
Overview of the Third Quarter 2012 Surveillance and Maintenance Report for the LM Rocky Flats Site

July–September 2012

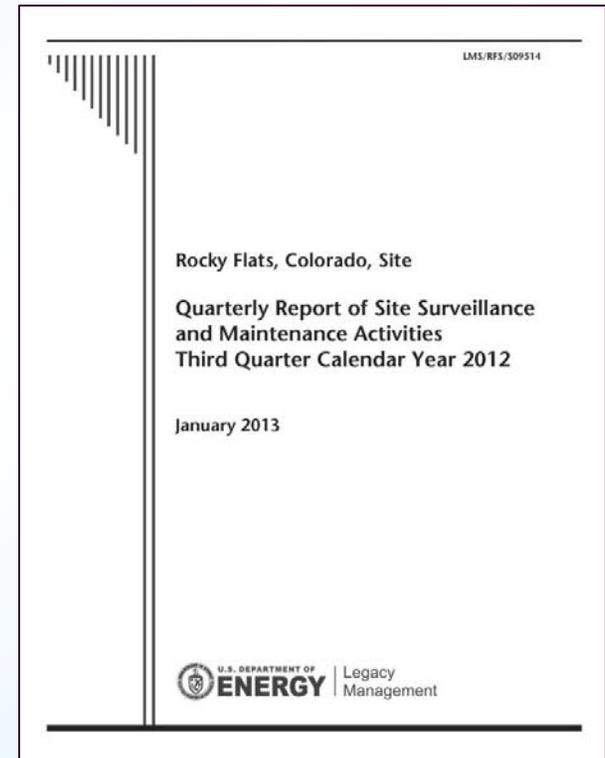


U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Quarterly Monitoring and Reporting

- Quarterly reports are required under RFLMA to document that the CERCLA remedy continues to be protective
 - Primary goal is protecting surface water
- The response action under the final remedy for Rocky Flats is
 - Maintaining two landfill covers
 - Maintaining four groundwater treatment systems
 - Surface water and groundwater monitoring
 - Physical controls
 - Signage
 - Restricted access
 - Institutional controls
 - No building construction or occupation
 - Restrictions on excavation and soil disturbance
 - No drinking or agricultural use of surface water
 - No groundwater wells except for monitoring
 - Protecting landfill covers and engineered remedy components



Surface Water Monitoring and Operations



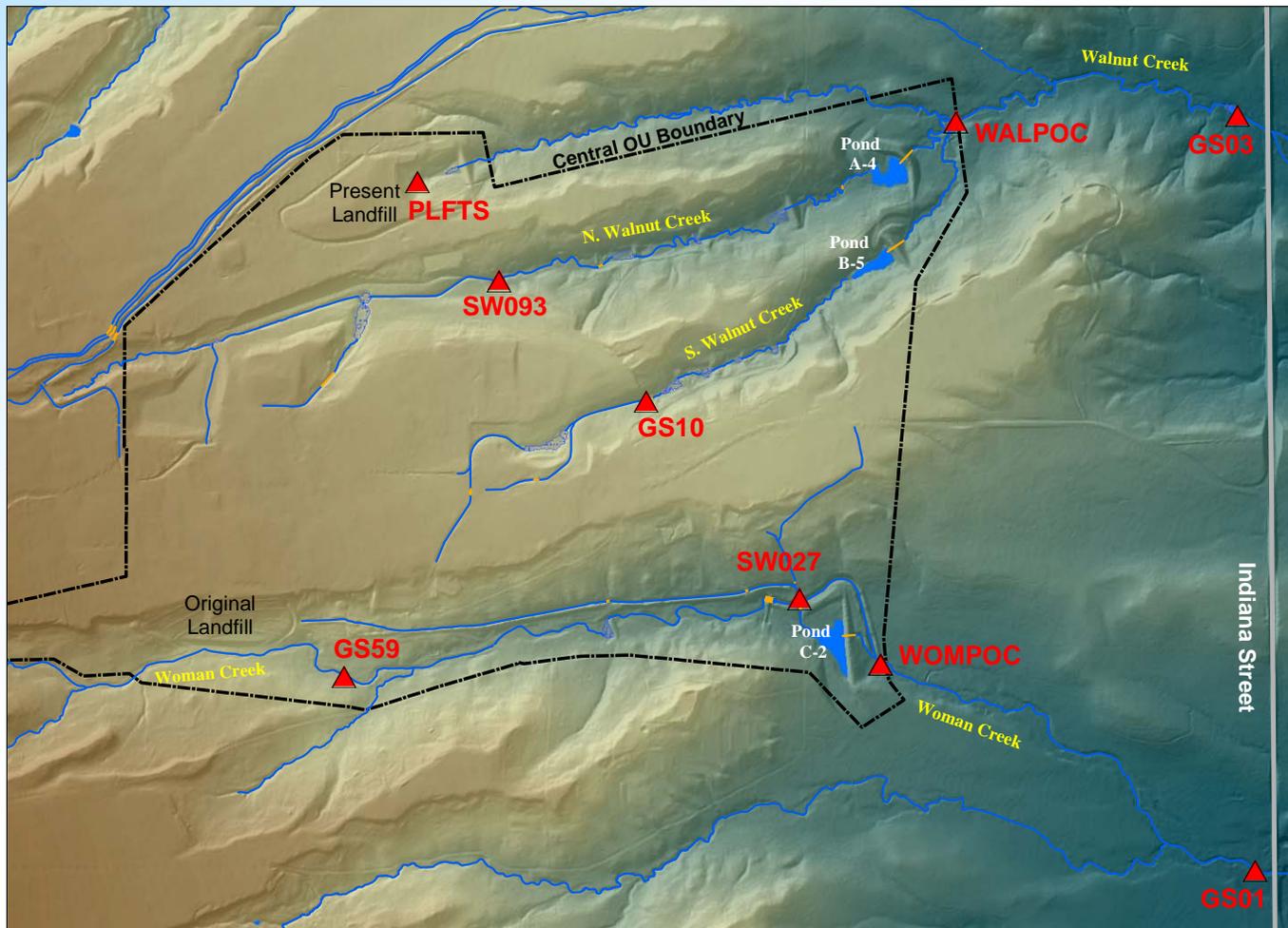
Third Quarter 2012



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Selected Surface Water Monitoring Locations

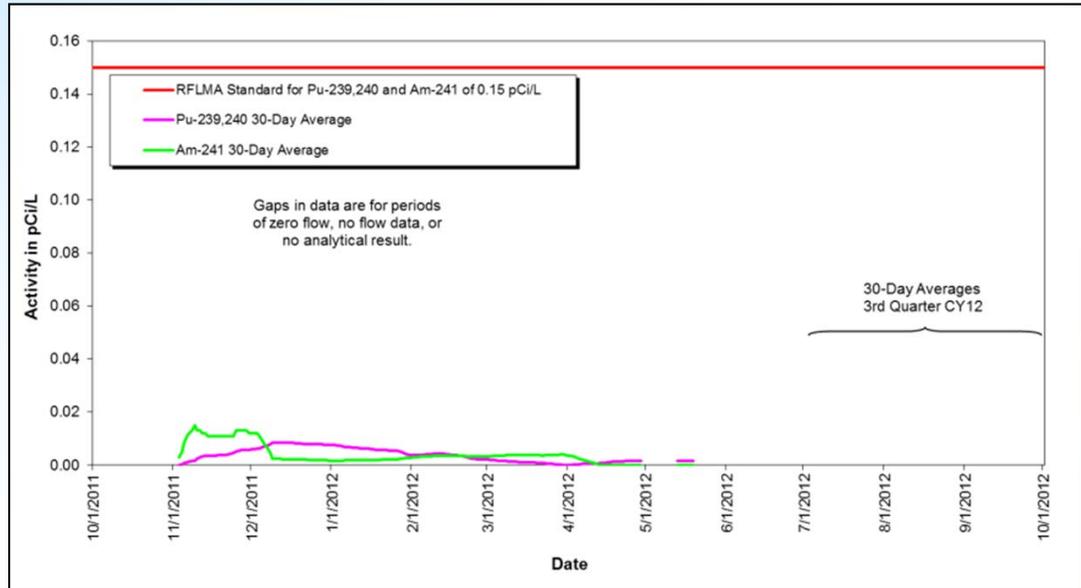


U.S. DEPARTMENT OF
ENERGY

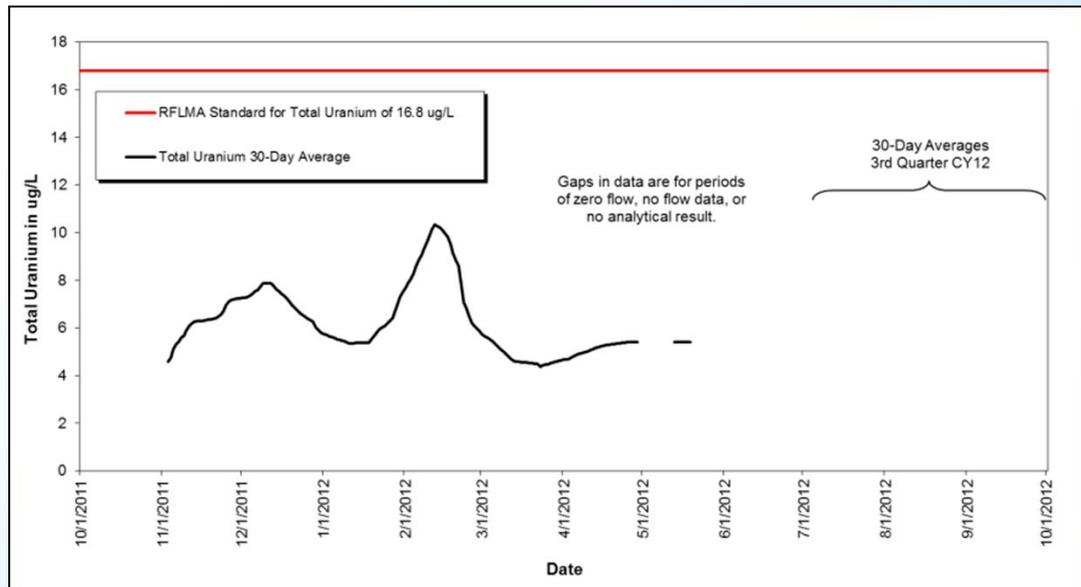
Legacy
Management

Point of Compliance Monitoring POC GS01

- Plutonium and Americium



- Total Uranium

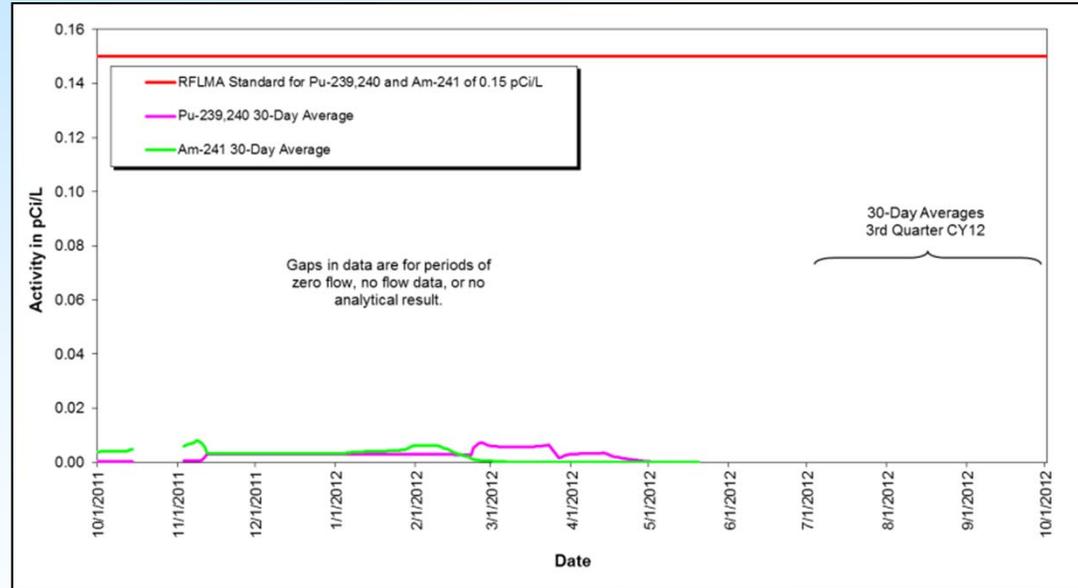


U.S. DEPARTMENT OF
ENERGY

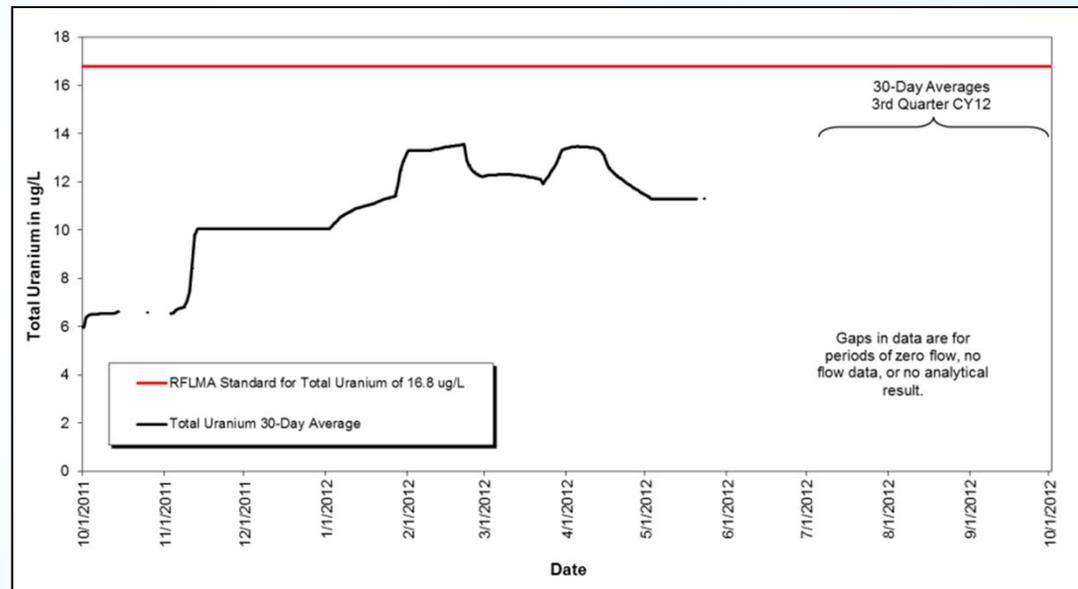
Legacy
Management

POC GS03

- Plutonium and Americium

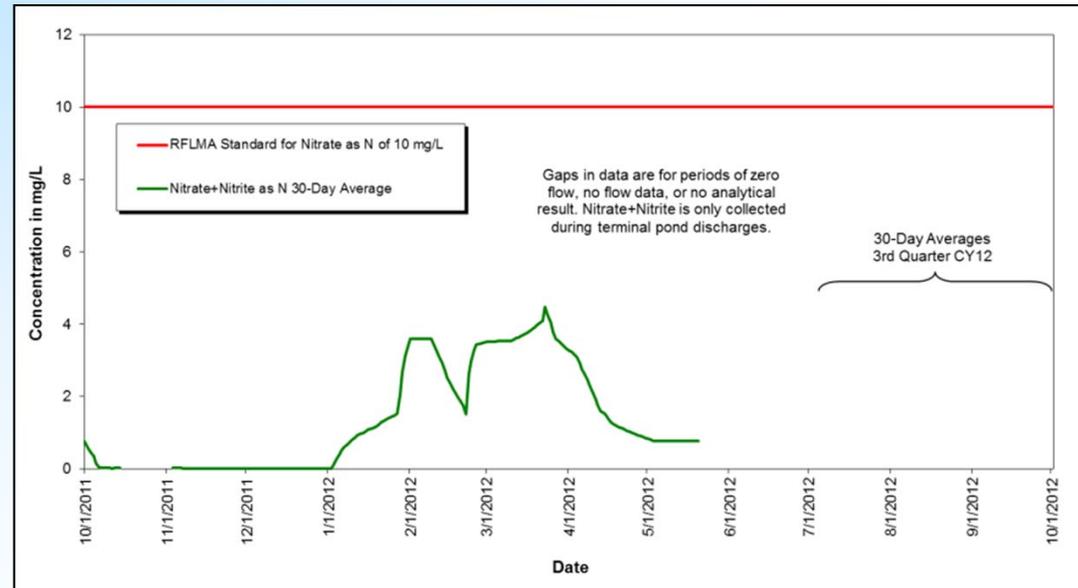


- Total Uranium



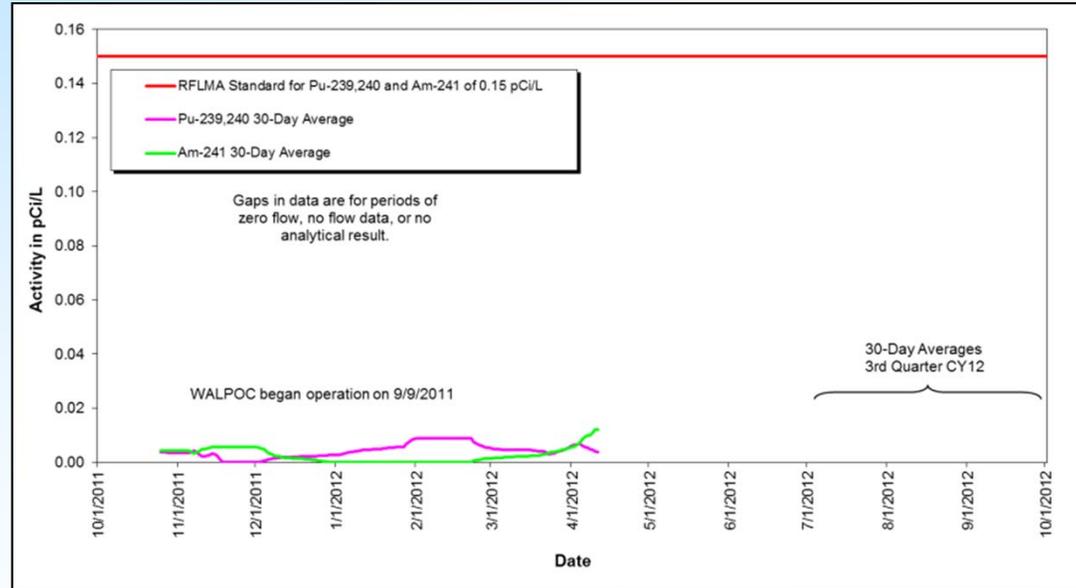
POC GS03

- Nitrate + Nitrite as Nitrogen

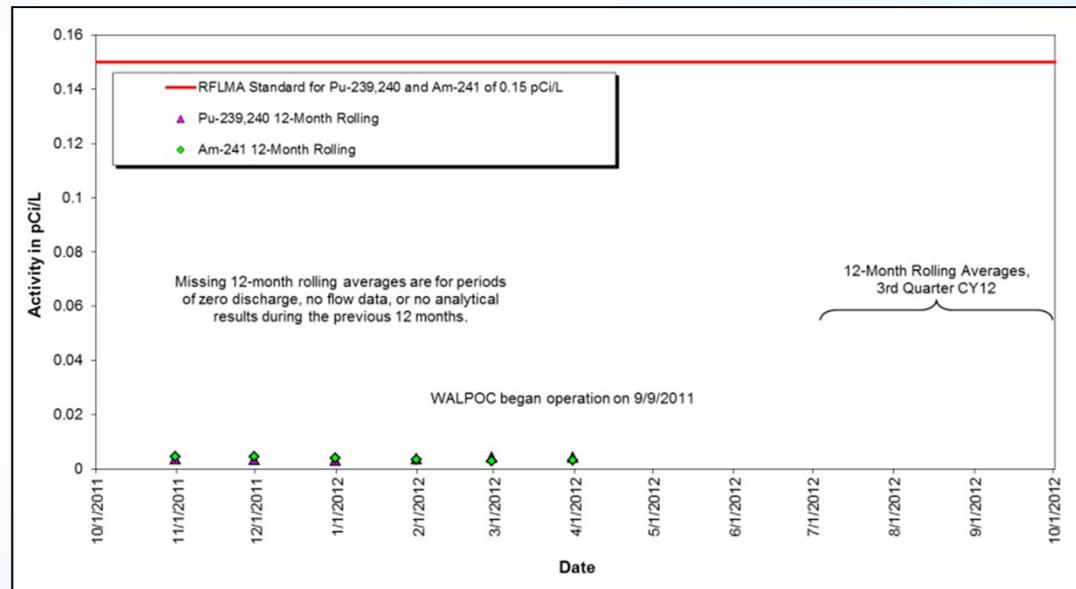


WALPOC

- Plutonium and Americium (30-Day Average)

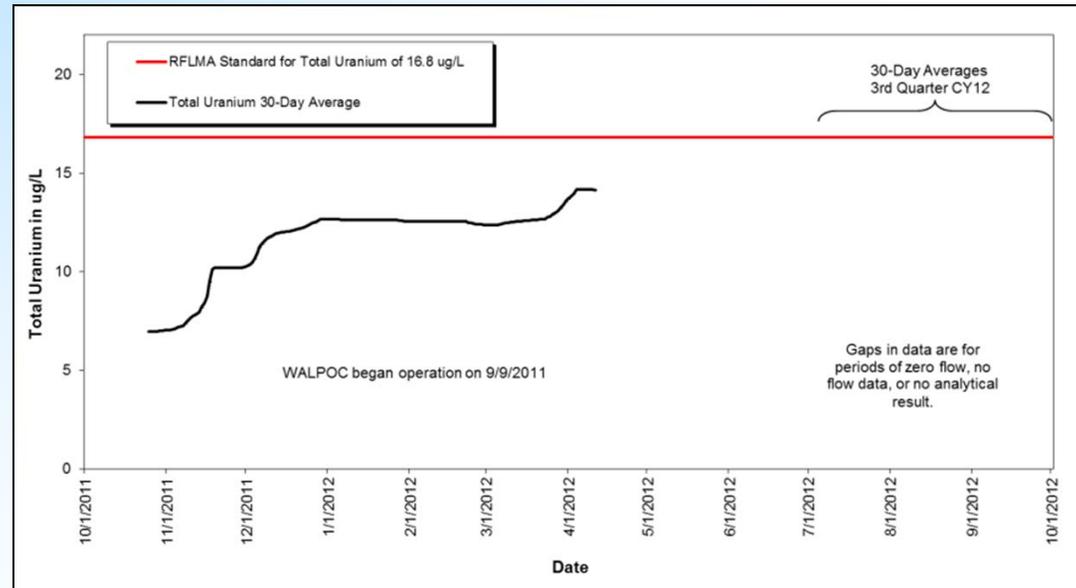


- Plutonium and Americium (12-Month Rolling Average)

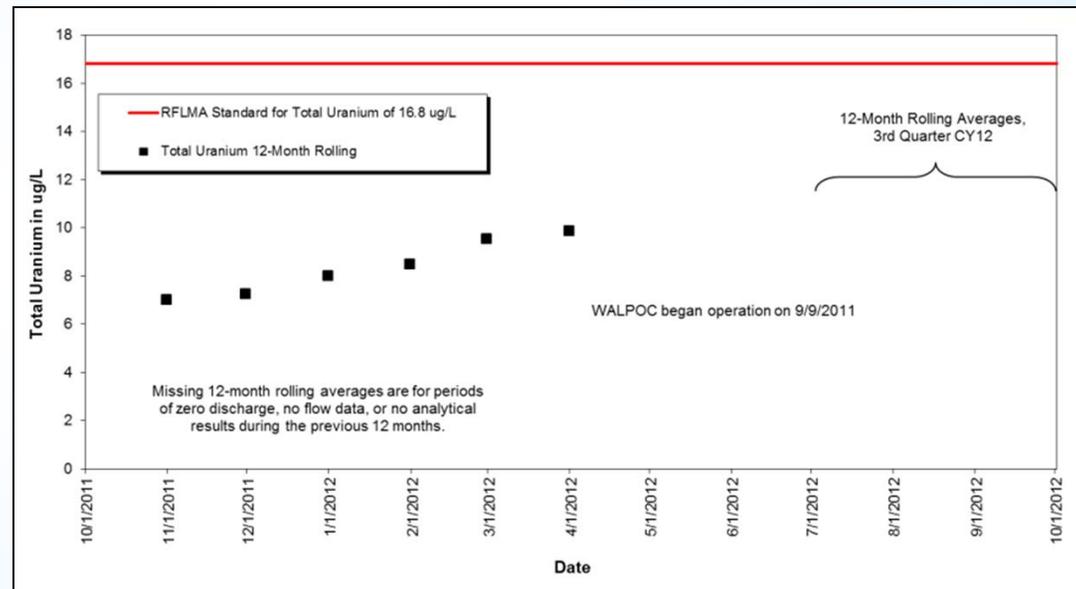


WALPOC

- Uranium (30-Day Average)

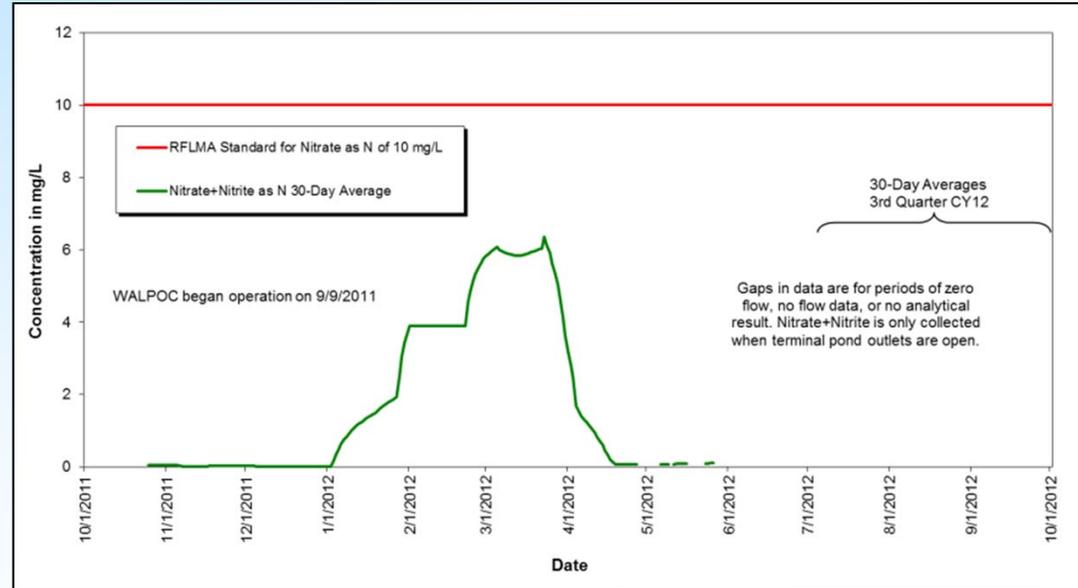


- Uranium (12-Month Rolling Average)

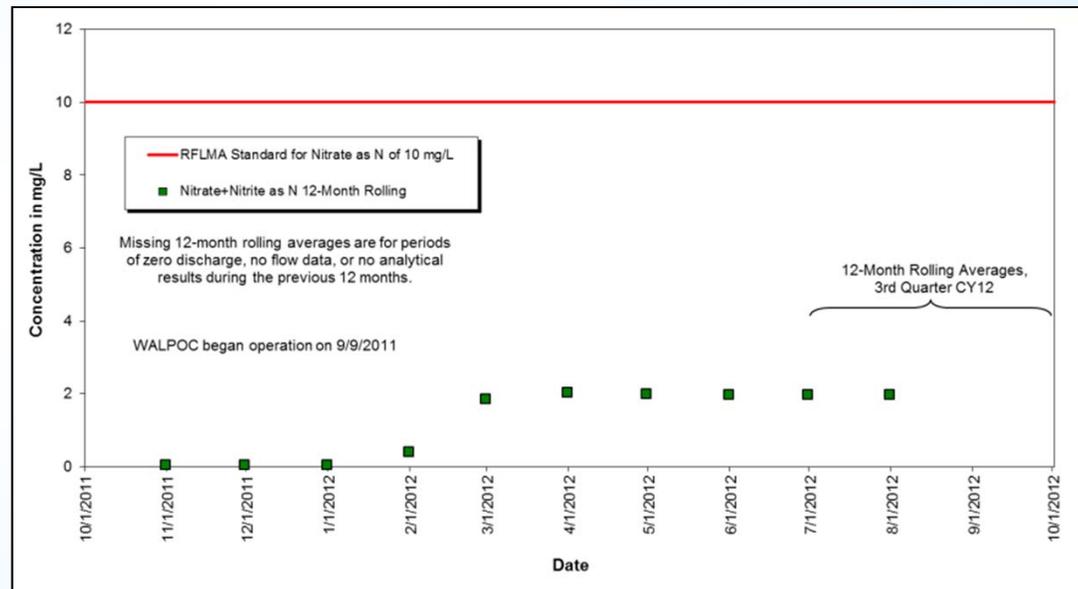


WALPOC

- Nitrate + Nitrite as Nitrogen (30-Day Average)

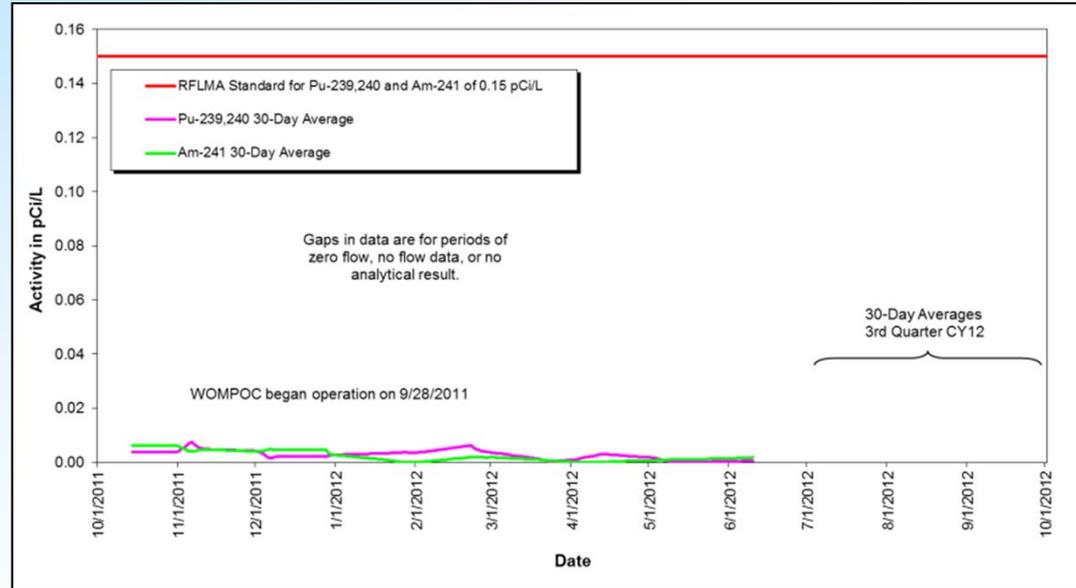


- Nitrate + Nitrite as Nitrogen (12-Month Rolling Average)

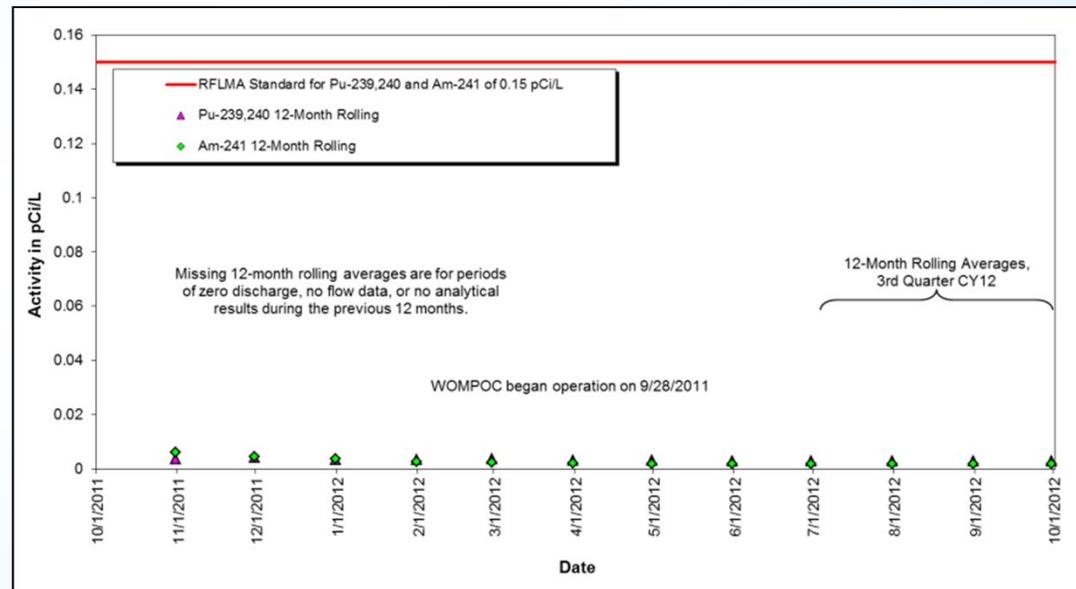


WOMPOC

■ Plutonium and Americium (30-Day Average)

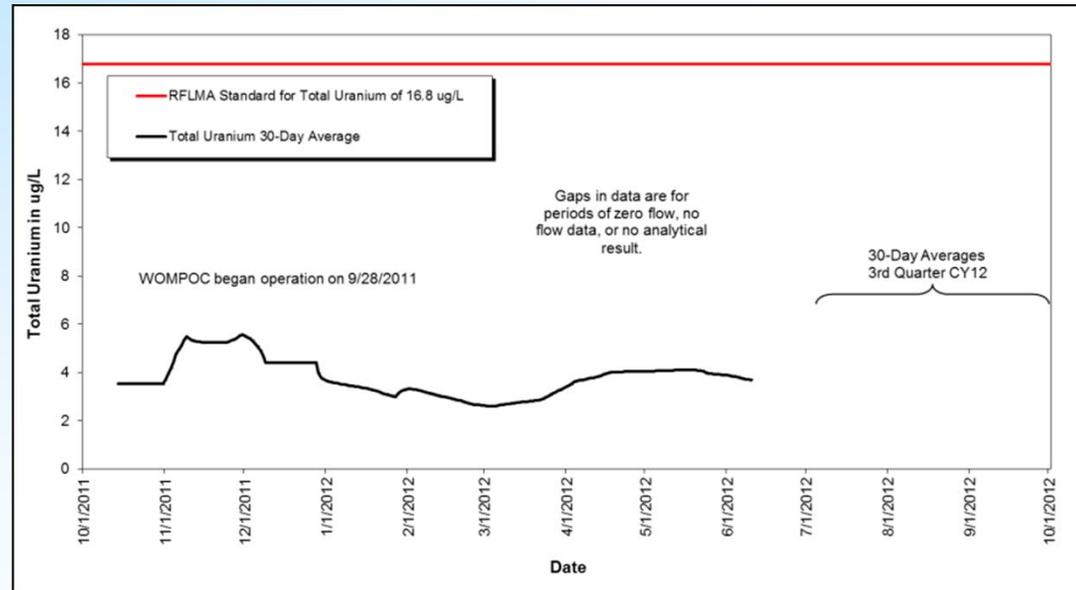


■ Plutonium and Americium (12-Month Rolling Average)

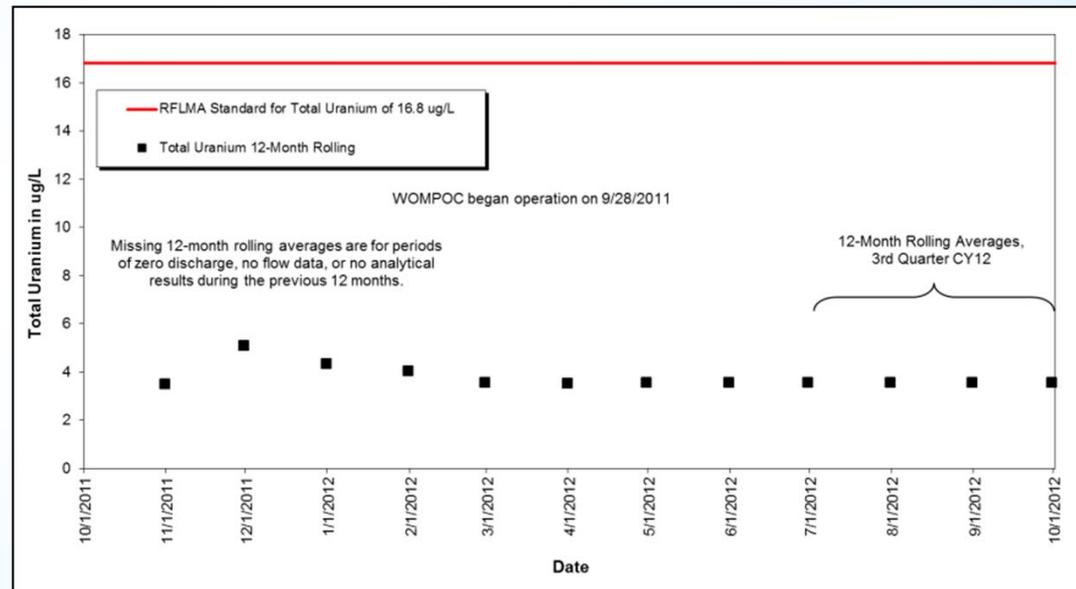


WOMPOC

- Uranium (30-Day Average)



- Uranium (12-Month Rolling Average)



Performance Monitoring at Original and Present Landfills

■ Original Landfill (OLF)

- Surface water sampling results met water quality standards

■ Present Landfill (PLF)

- System effluent sampling results met water quality standards

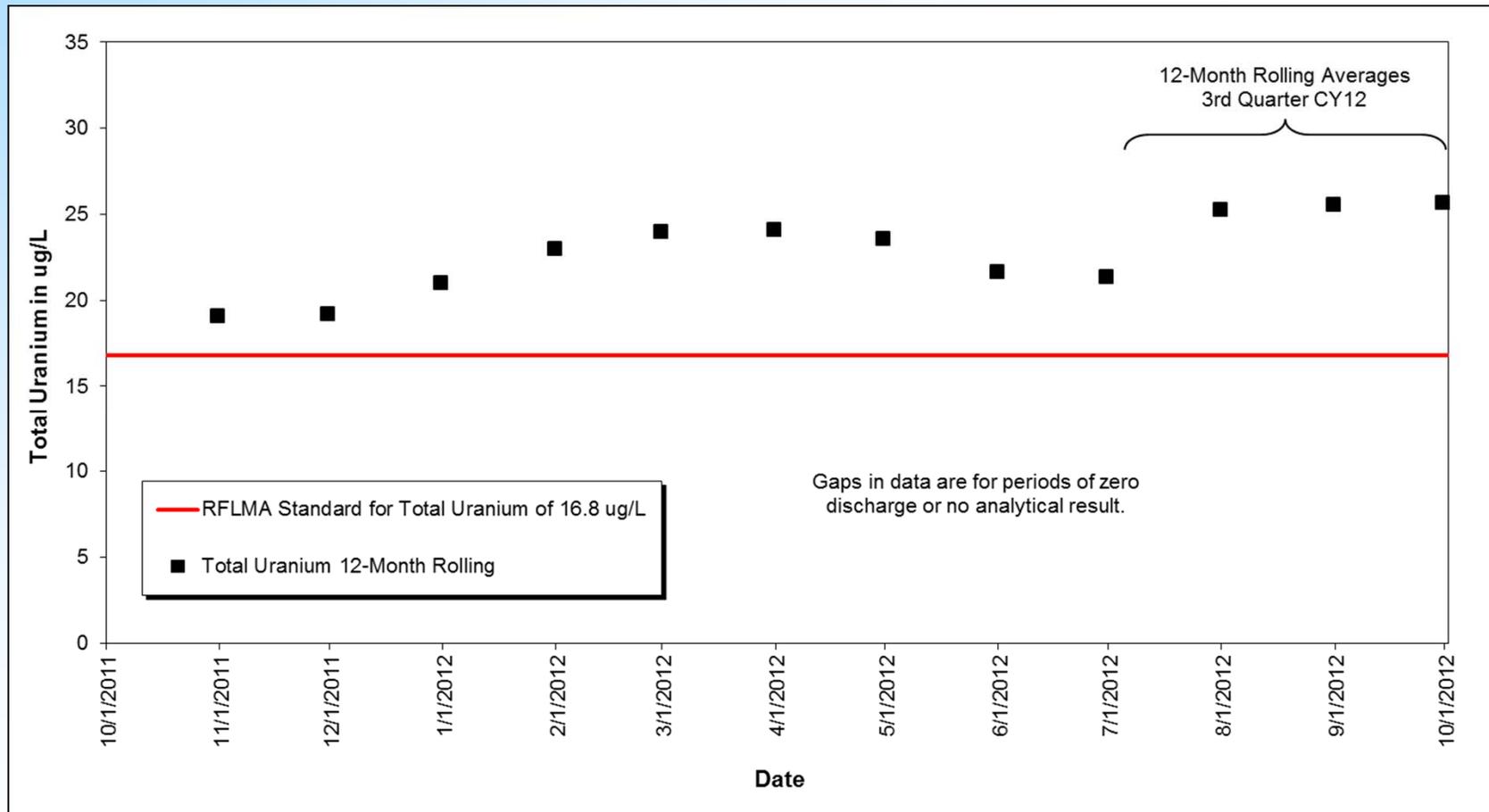


Point of Evaluation Monitoring

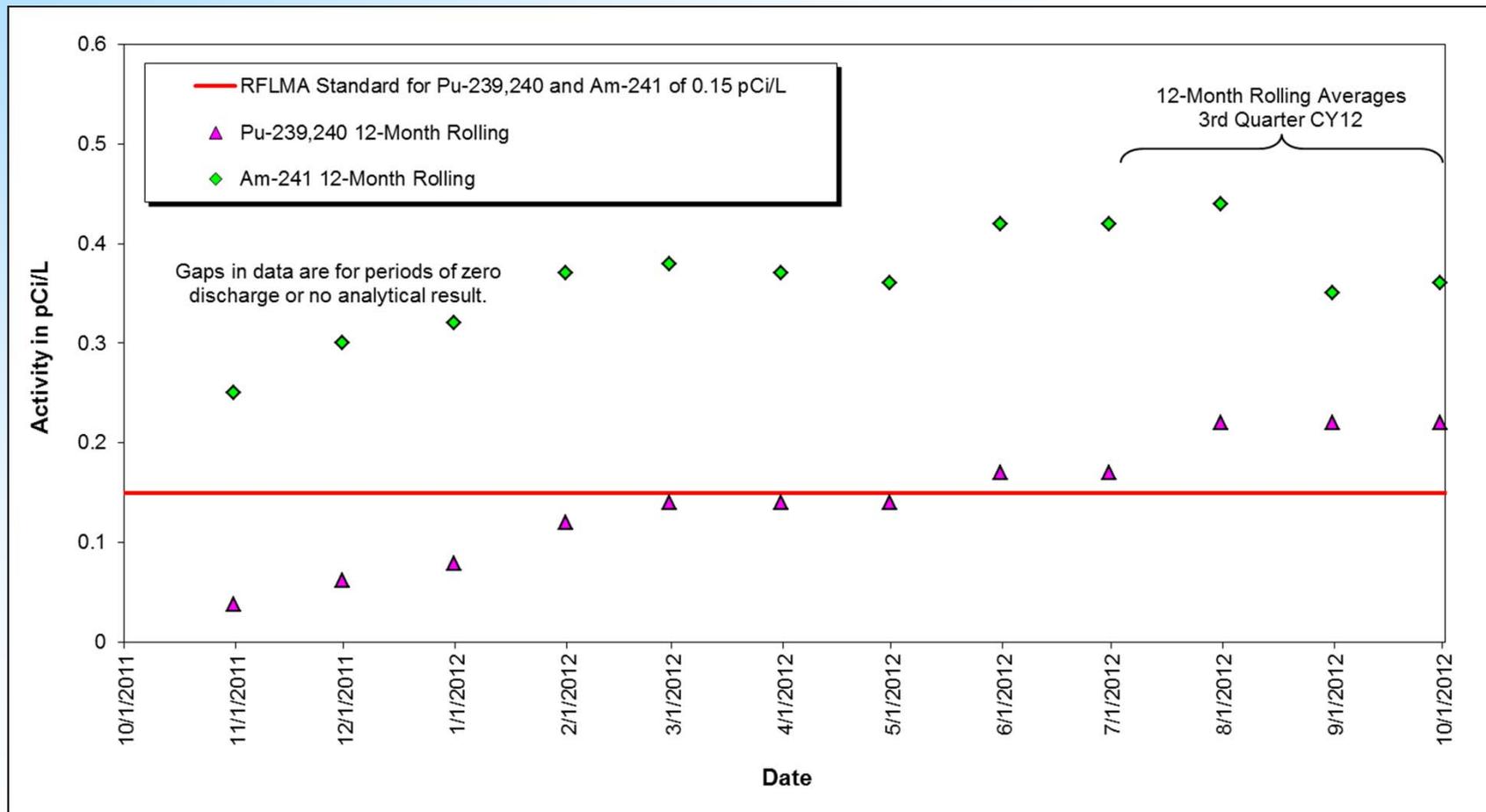
- Reportable values for americium, plutonium, and uranium at GS10
- Additional sampling upstream and downstream of GS10
- Contact Records are available on the Rocky Flats website



Uranium at GS10



Plutonium and Americium at GS10



Questions?



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Groundwater Monitoring and Operations



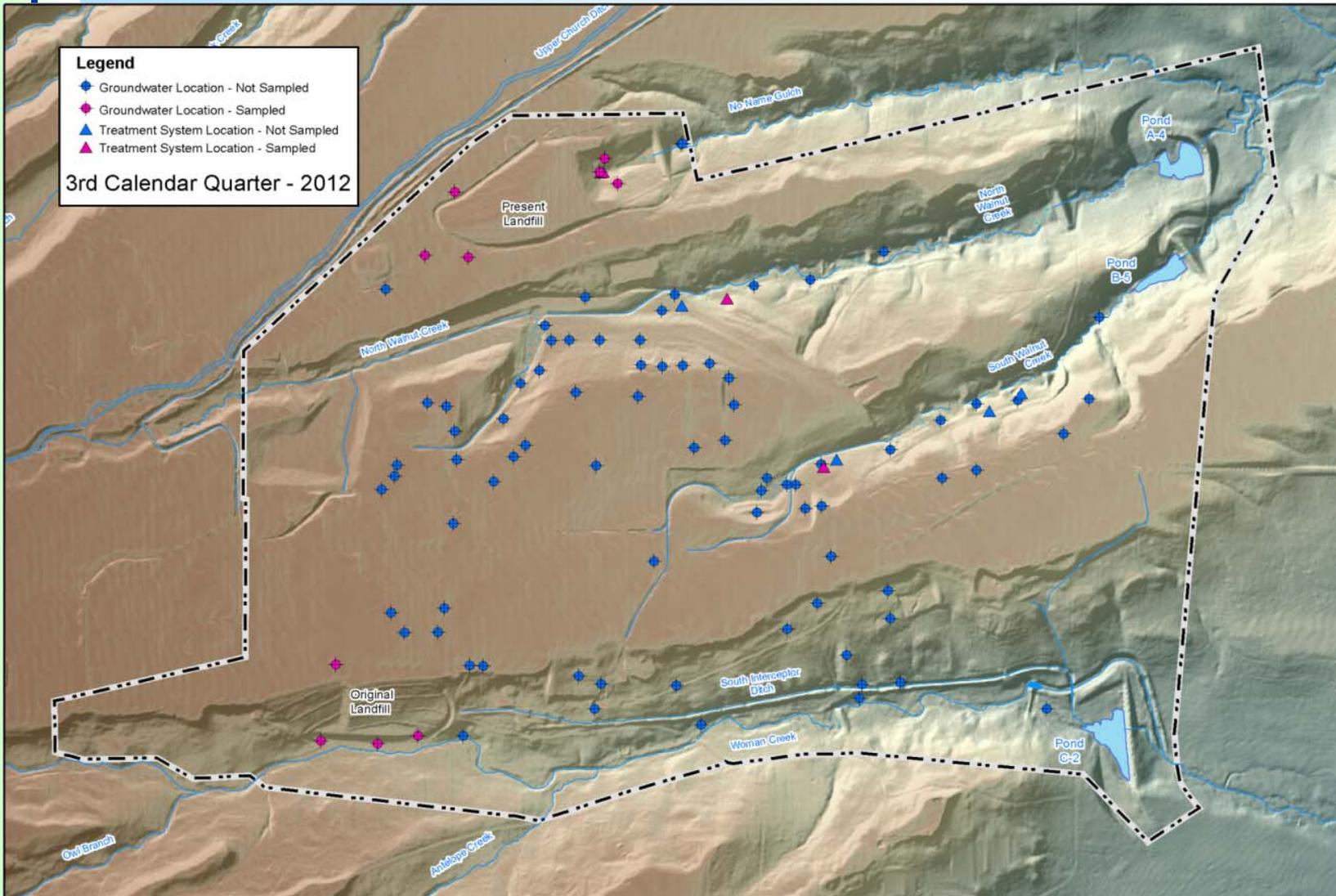
Third Quarter 2012



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Groundwater Monitoring Locations



U.S. DEPARTMENT OF
ENERGY

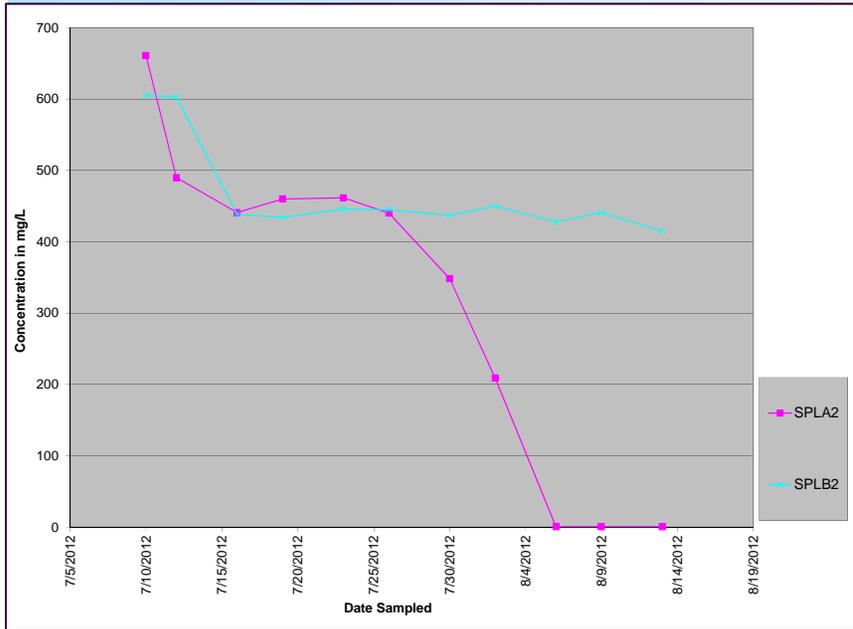
Legacy
Management

Groundwater Monitoring and Treatment

- Groundwater monitoring and treatment ensures surface water protection
- Monitoring results indicate continued protectiveness
- Treatment system enhancements
 - Mound Site Plume Treatment System
 - Installed powered ventilation on air stripper
 - Air stripping reduced contaminants by 90 percent
 - Solar Ponds Plume Treatment System
 - Continued testing ZVI-filled microcells for uranium treatment
 - Continued testing lagoons for nitrate treatment

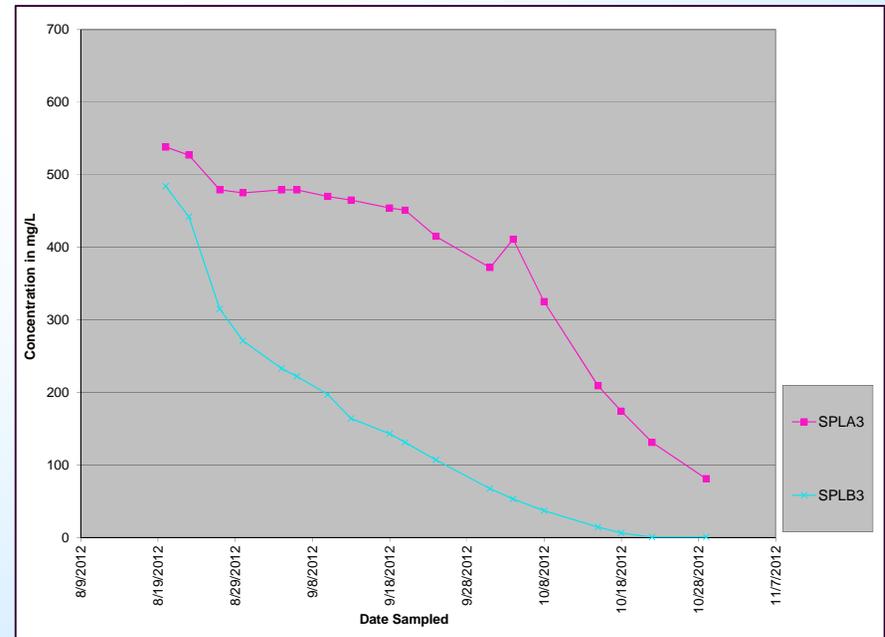


SPPTS Bench-Scale Lagoons



Part 2:
Container B dosed with 2 times the carbon of Container A

Part 3:
Container A repeats Part 2(A),
Container B contains more inoculum



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Questions?



Cell A contains
recirculation pump



Cell B is “stagnant”



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Site Operations



Third Quarter 2012



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Landfill Inspections

- All landfill inspections were completed
- Landfill covers are in good condition



Settlement Monument Surveys

- Results indicate landfills are stable



OLF Inclinator Measurements

- Results indicate OLF is stable



Quarterly Sign Inspections

- RFLMA physical control
- All signs are in good condition



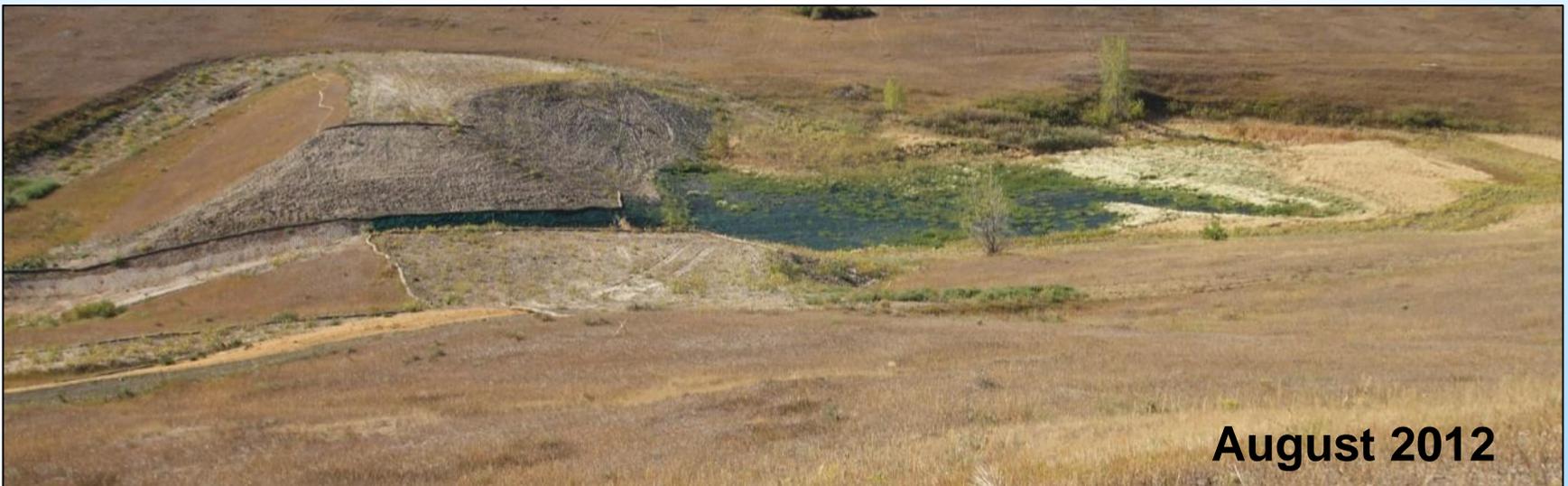
Questions?



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Ecological Activities



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Ecological Monitoring

- Revegetation monitoring
- Preble's mouse jumping mouse mitigation monitoring
- Wetland mitigation monitoring
- Weed mapping
- PLF/OLF quarterly vegetation surveys
- Nest box monitoring
- Prairie dog surveys
- Photopoint monitoring



Ecological Maintenance

- Completed fall herbicide applications (approximately 96 acres treated in COU)
- Treated several dozen small Russian olive trees and a few saltcedar (tamarisk) plants with herbicides throughout COU
- Revegetated and installed erosion controls along former PLF – A-3 ridgetop road
- Mowed several roadside edges and other off-road locations to help control weeds and reduce wildfire risk
- Provided supplemental watering for woody plants that were installed for habitat enhancement



Questions?



U.S. DEPARTMENT OF
ENERGY

Legacy
Management