

Overview of the First Quarter 2016 Surveillance and Maintenance Report for the LM Rocky Flats Site

January–March 2016

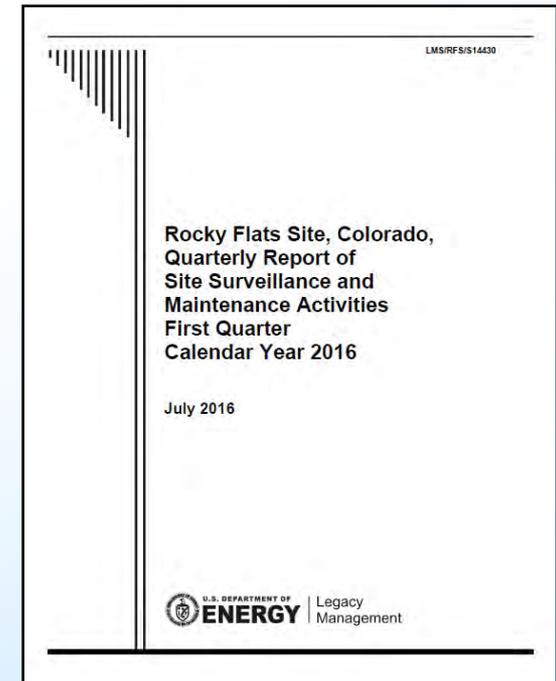


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Quarterly Monitoring and Reporting

- Quarterly reports are required under the *Rocky Flats Legacy Management Agreement* (RFLMA), to document that the CERCLA remedy continues to be protective
 - Primary goal: Surface water protection
- Response action under the final remedy for Rocky Flats
 - Maintain two landfill covers
 - Maintain four groundwater treatment systems
 - Monitor surface water and groundwater
 - Maintain physical controls
 - Signage
 - Access restriction
 - Enforce institutional controls
 - No building construction or occupation
 - Excavation and soil-disturbance restrictions
 - No surface-water consumption or agricultural use
 - No groundwater wells, except for monitoring
 - Landfill covers and engineered remedy-components protection



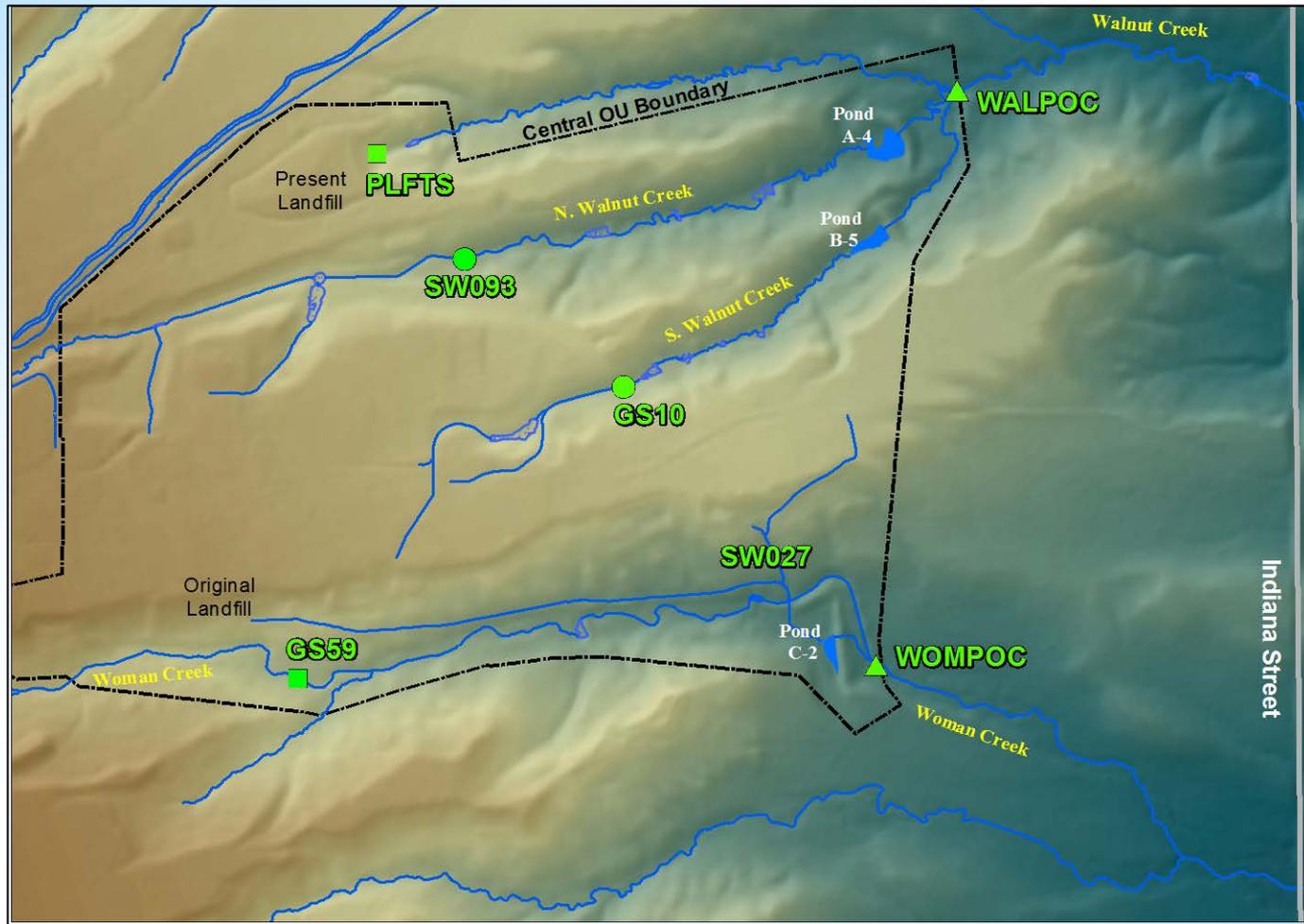
Surface Water Monitoring



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Select RFLMA Surface-Water Monitoring Locations



Original Landfill (OLF) Performance Monitoring

- OLF (location GS59)
 - Composite sampling results for selenium above RFLMA standards
 - Mean selenium concentration 5.26 mg/L for the quarter (RFLMA standard is 4.6 mg/L)
 - Prompted increased sampling frequency (monthly) for the second quarter, per RFLMA evaluation protocols



Present Landfill (PLF) Performance Monitoring

- PLF (location PLFSYSEFF)
 - Routine first-quarter sampling showed one analyte above the applicable RFLMA standard
 - Vinyl chloride concentration was 0.21 µg/L, exceeding the practical quantitation limit of 0.2 µg/L
 - Per RFLMA evaluation protocols, the result triggered a sampling frequency increase from quarterly to monthly
 - The following two monthly sample results also showed vinyl chloride above the standard (0.29 µg/L and 0.27 µg/L)
 - Vinyl chloride was not detected in the third monthly sample
 - Per RFLMA evaluation protocols, sampling frequency returned to quarterly



Point of Evaluation (POE) Monitoring

- Location SW027: 12-month rolling averages for plutonium (Pu) and americium (Am): Reportable as of April 30, 2015, and June 30, 2015, respectively
 - As of the end of the first quarter 2016, 12-month rolling averages were:
 - Pu 0.97 pCi/L and Am 0.20 pCi/L; standard is 0.15 pCi/L
 - Very little flow during the first quarter of 2016
 - RFLMA Contact Record 2015-05 (July 8, 2015); mitigating actions included enhancing upstream erosion controls
 - Concentrations at downstream location WOMPOC are not reportable
- No other RFLMA POE analyte concentrations were reportable during the first quarter of 2016



Point of Compliance (POC) Monitoring

- All RFLMA POC analyte concentrations remained below reportable levels throughout first quarter calendar year 2016



Questions?



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Groundwater Monitoring and Operations

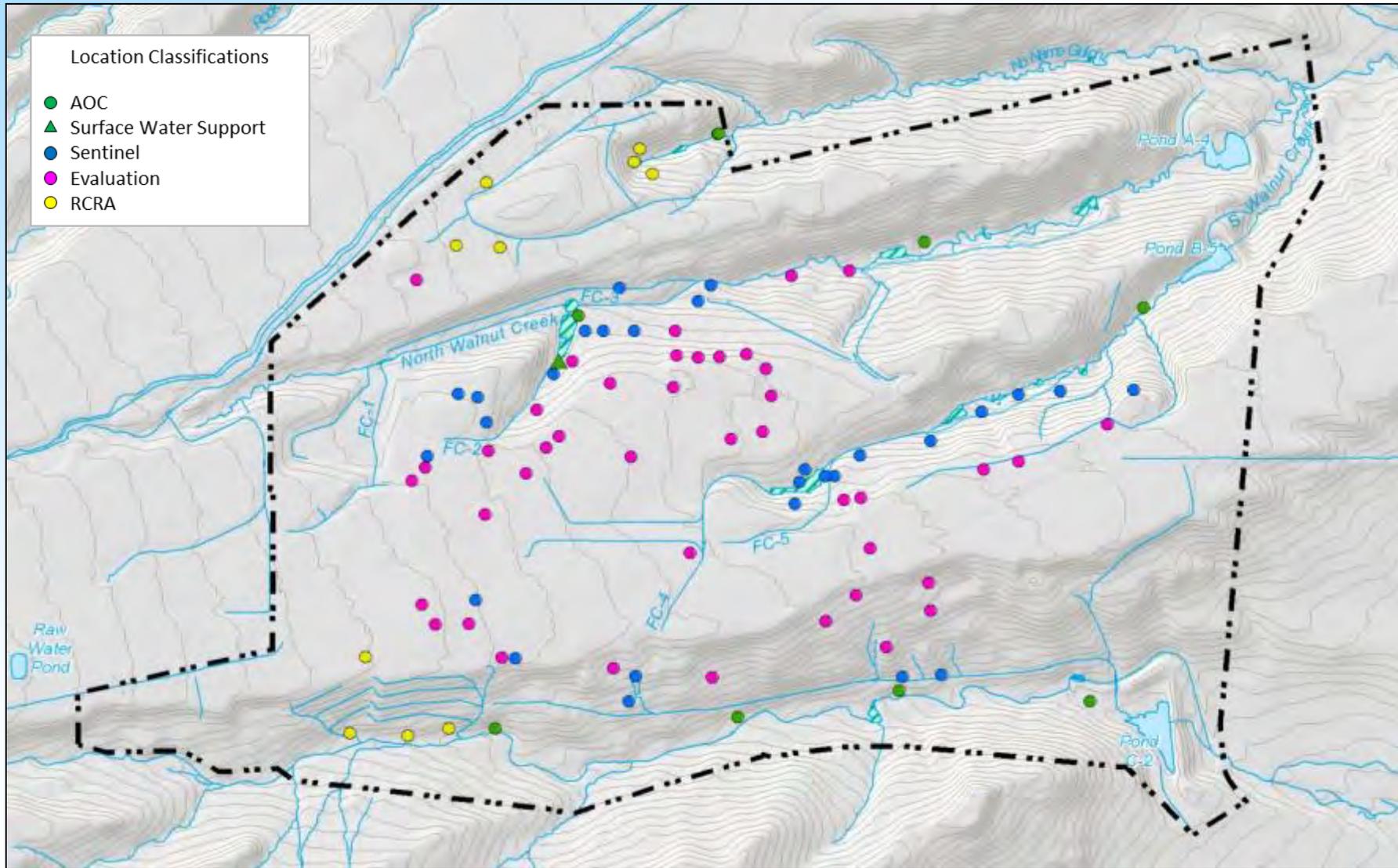
First Quarter 2016

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RFLMA Monitoring

- Light sampling quarter
 - 10 Resource Conservation and Recovery Act wells (sampled quarterly)
 - Groundwater quality generally consistent with previous results
 - Results will be evaluated in the annual report





NOTE: Groundwater treatment system locations omitted for clarity.

Treatment System Activities

- Mound Site Plume Treatment System
 - Routine maintenance on air stripper, other components
 - Finishing system reconfiguration design
- East Trenches Plume Treatment System
 - Routine maintenance on power facility, air stripper
- Solar Ponds Plume Treatment System
 - Preparations for interim reconfiguration project
 - Converts original treatment cells to full-scale, test lagoon
 - Continued operating, maintaining pilot-scale lagoons



Questions?



Site Operations



First Quarter 2016



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Quarterly Sign Inspections

- RFLMA physical control
- All signs are in good condition



Site Operations – OLF

- Performed three monthly inspections
 - One weather-related inspection occurred in March due to a precipitation event producing more than 1 inch of rain in a 24-hour period
- Monitored eight settlement monuments
- No issues were noted during inspections
 - Areas repaired in 2015 did not experience cracking or movement during this quarter
- Snow fencing installed at the top of the OLF hillside was removed to eliminate snow retention that might recharge groundwater just upgradient of the OLF



Site Operations – PLF

- Performed one quarterly inspection and one weather-related inspection for precipitation events producing more than 1 inch of rain in a 24-hour period
 - No issues were observed during inspections



Former Building Areas 371, 771, 881, and 991

- Inspected former building areas – no issues were observed



Questions?

