

# Moab UMTRA Project

*February  
2014*



Photo  
Courtesy  
of DOE

## Uranium Mill Tailings Remedial Action

*A Grand County Perspective by Lee Shenton, UMTRA Liaison*



# Main Project Goals

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



Total project costs are estimated at about \$1 billion

## Expected Completion About 2025

# Operations Status

- **41% of tailings moved**
  - 6.5 million tons shipped
  - 4 trains per work week
  - Shipping curtailed during holiday weeks
  - FY14 Budget \$38 million; no more curtailments
- **Ground Water Remediation**
  - Extraction and injection wells active
  - Habitat support to resume in Spring

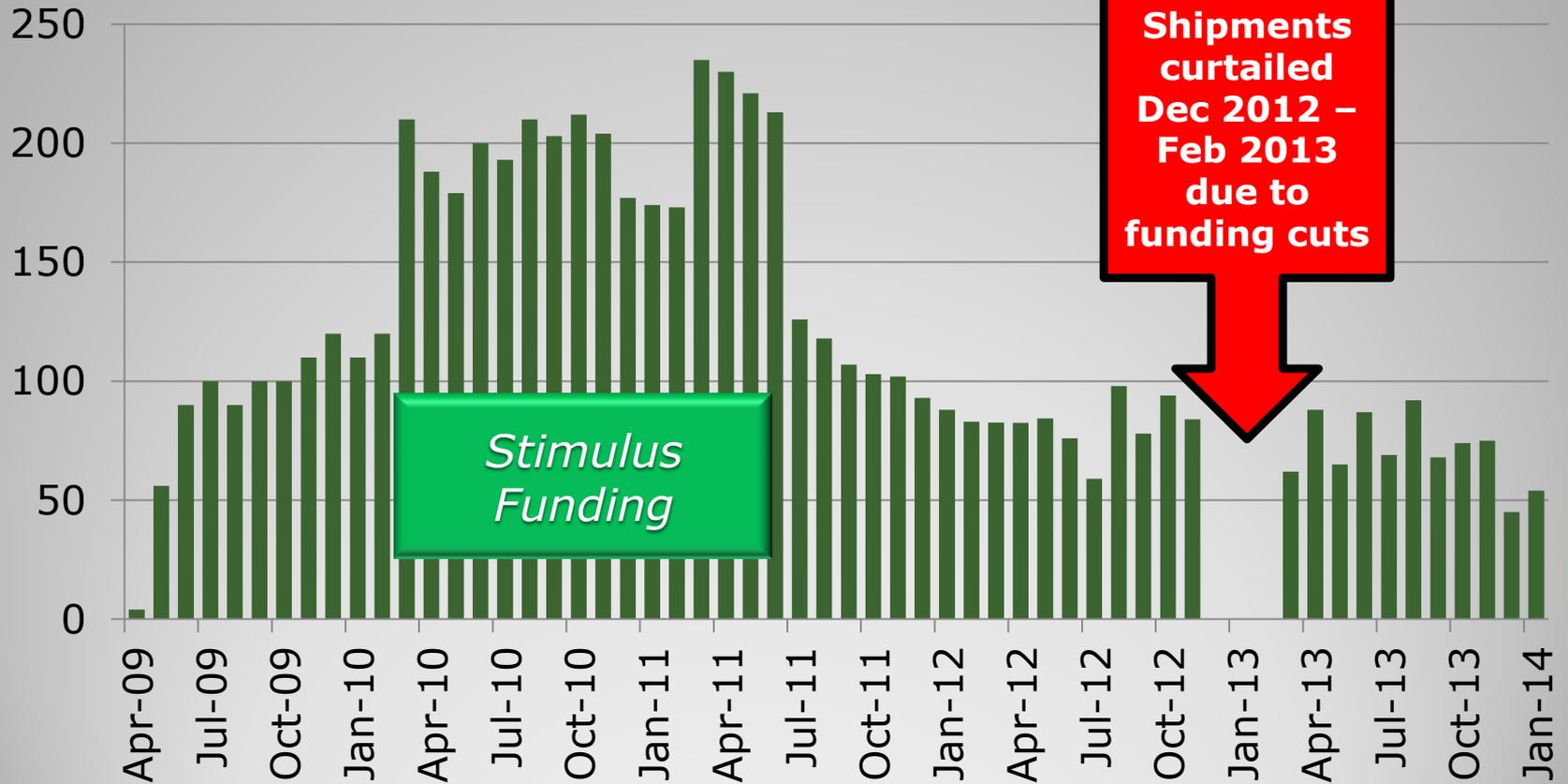


Excavation Continuing July, 2013



# 41% of Tailings Removed

Tailings Removed (000 tons)



Impact as  
% of Guideline



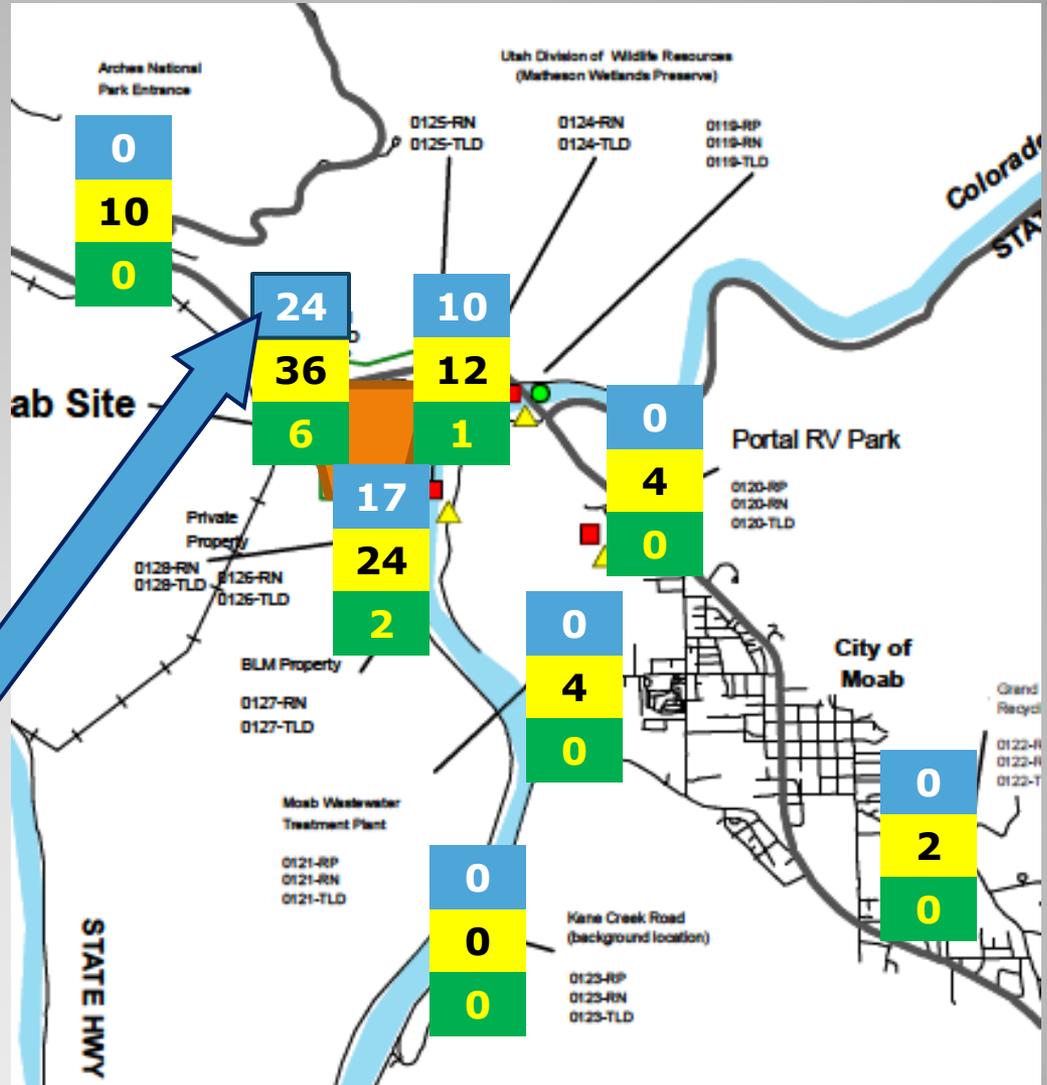
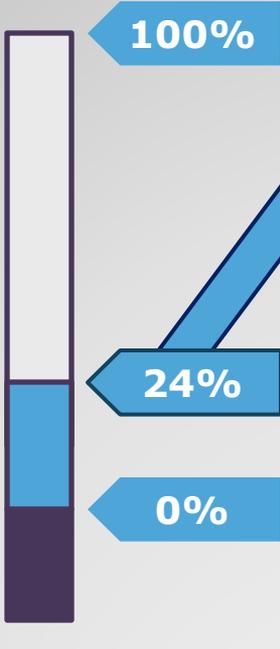
**Guideline 3.7**

*Radon not to exceed  
3.0 pCi/L  
above background*

**Radon  
measured at  
northwest  
boundary 1.7**

**Background 0.7**

**0**



# Impacts Around Moab: 4<sup>th</sup> Qtr 2013

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

Impact as  
% of Guideline

**RADON**  
**GAMMA**  
**PARTIC**

mREM

192

100%

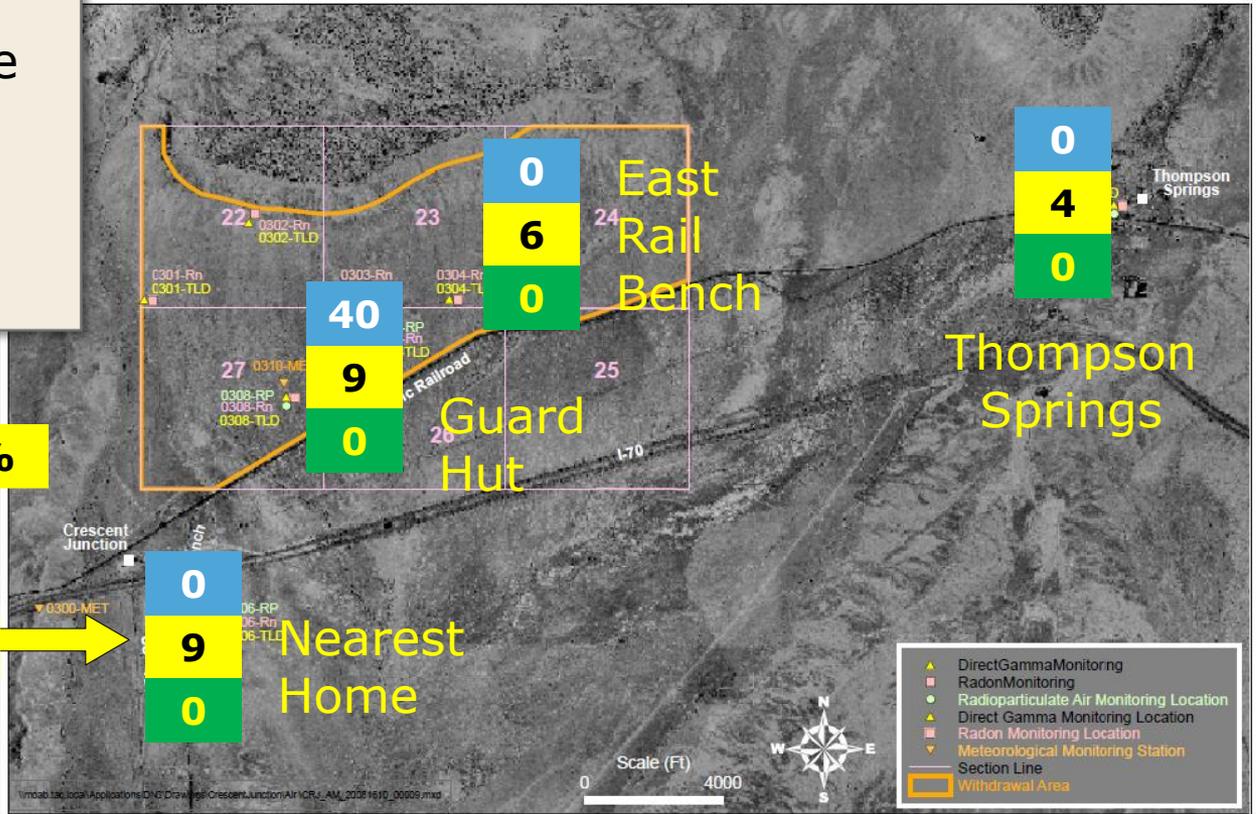
Gamma Guideline

92

0%

Background

0



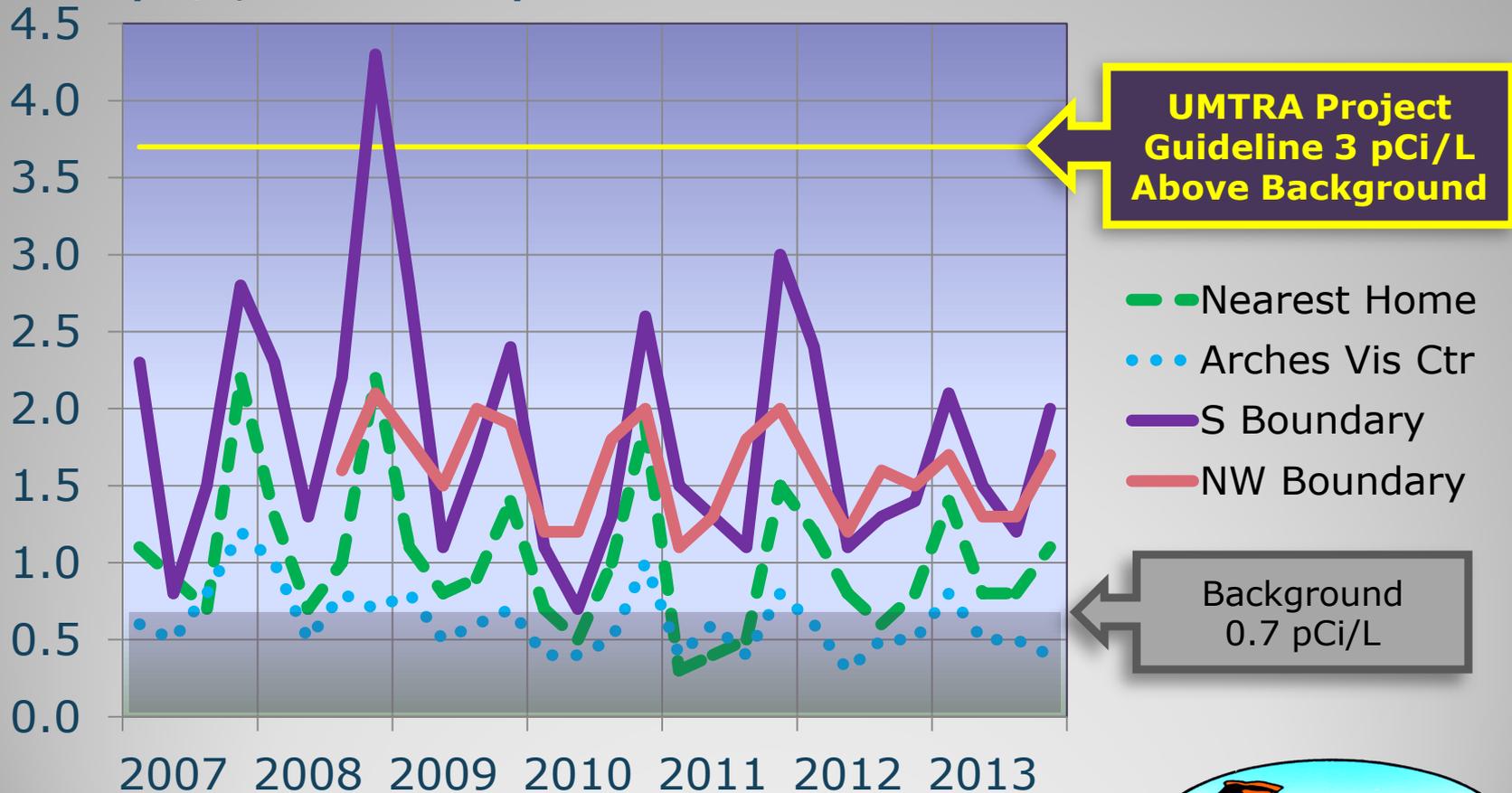
**Guideline: Gamma not to exceed 100 mREM/yr above background.**  
 Nearest Home: Gamma total for last 12 months was 101 mREM,  
 Or 9 mREM (9% of 100 mREM guideline) above background.

# Impacts Around CJ: 4<sup>th</sup> Qtr 2013

mREM = milli-Roentgen Equivalents in Man, a radiation biological dose equivalent.

# Radon Trends Near Pile

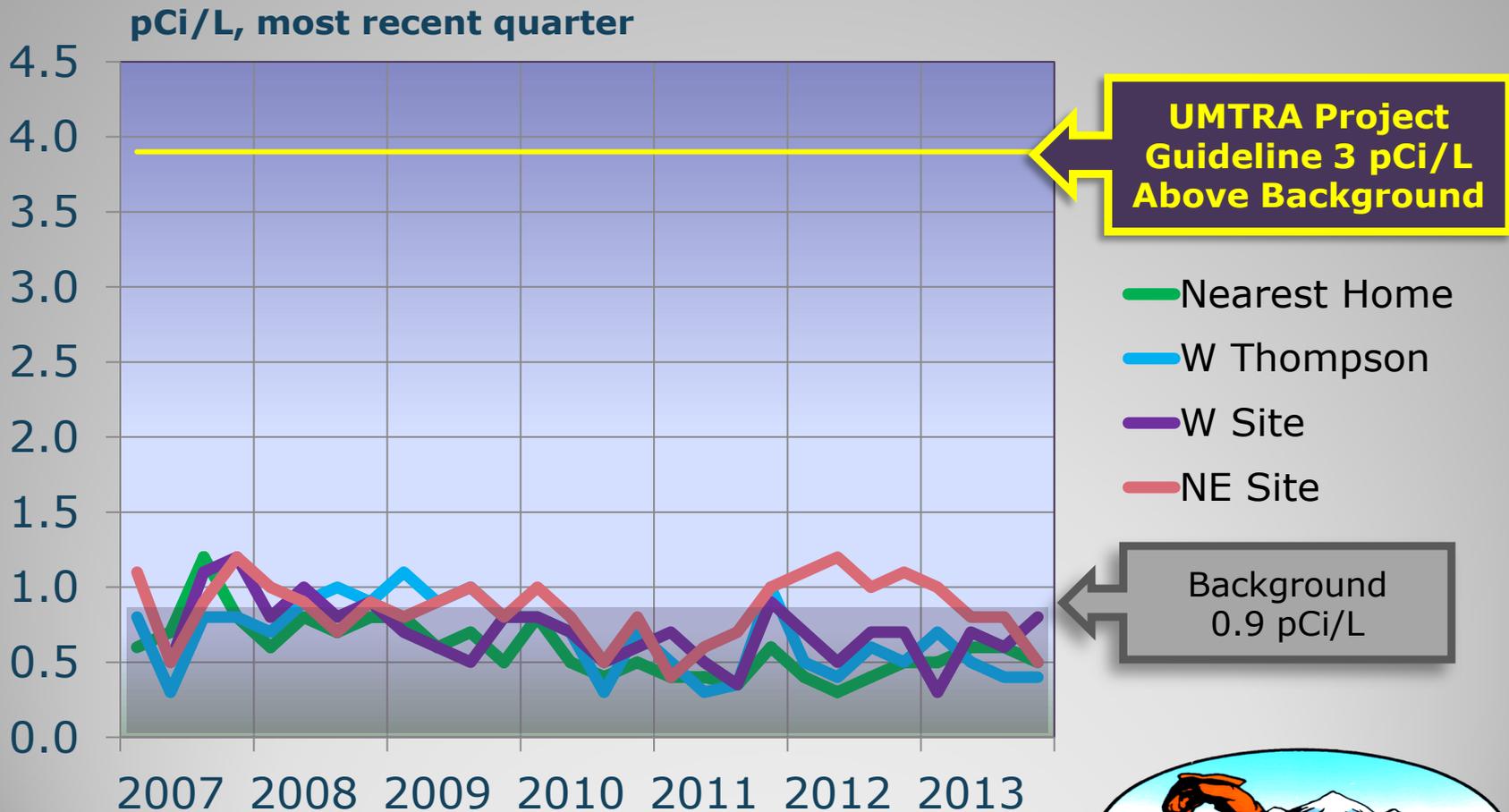
pCi/L, most recent quarter



EPA Indoor Guideline 4 pCi/L



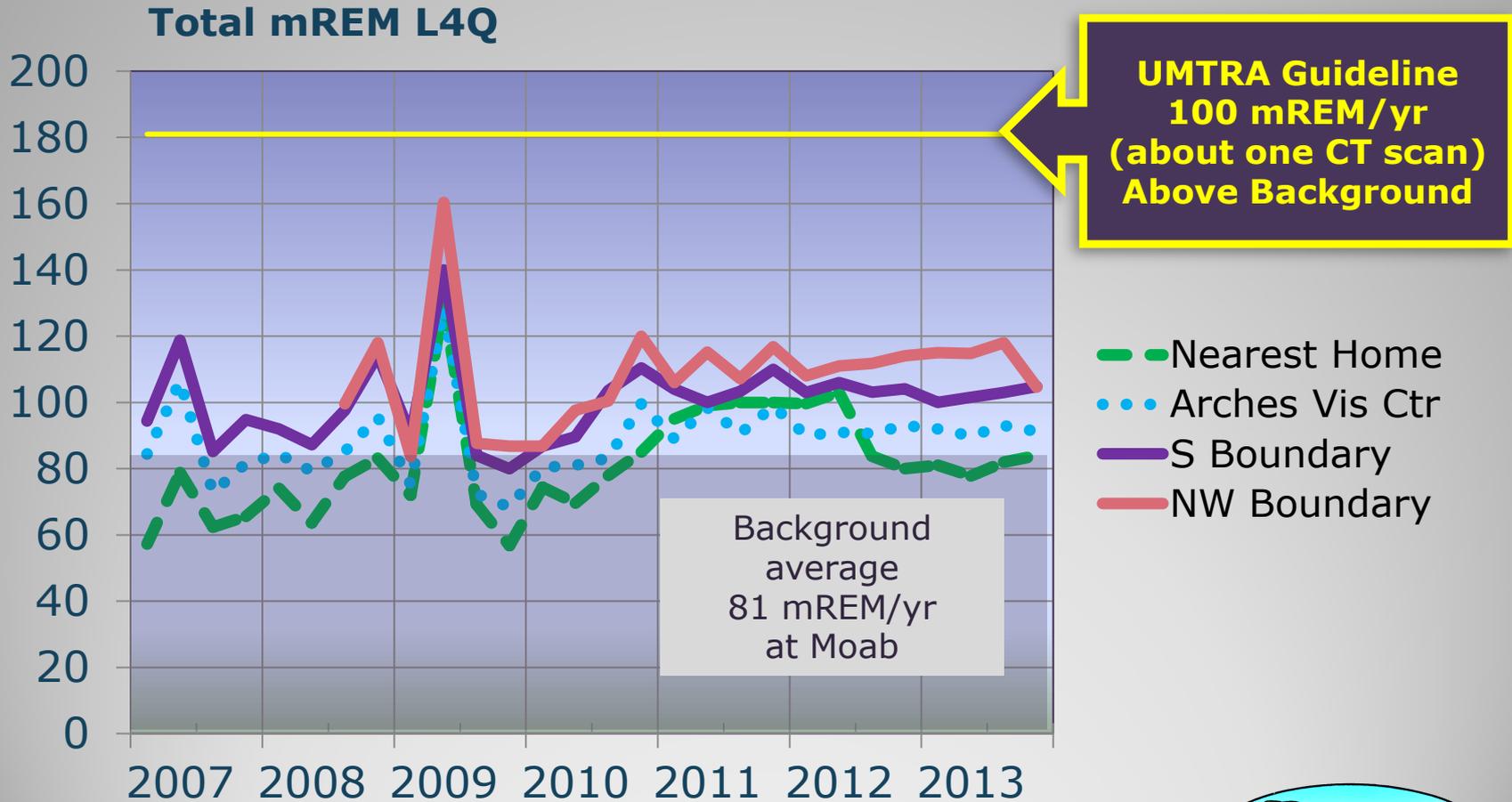
# Radon Trends Near Disposal Cell



EPA Indoor Guideline 4 pCi/L

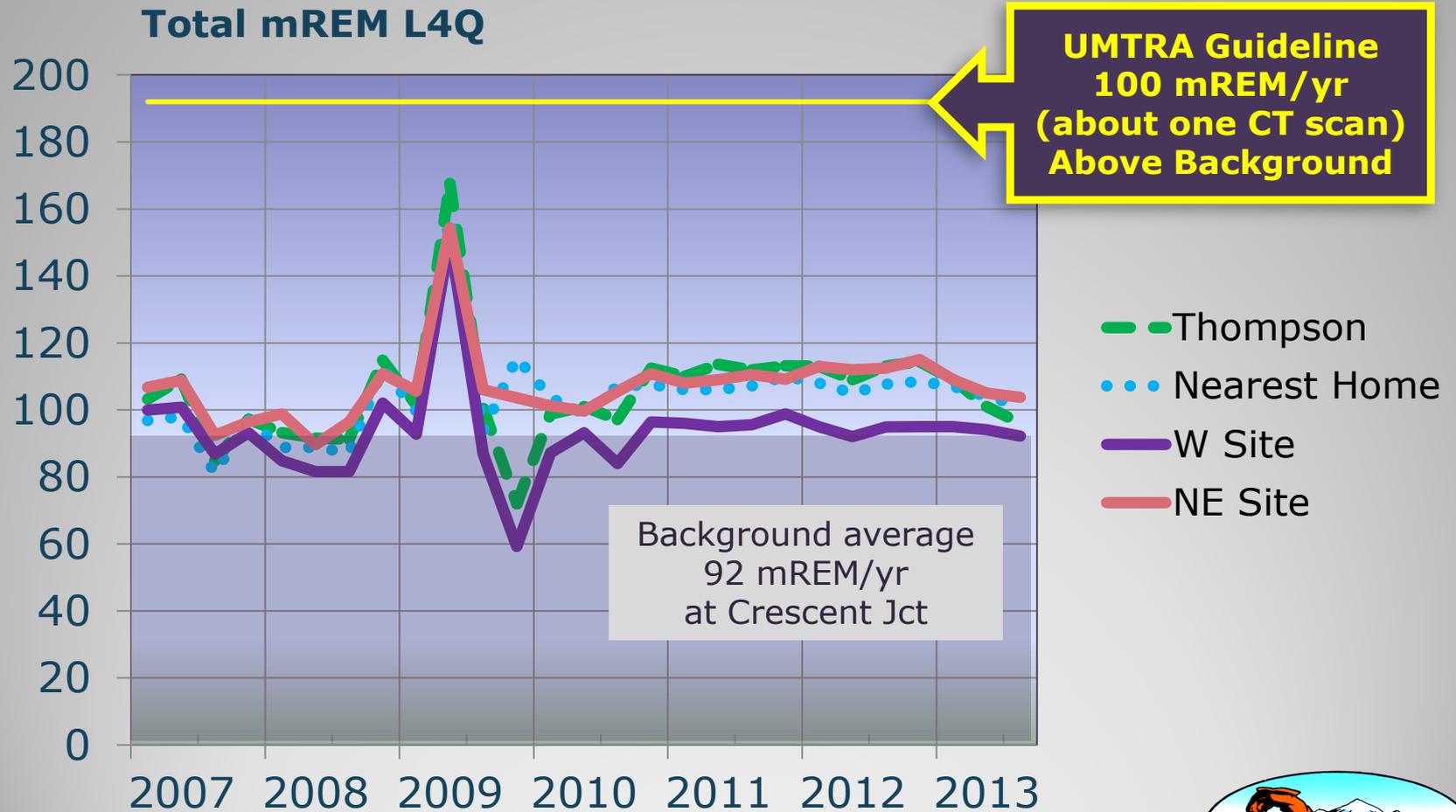


# Gamma Radiation Near Pile



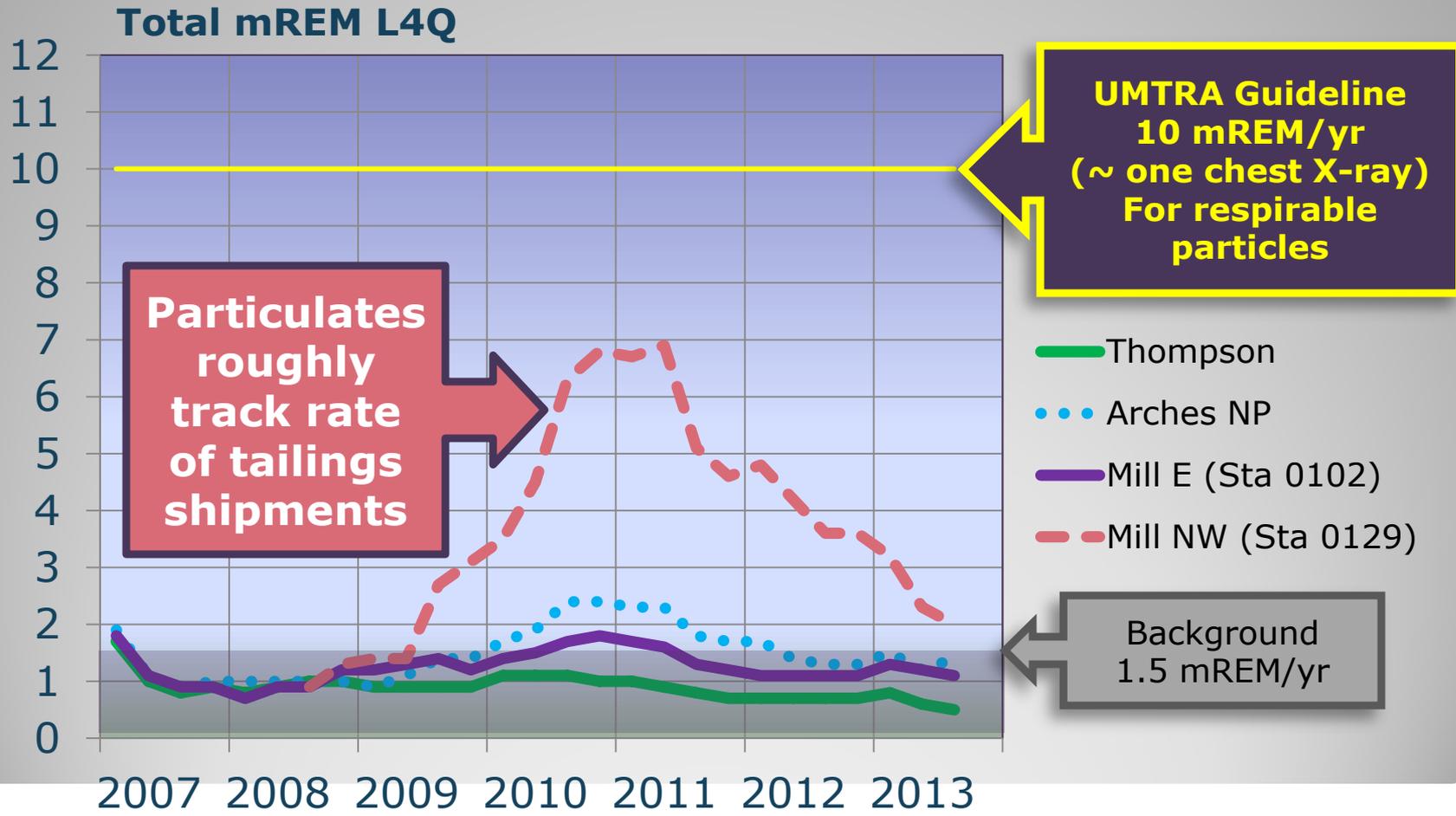
L4Q = Last Four Quarters

# Gamma Radiation Near Disposal Cell



L4Q = Last Four Quarters

# Airborne Radioparticulates



Radioparticulate data for 13Q4 not yet available

# Ground Water Remediation

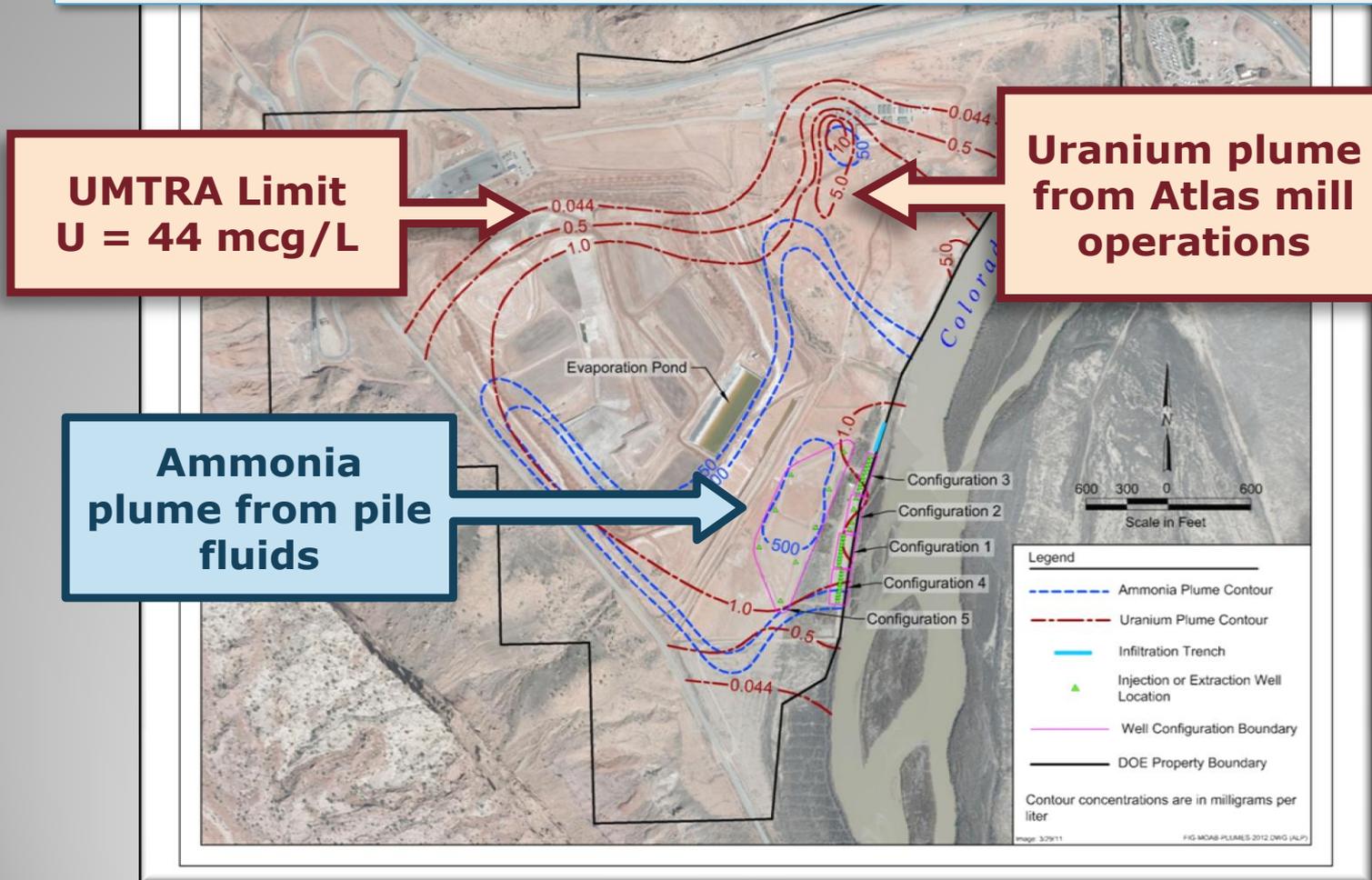


**Extracted to Date  
(kept out of river)**  
799,000 pounds ammonia  
3,990 pounds uranium

- Well field between pile and river
- Extraction year-round to protect river
- Fresh water injection while river is low
- Seasonal habitat protection

➤ Could continue 1-2 years after pile removed

# Ground Water Conditions



Colorado River background Uranium level ~8 micrograms (mcg)/L at Moab.

# To Learn More



- **Online**

- [MoabTailings.org](http://MoabTailings.org)
- [gjem.energy.gov/moab](http://gjem.energy.gov/moab)
- [GrandCountyUtah.net](http://GrandCountyUtah.net) (What's New)

- **Public meetings**

- *Moab Tailings Project Steering Committee, quarterly*
- *Site Futures Committee, as needed*

- **UMTRA Reading Room (Library)**

- **Chat with Grand County's Liaison**

- 259-1795 (Tue, Thu), 719-2811 (Wed)
- [Ishenton@grandcountyutah.net](mailto:Ishenton@grandcountyutah.net)

