

# Moab UMTRA

## Uranium Mill Tailings Remedial Action



**May  
2020**

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 1<sup>st</sup> 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.

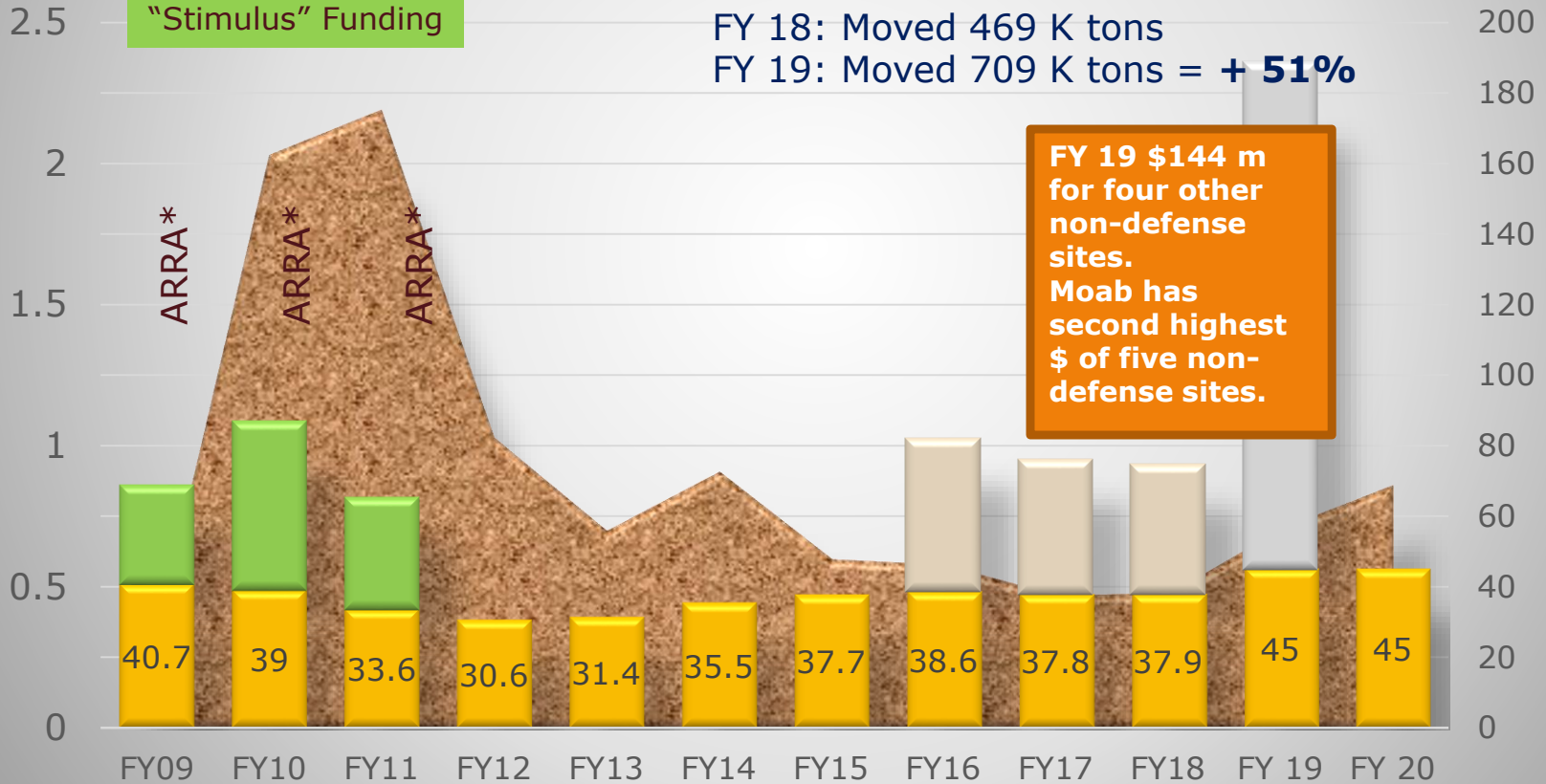


# Tailings Removed & Budget History

(Millions of Tons & Dollars per Year)

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

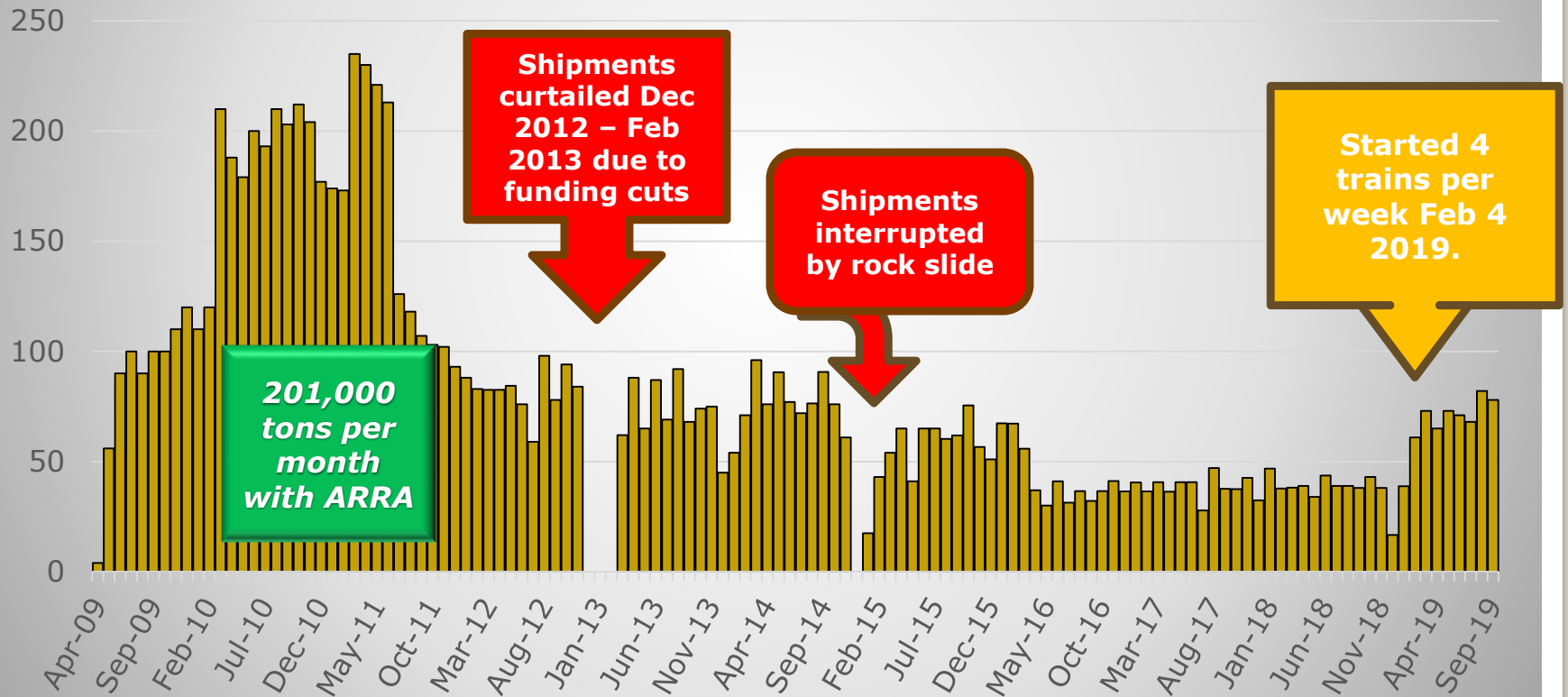
## Moab Regular Funding (Million \$)



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.**

➤ **Monthly Tonnage Shipments Slide 1 of 2**  
 ➤ **April 09 through September 2019**

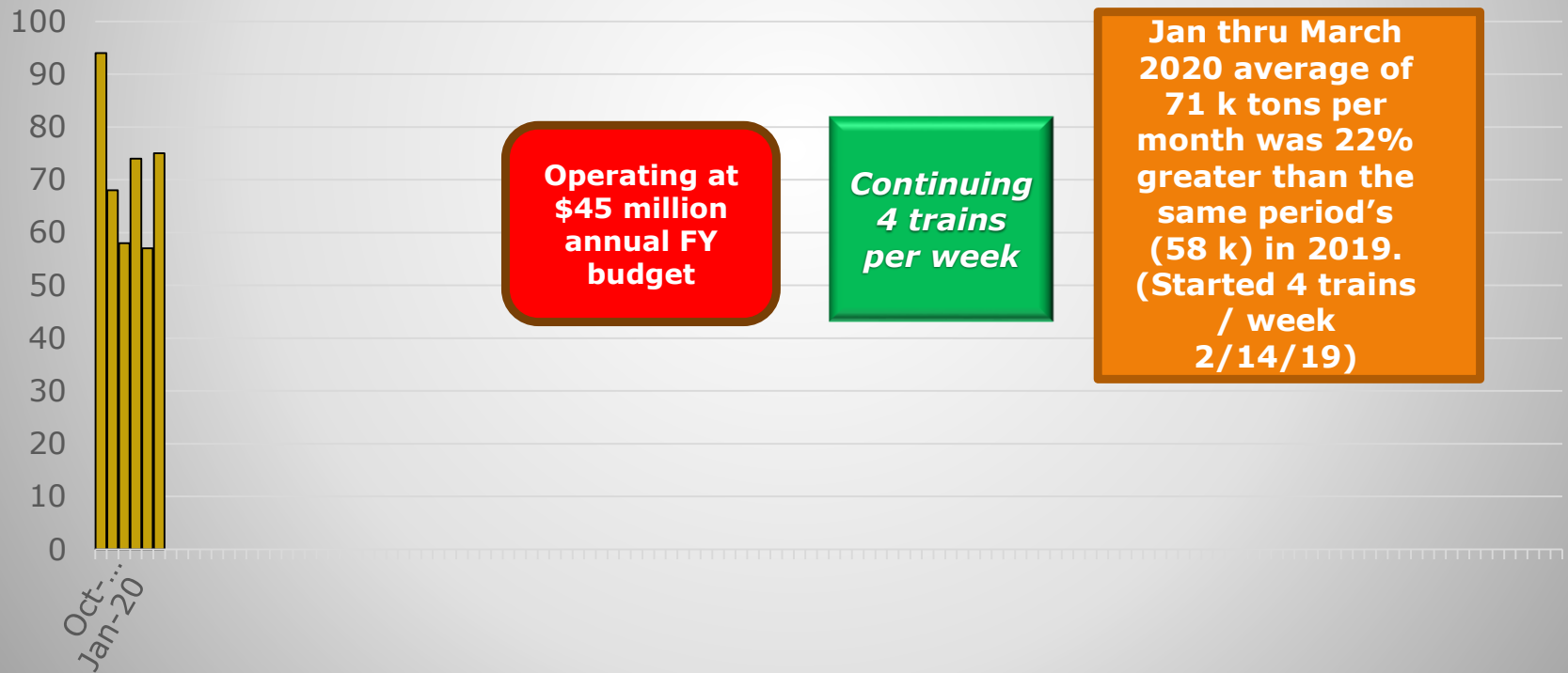
Tailings Removed (000 tons per month)



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.

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

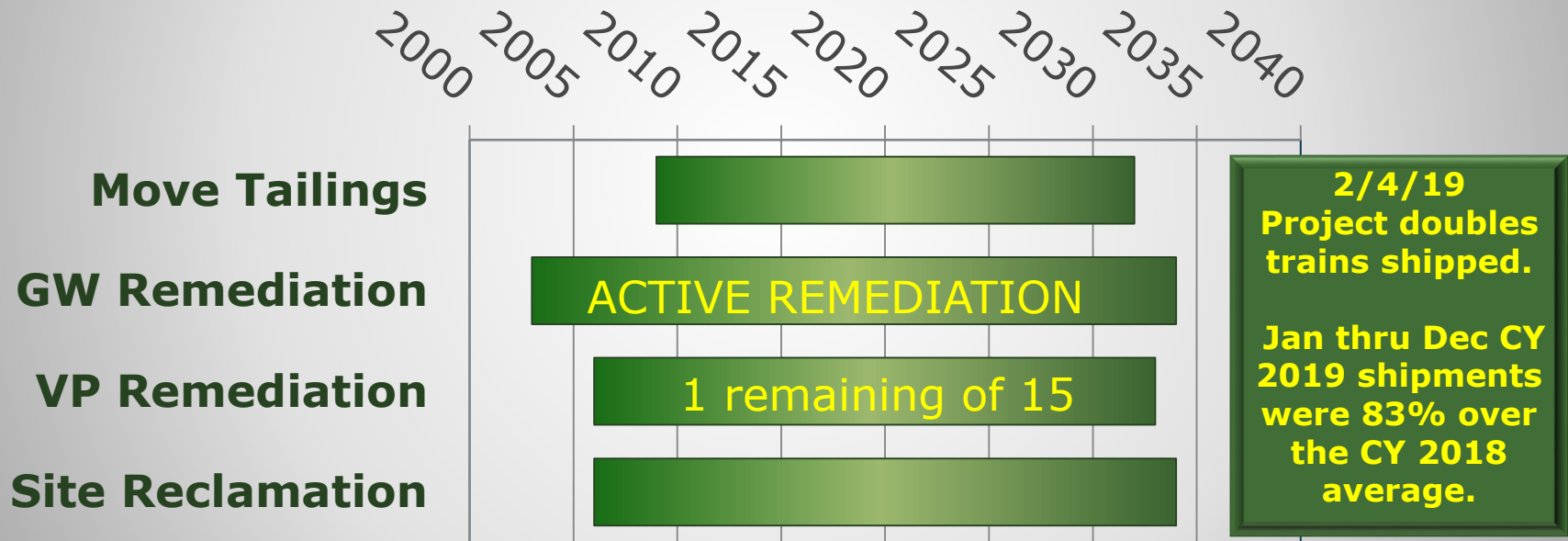
Tailings Removed (000 tons per month)



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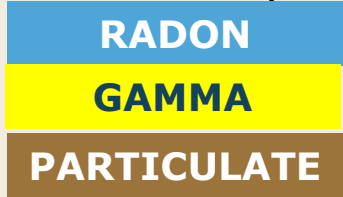
# Main Project Goals

- 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



CY18 tons (451.8) averaged 37.7 K /month  
 CY19 tons (829.8) averaged 69.1 K /month

Per Cent of Allowable Impact



Guideline 3.7

Offsite radon not to exceed 3.0 pCi/L above background

2.5

Radon level at south boundary

Background 0.7

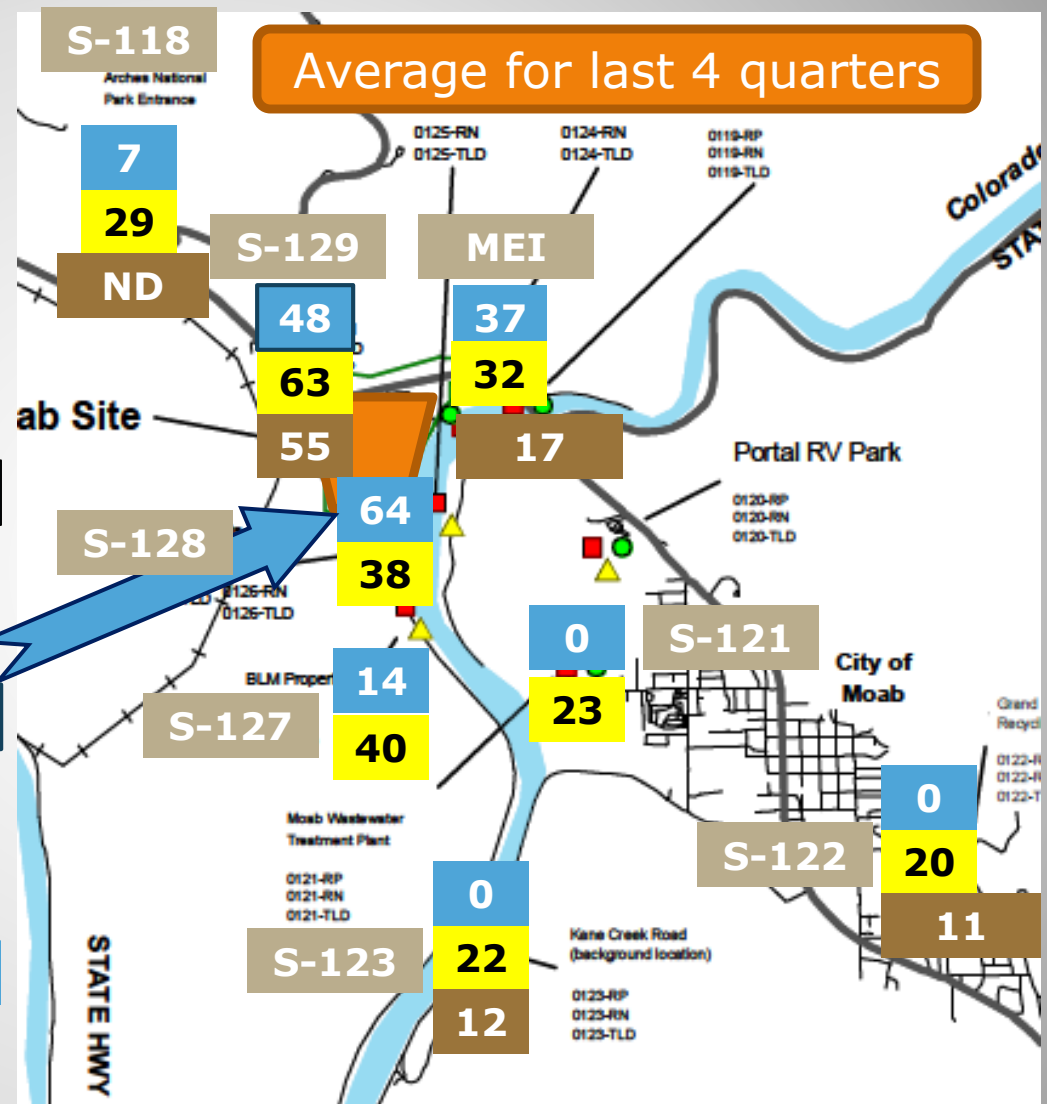
0

100%

60%

0%

Average for last 4 quarters



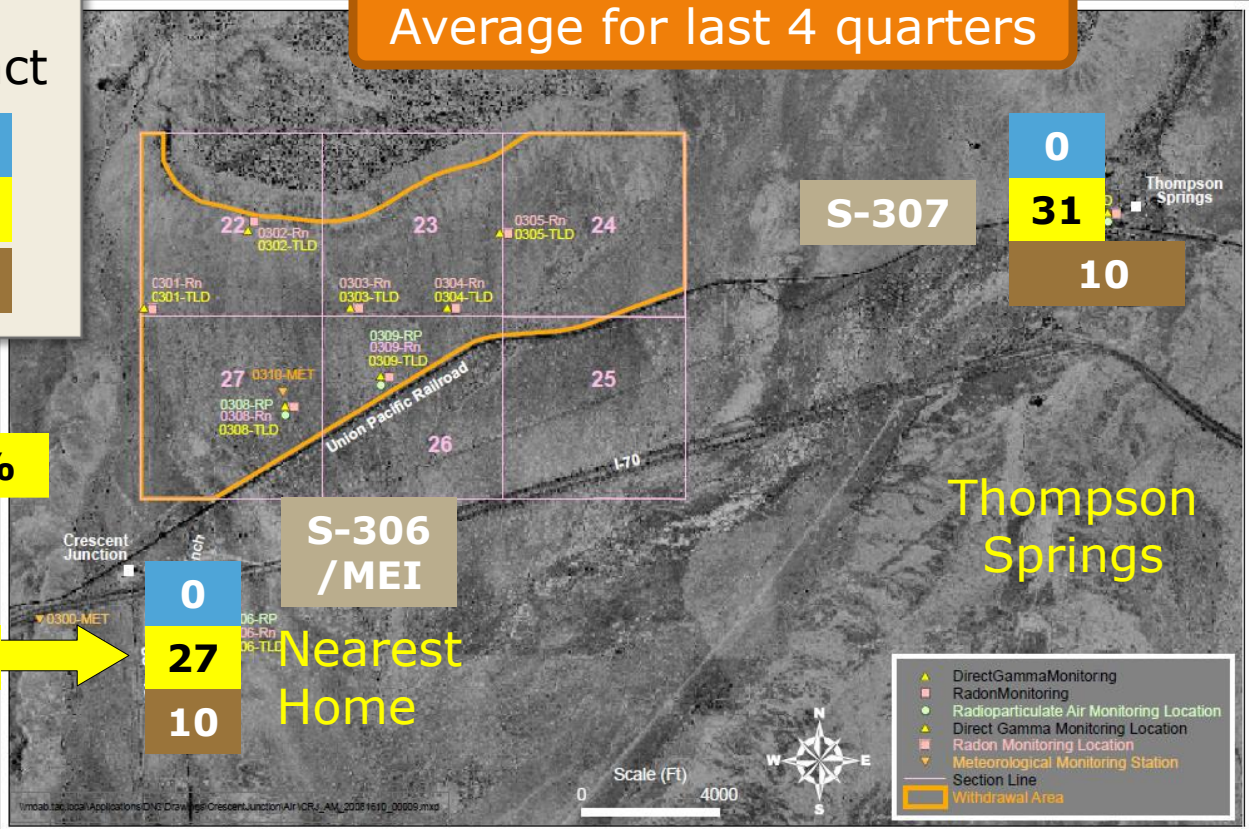
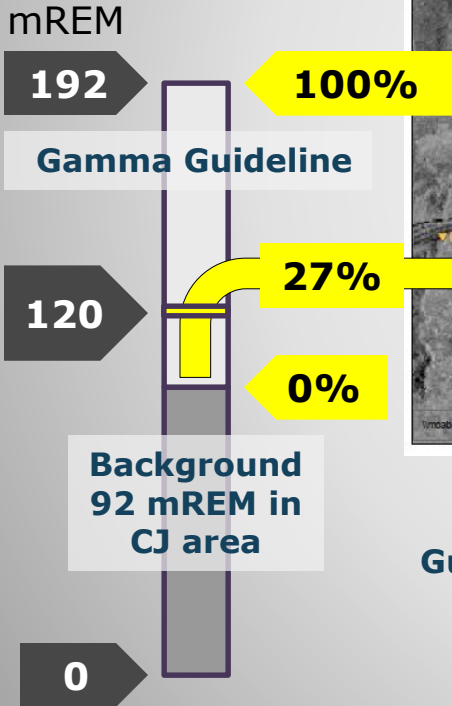
# Impacts Around Moab: 19Q1-19Q4

pCi/L = picoCuries per Liter, radiation from Radon gas in the air, L4Q average

Per Cent of Allowable Impact

<b>RADON</b>
<b>GAMMA</b>
<b>PARTICULATE</b>

Average for last 4 quarters



**S-306 /MEI**

**0**

**27** Nearest Home

**10**

**S-307**

**0**

**31**

**10**

**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

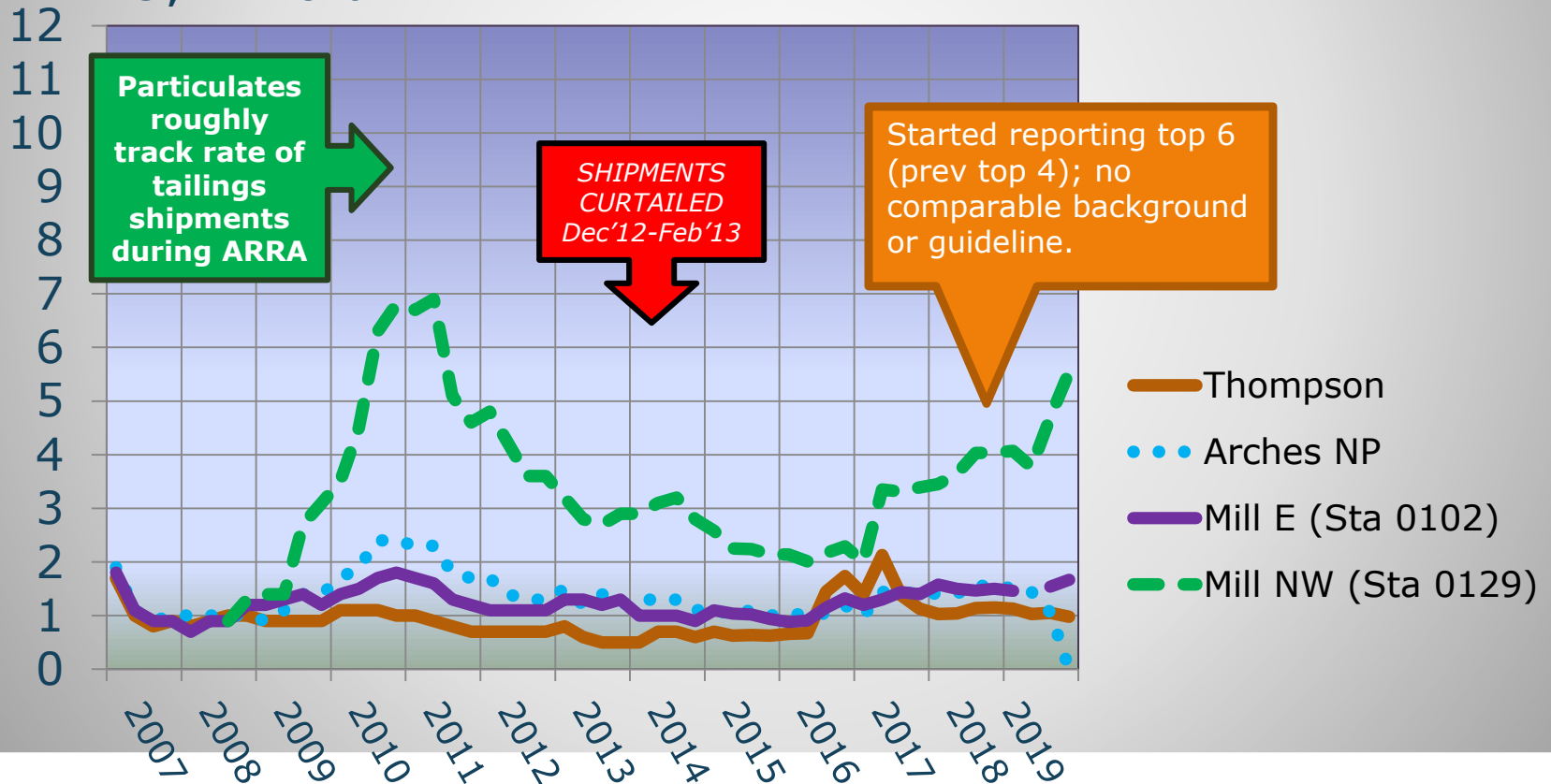
mREM = milli-Roentgen Equivalents in Man, biological dose equivalent, sum of L4Q

# Airborne Radioparticulates

Total DCG for 19Q1 – 19Q4

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

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



Injection wells  
between side channel  
and Riverside Trail

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)**

- 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

- 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](http://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](mailto:rvonkoch@grandcountyutah.net)
- or phone 435-259-1795

