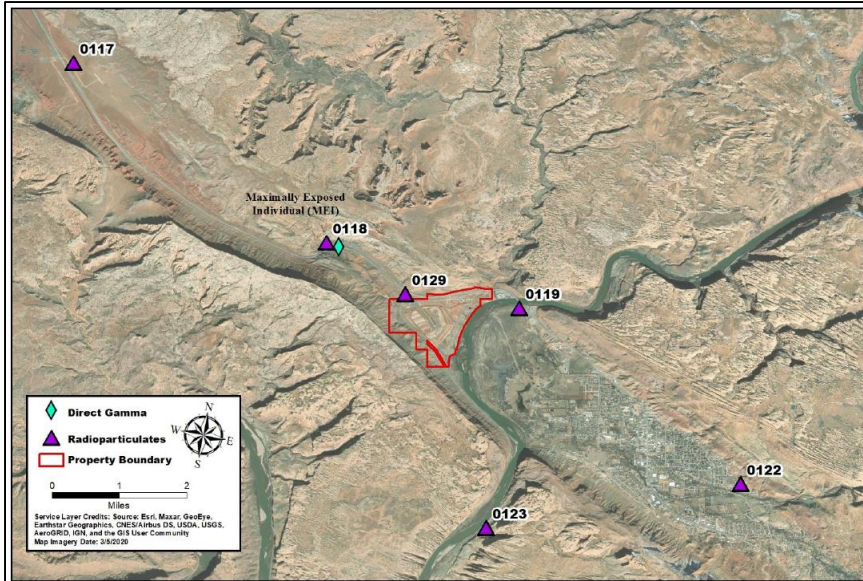


Figure 1. Moab Off-site and Maximally Exposed Individual Environmental Air Monitoring Locations

Moab Site - Radioparticulates (mrem)			
Station No.	1Q23	2Q23	Diff
MSP-0102-RP	1.86	2.15	0.29
MSP-0105-RP	2.17	2.49	0.32
MSP-0114-RP	3.27	2.46	-0.81
MSP-0117-RP	1.99	2.05	0.06
MSP-0118-MEI	3.25	3.38	0.13
MSP-0119-RP	1.71	1.69	-0.02
MSP-0122-RP	1.58	1.77	0.19
MSP-0123-RP	1.53	1.76	0.23
MSP-0129-RP	3.61	3.29	-0.32

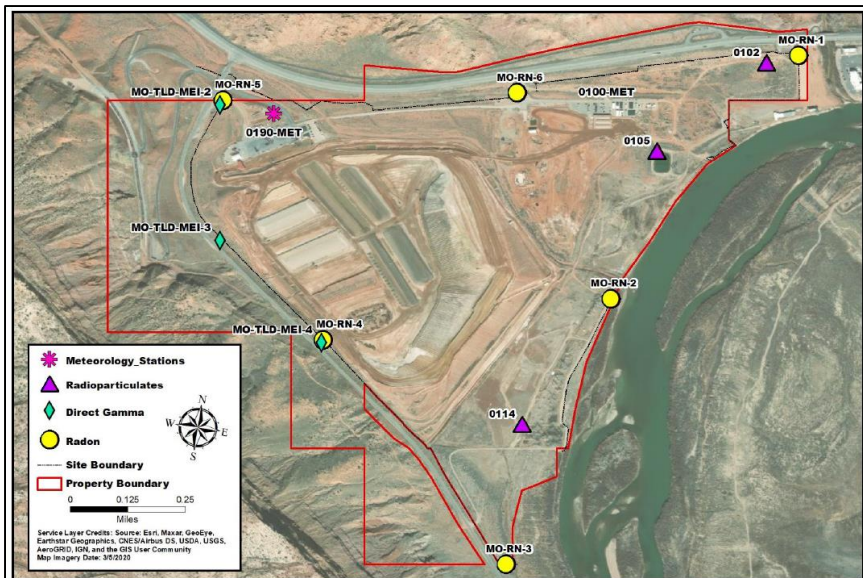


Figure 2. Moab On-site Environmental Air Monitoring Locations

Moab Site - Radon (pCi/L)			
Station No.	1Q23	2Q23	Diff
MO-RN-1	0.51	0.46	-0.05
MO-RN-2	1.93	1.9	-0.03
MO-RN-3	0.58	0.54	-0.04
MO-RN-4	1.09	1.09	0
MO-RN-5	0.69	0.75	0.06
MO-RN-6	1.23	1.18	-0.05

DOE Limit: 3.00 pCi/L

RA DIOPARTICULATES AND RADON – 2Q23

CRESCENT JUNCTION SITE

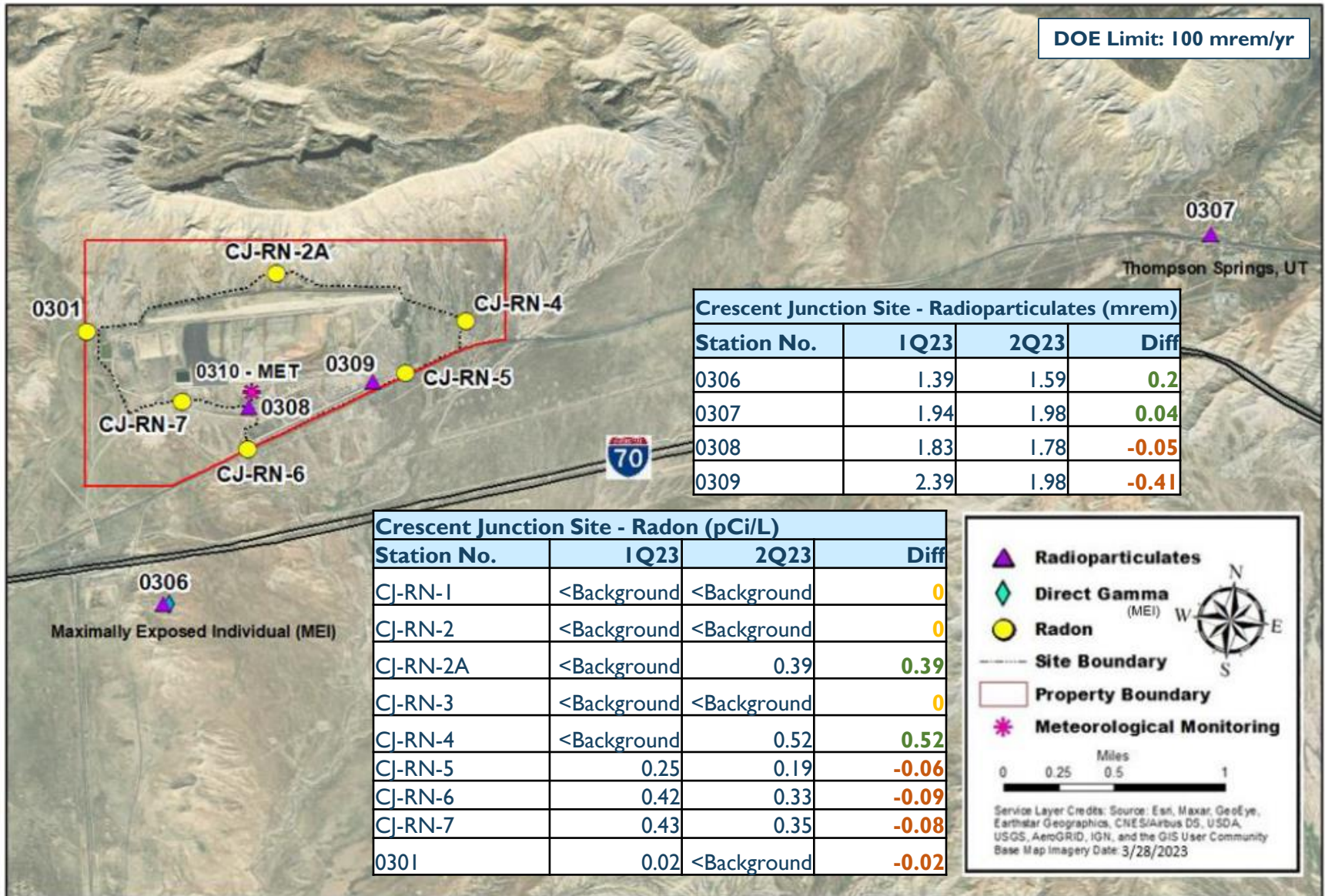


Figure 3. Crescent Junction Site Environmental Air Monitoring Locations

GROUNDWATER REMEDIATION

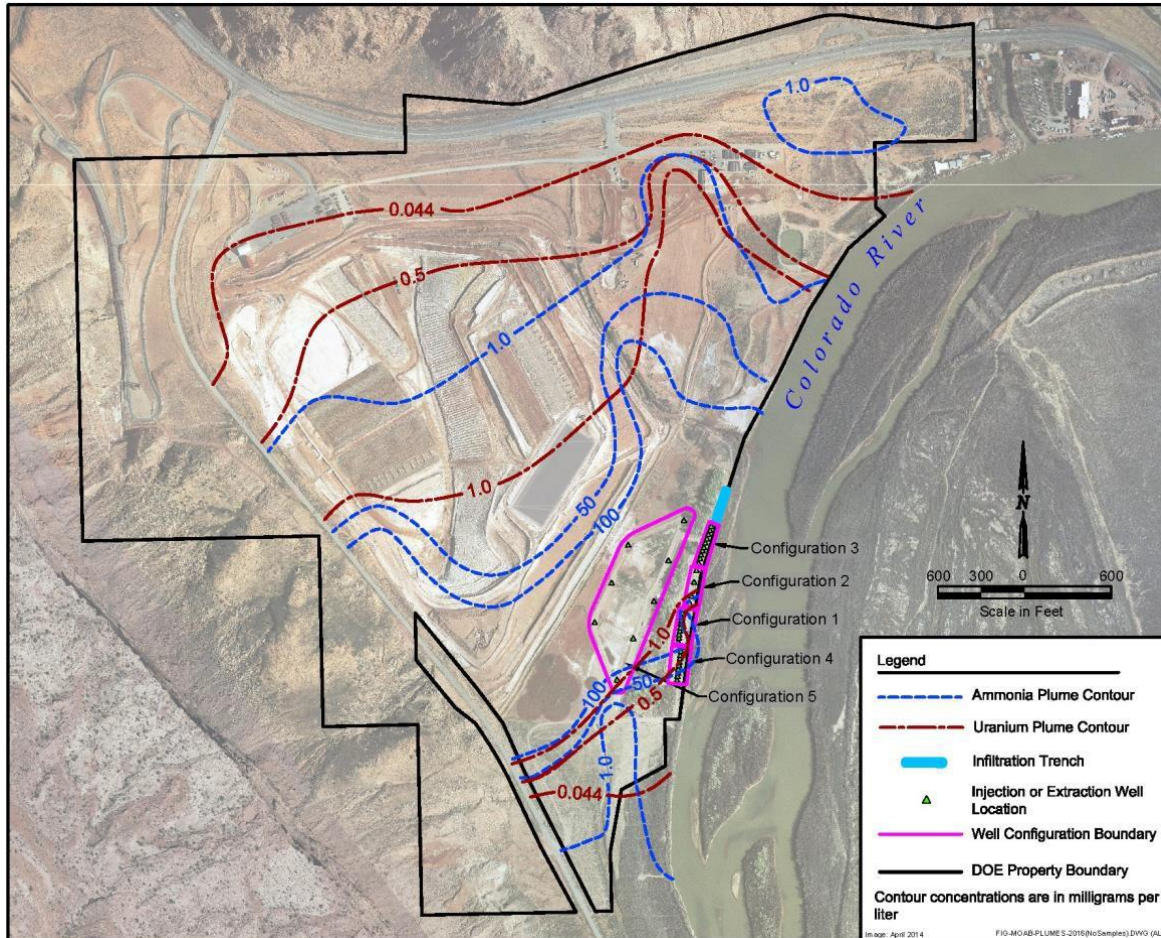
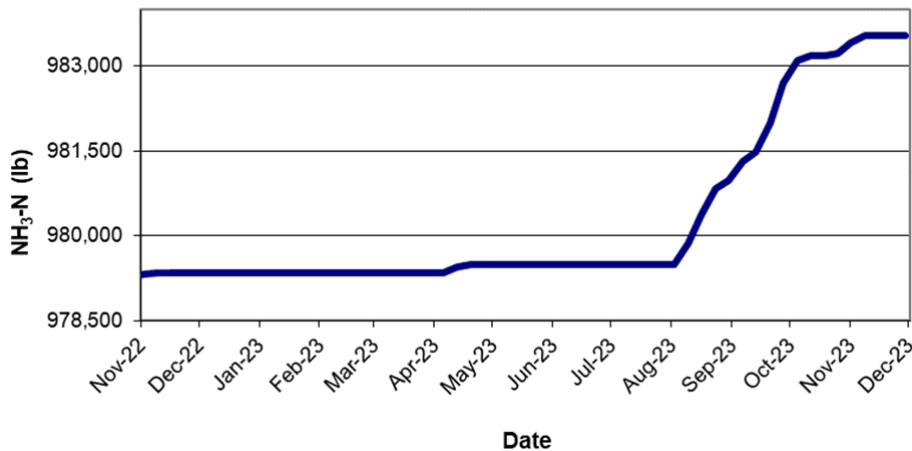


Image: https://www.gjem.energy.gov/general/interim_gw_action.htm

- 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

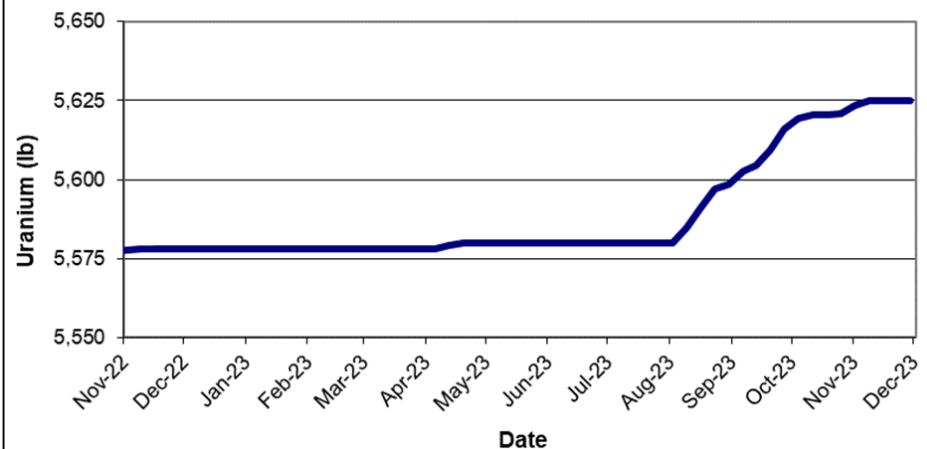
Interim Action Groundwater System
Cumulative Mass of Ammonia Extracted



Over the life of the Project, extraction has prevented 983,536 pounds of ammonia and 5,625 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 111,994,312 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)	JAN-23	FEB-23	MAR-23	APR-23	MAY-23	JUNE-23	JULY-23	AUG-23	SEPT-23	OCT-23	NOV-23	DEC-23
	979335	979335	979335	979483	979483	979483	979483	980985	982695	983410	983536	983536
Difference (in lbs)	-	0	0	148	0	0	0	1502	1710	715	126	0
Uranium Extraction (in lbs)	JAN-23	FEB-23	MAR-23	APR-23	MAY-23	JUNE-23	JULY-23	AUG-23	SEPT-23	OCT-23	NOV-23	DEC-23
	5578	5578	5578	5580	5580	5580	5580	5599	5616	5625	5625	5625
Difference (in lbs)	-	0	0	2	0	0	0	19	17	9	0	0

Moab Site - Radioparticulates (mrem)			
Station No.	1Q23	2Q23	Diff
MSP-0102-RP	1.86	2.15	0.29
MSP-0105-RP	2.17	2.49	0.32
MSP-0114-RP	3.27	2.46	-0.81
MSP-0117-RP	1.99	2.05	0.06
MSP-0118-MEI	3.25	3.38	0.13
MSP-0119-RP	1.71	1.69	-0.02
MSP-0122-RP	1.58	1.77	0.19
MSP-0123-RP	1.53	1.76	0.23
MSP-0129-RP	3.61	3.29	-0.32

Crescent Junction Site - Radon (pCi/L)			
Station No.	1Q23	2Q23	Diff
CJ-RN-1	<Backgroun	<Backgroun	0
CJ-RN-2	<Backgroun	<Backgroun	0
CJ-RN-2A	<Backgroun	0.39	0.39
CJ-RN-3	<Backgroun	<Backgroun	0
CJ-RN-4	<Backgroun	0.52	0.52
CJ-RN-5	0.25	0.19	-0.06
CJ-RN-6	0.42	0.33	-0.09
CJ-RN-7	0.43	0.35	-0.08
0301	0.02	<Backgroun	-0.02

Moab Site - Radon (pCi/L)			
Station No.	1Q23	2Q23	Diff
MO-RN-1	0.51	0.46	-0.05
MO-RN-2	1.93	1.9	-0.03
MO-RN-3	0.58	0.54	-0.04
MO-RN-4	1.09	1.09	0
MO-RN-5	0.69	0.75	0.06
MO-RN-6	1.23	1.18	-0.05

Crescent Junction Site - Radioparticulates (mrem)			
Station No.	1Q23	2Q23	Diff
0306	1.39	1.59	0.2
0307	1.94	1.98	0.04
0308	1.83	1.78	-0.05
0309	2.39	1.98	-0.41

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

QUESTIONS?