

Moab UMTRA

Uranium Mill Tailings Remedial Action



**January,
2018**

looking northeast,
October, 2016 image
courtesy of DOE

Annual Project Review for Council
by Lee Shenton
Grand County UMTRA Liaison



Highlights



- **New Project Director Hired**
- **UDOH Health Study Updated**
 - No health impacts related to UMTRA
- **56% of tailings removed**
- **Defensive wells still protecting river**
- **Final vicinity property being remediated**

Observations provided by Grand County UMTRA Liaison on behalf of the Moab Tailings Project Steering Committee, as established by Grand County Resolution 2970A.

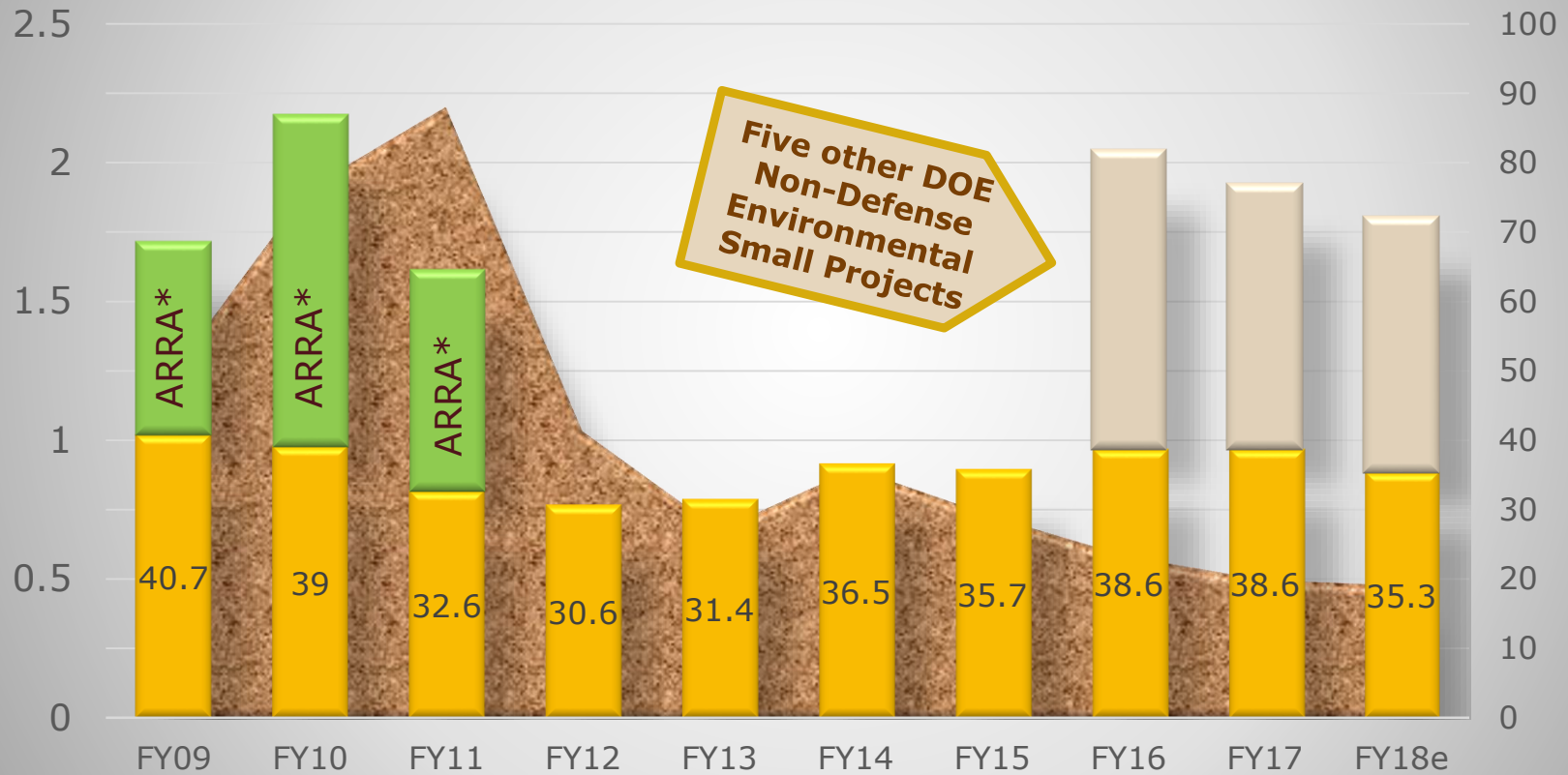


Tailings Removed

(Millions of Tons per Year)

Funding

(Million \$)

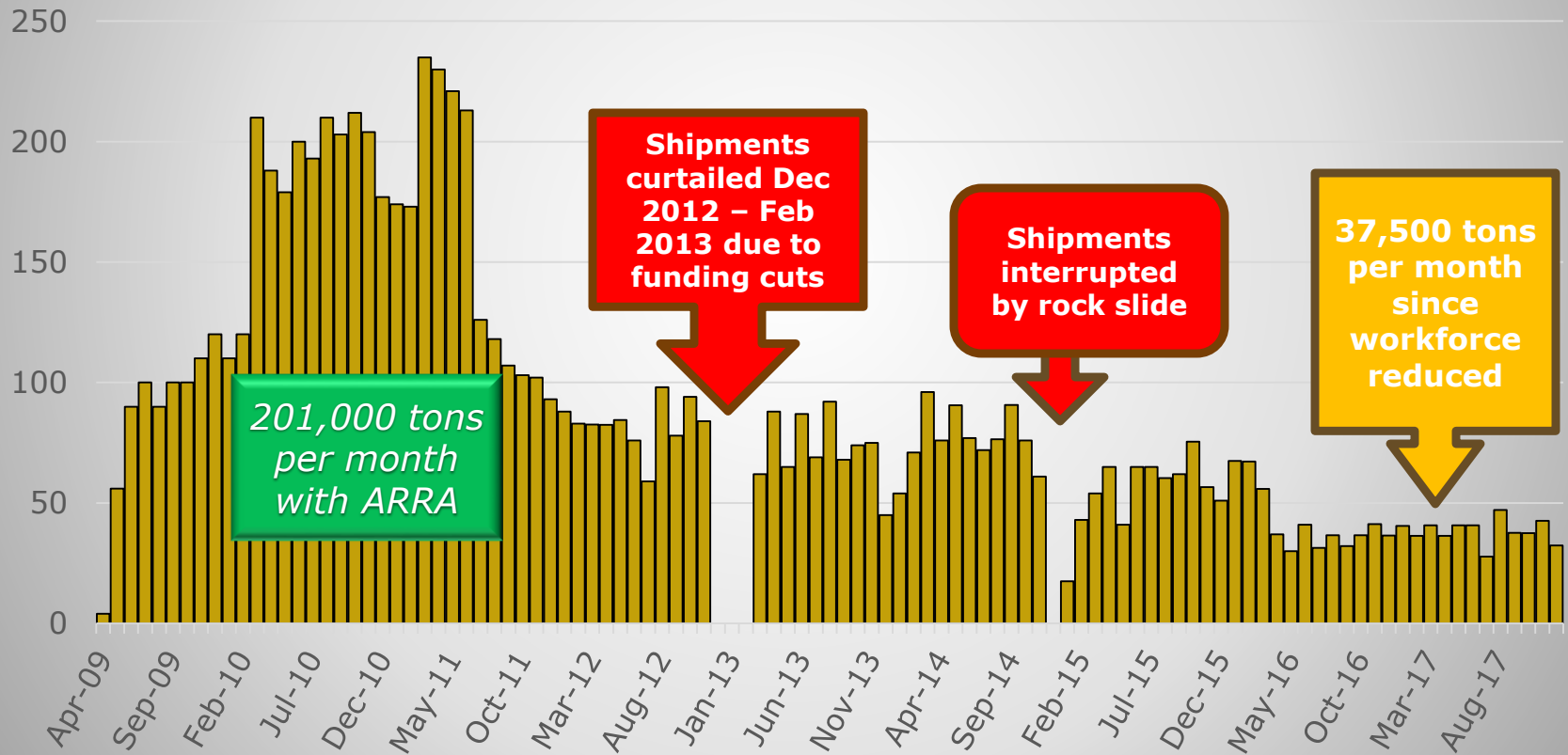


* American Recovery and Reinvestment Act of 2009, aka "Stimulus"

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 2970A.

56% of Tailings Removed

Tailings Removed (000 tons per month)



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Operations Status

- **56% of tailings moved**
 - 8.9 million tons shipped
 - 2 trains/week, ~37,500 tons/month (L6M)
 - Proposed \$35.3 mil FY18 vs \$38.6 mil FY17
- **Key aging equipment replaced**
- **Ground water remediation progressing**
 - Freshwater “curtain” activated when river level low

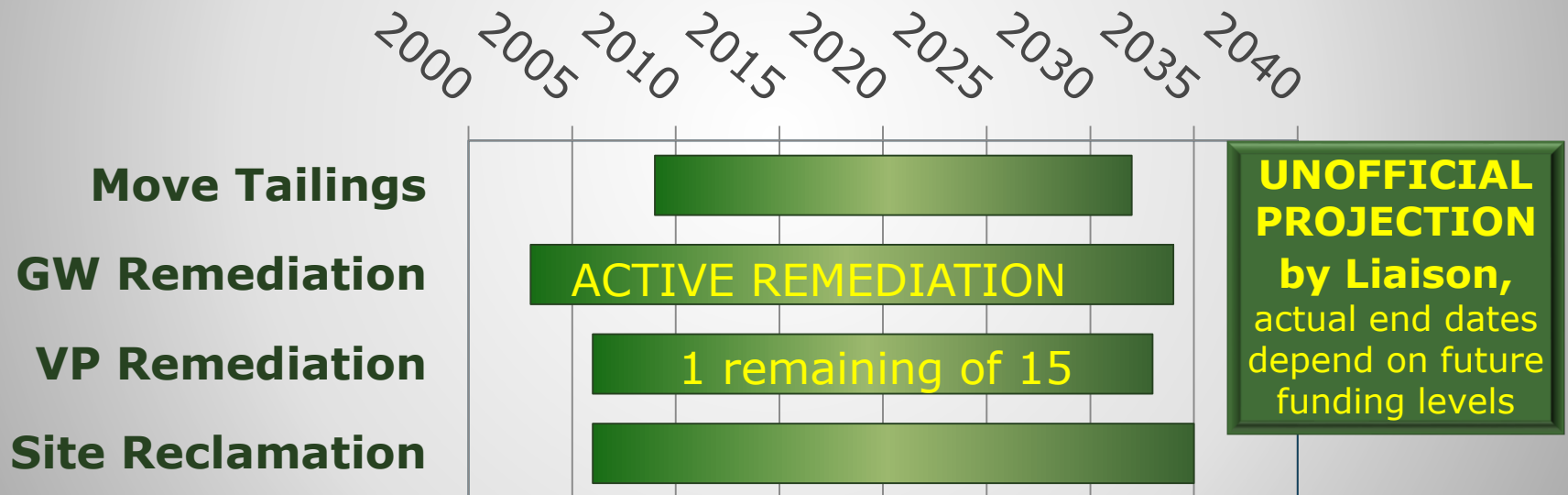


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Main Project Goals

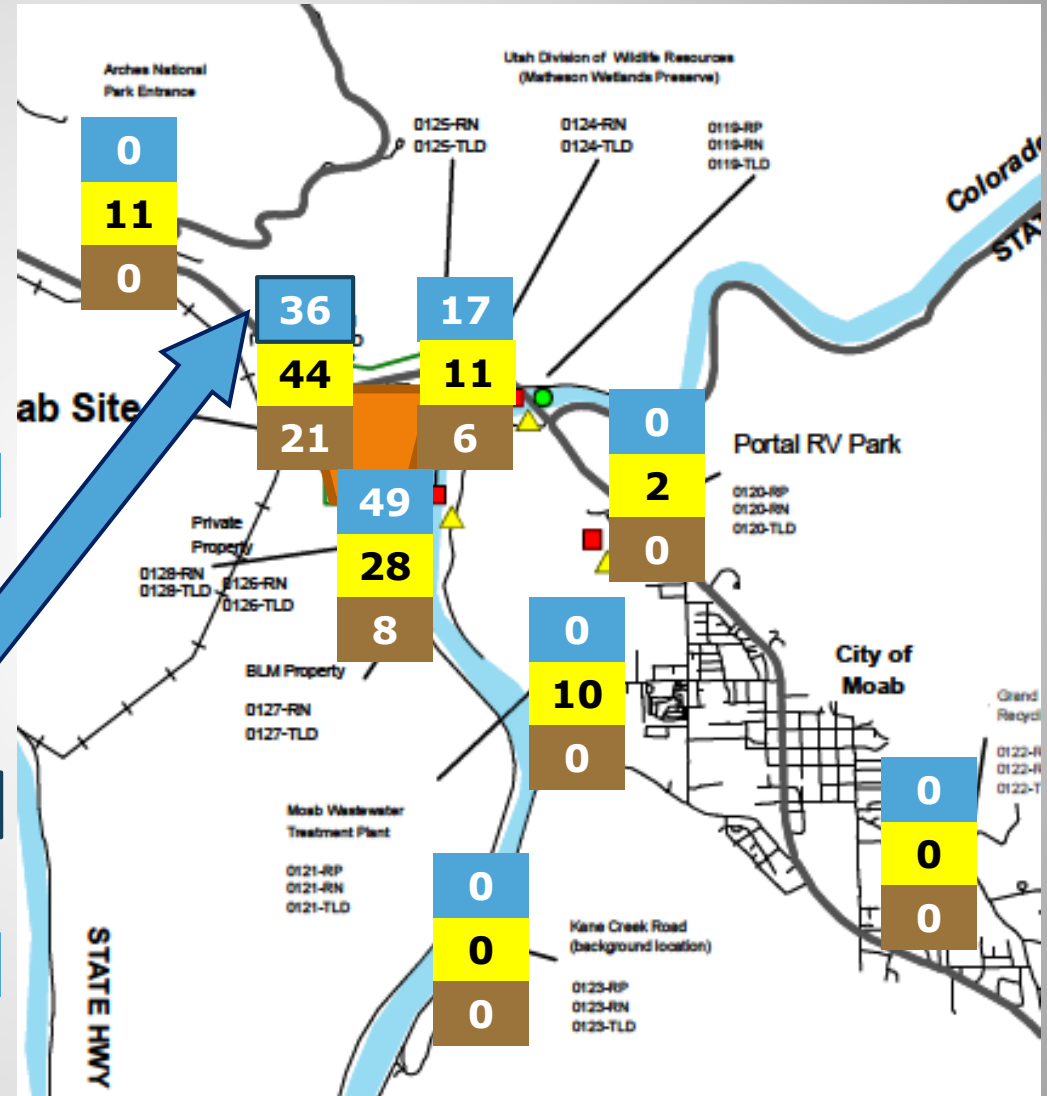
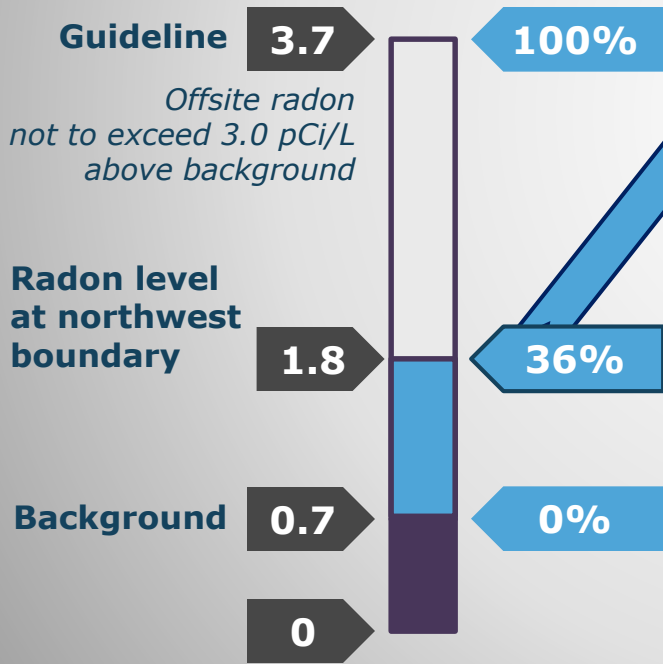
- Move tailings away from Colorado River
- Protect river by intercepting ground water contaminants
 - Remediate vicinity properties
- Reclaim project sites at Moab and Crescent Junction



Total project costs are estimated at about \$1 billion

At the current rate (rolling six month average) the last of the tailings will be shipped in 2033.

Per Cent of Allowable Impact



Impacts Around Moab: 16Q4-17Q3

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

Per Cent of Allowable Impact

RADON
GAMMA
PARTIC

mREM

192

100%

Gamma Guideline

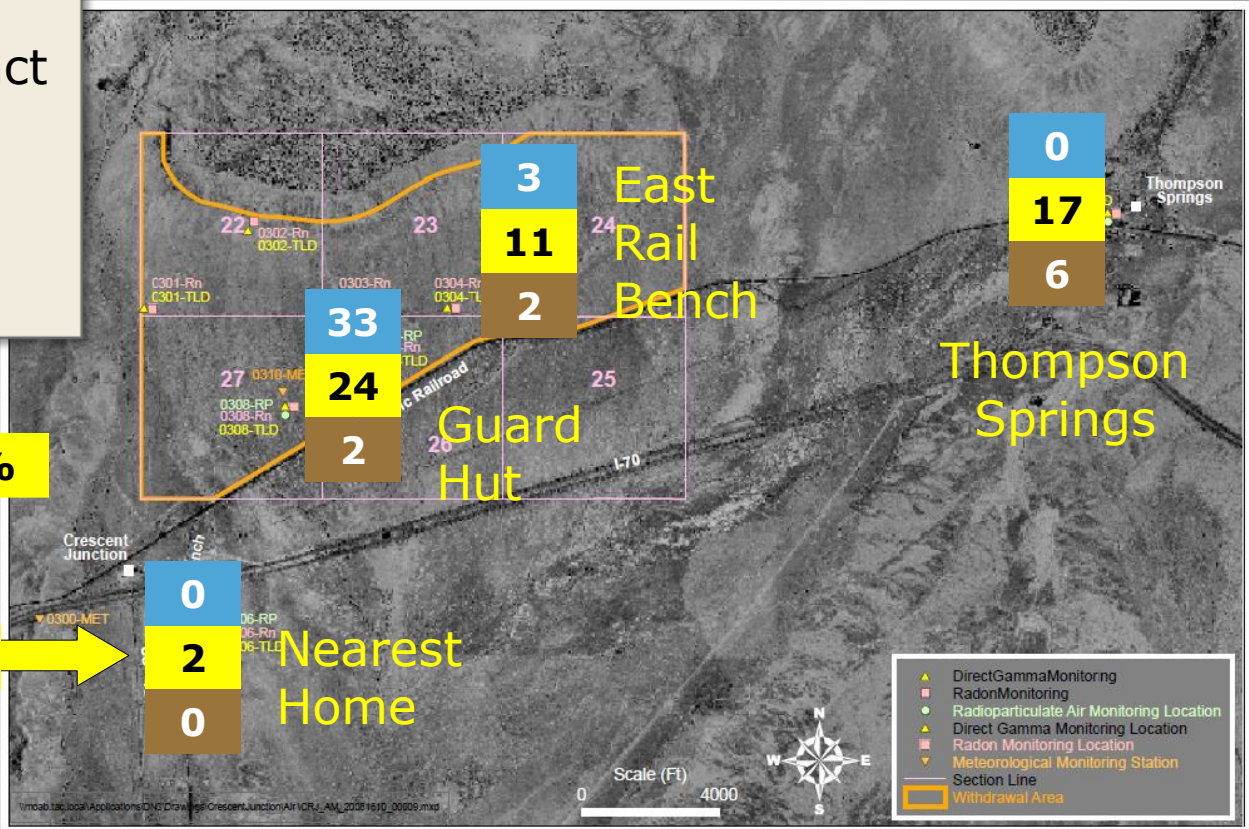
2%

94

0%

Background
92 mREM in
CJ area

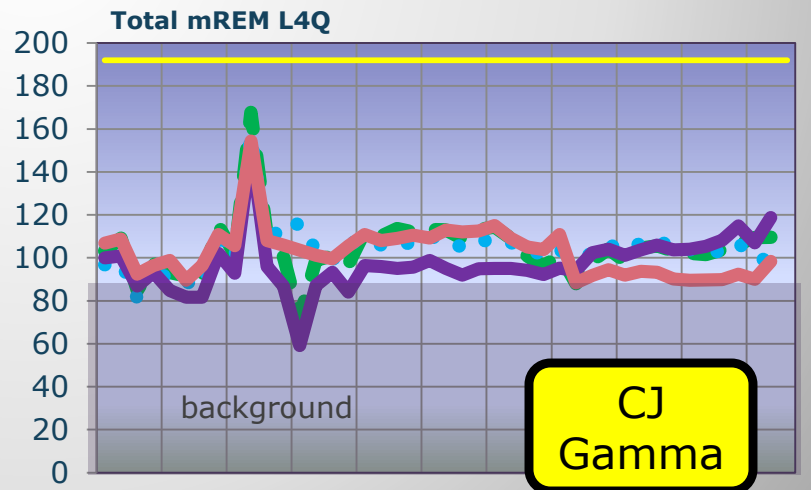
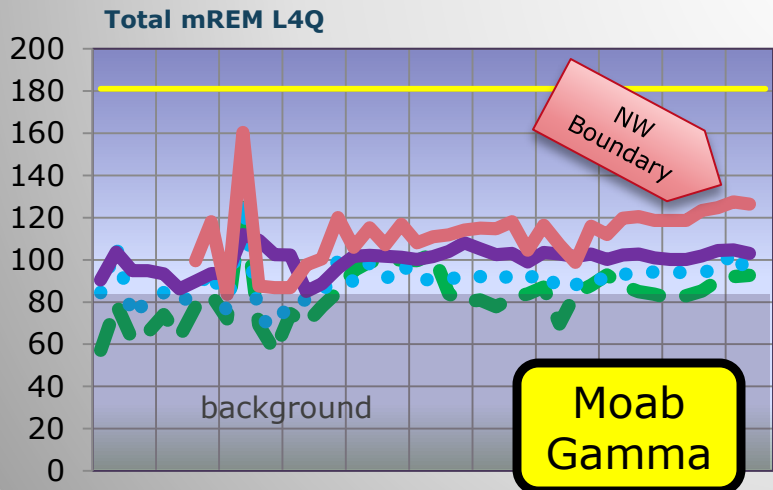
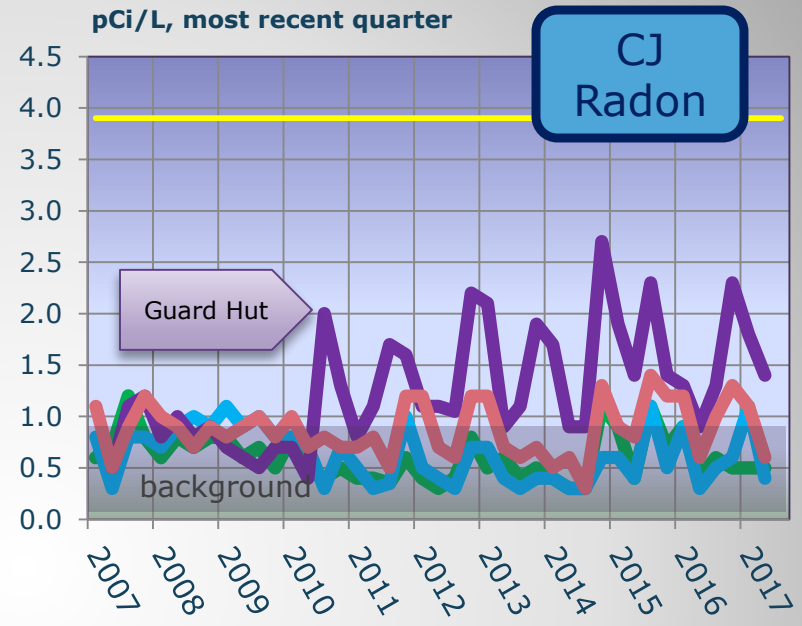
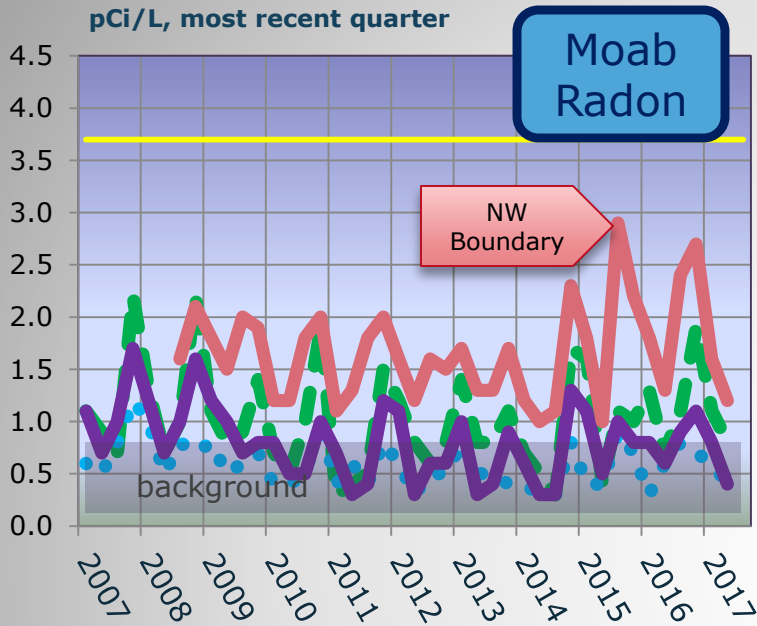
0



Guideline: Gamma not to exceed 100 mREM/yr above background.
Gamma total for last 12 months at nearest home was 94 mREM,
Or 2 mREM (2% of 100 mREM guideline) above CJ background.

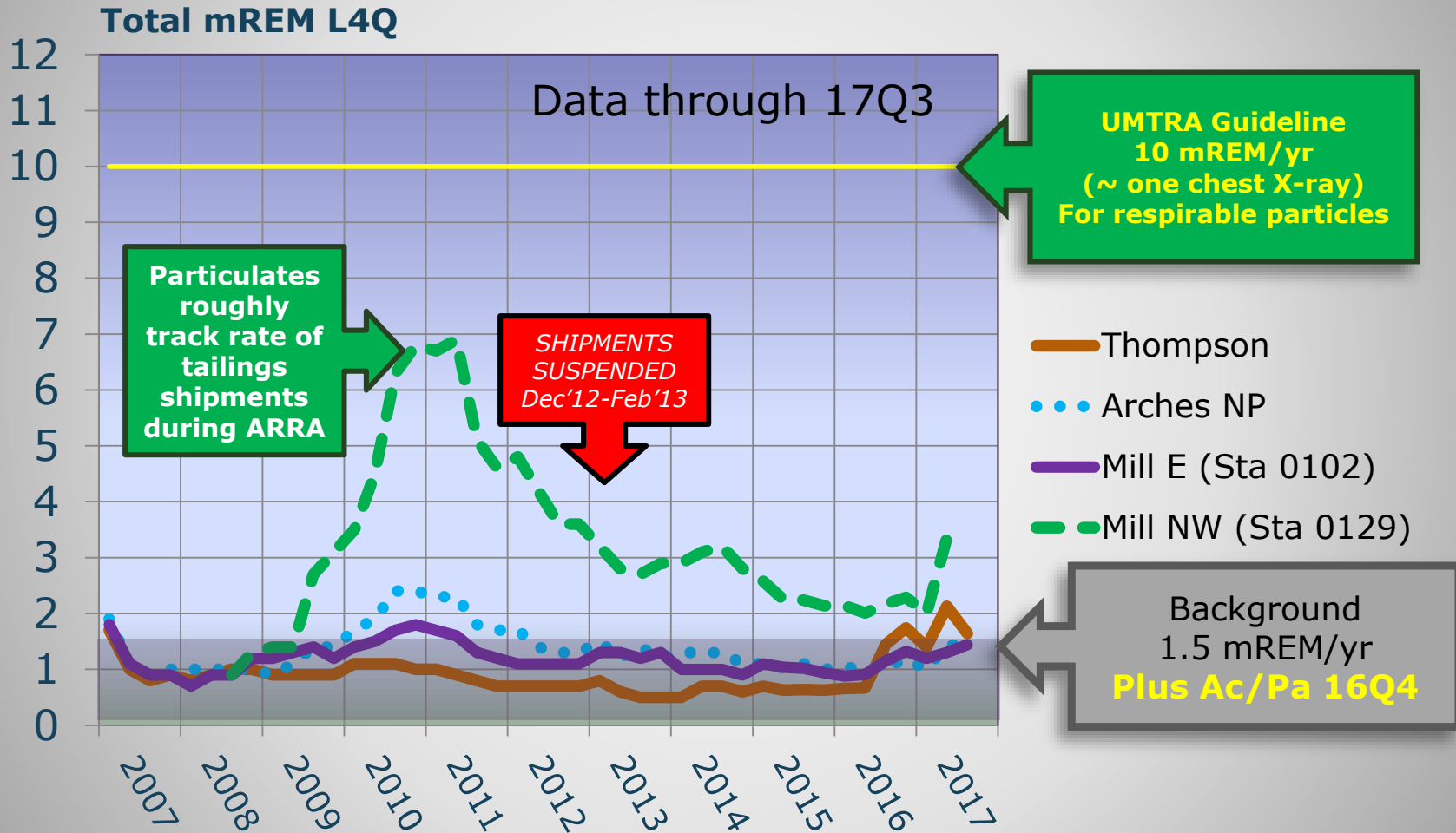
Impacts Around CJ: 16Q4-17Q3

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



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 2970A.

Airborne Radioparticulates



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Ground Water Remediation



**Extracted by Dec-2017
(kept out of river)**

900,000 pounds ammonia
4,800 pounds uranium

- Well field between pile and river intercepts contaminated ground water
- Fresh water “curtain” injection as needed
- Side channel habitat protected seasonally with added fresh water

➤ Could continue 1-2 years after pile removed