Overview of the First Quarter 2013 Surveillance and Maintenance Report for the LM Rocky Flats Site

January–March 2013
Quarterly Monitoring and Reporting

- Quarterly reports are required under the RFLMA to document that the CERCLA remedy continues to be protective
  - Primary goal is protecting surface water
- Response action under the final remedy for Rocky Flats
  - Maintain two landfill covers
  - Maintain 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 consumption or agricultural use of surface water
    - No groundwater wells except for monitoring
    - Protection of landfill covers and engineered remedy components
RFLMA Attachments Modifications

- Contact Record 2012-03 describes proposed modifications
- Modifications approved February 21, 2013
- Attachment 1
  - Site map updated to reflect PLF and A-3 Ponds dam breaches
- Attachment 2
  - Table 1 surface water standards for 8 analytes revised to adopt Colorado Water Quality Control Commission standards revisions effective in 2013
  - Figures and tables updated to reflect dam breach and WALPOC and WOMPOC replacing GS08, GS11, and GS31 as points of compliance
  - Changes to reflect completion of third five-year review and successful revegetation at OLF and PLF
Surface Water Monitoring

First Quarter 2013
Selected RFLMA SW Monitoring Locations
Performance Monitoring at OLF and PLF

- **OLF**
  - All sampling results met water quality standards during the quarter

- **PLF**
  - All sampling results met water quality standards during the quarter
Point of Evaluation Monitoring – GS10

- Reportable 12-month rolling average values for americium and uranium at GS10 were observed during the quarter
  - Plutonium was not reportable during the quarter
- Additional sampling is being conducted both upstream of and downstream of GS10
Questions?
Groundwater Monitoring and Operations

First Quarter 2013
RFLMA Monitoring

- RCRA wells at PLF and OLF
  - Results consistent with previous quarters
  - Statistical evaluation will be discussed in the 2013 annual report
Other Activities

- Completed installation of air strippers at MSPTS and ETPTS
  - MSPTS: In effluent manhole
    - More than doubled the effectiveness of the prototype unit
    - Operates full time
  - ETPTS: In influent manhole
    - Reduces total VOCs by an order of magnitude
    - ZVI-filled treatment cells receive water that has passed through the air stripper
  - Air stripper optimization continues

- Continued testing at SPPTS
  - ZVI-containing microcells are used to treat uranium
  - Pilot-scale lagoons are used to treat nitrate
  - Results of tests are promising
  - Testing continues
Questions?
Site Operations – First Quarter 2013
Site Operations – OLF

- Three monthly inspections
- Monitored eight settlement monuments and seven inclinometers
Site Operations – PLF

- One inspection
- Nine settlement monuments and six side slope monitors scheduled for fourth quarter
Annual Site (Central Operable Unit) Inspection – March 19, 2013

- Inspect and monitor for evidence of significant erosion
- Inspect effectiveness of institutional controls
- Document evidence of any adverse biological conditions observed during inspection
- Confirm Environmental Covenant is in the administrative record and Jefferson County land records
No significant erosion noted – found some minor depressions and surface debris/trash.

Filled minor depression in East Trenches area

COU divided into 5 Inspection Areas
Questions?
First Quarter 2013 Ecological Monitoring Summary

- Data analysis and report writing
- Planted volunteer-collected wildflower and grass seed at forb nursery locations
- Planted native grasses in old mine road on D-2 parcel