

ROCKY FLATS STEWARDSHIP COUNCIL

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Jefferson County -- Boulder County -- City and County of Broomfield -- City of Arvada -- City of Boulder
City of Golden -- City of Northglenn -- City of Thornton -- City of Westminster -- Town of Superior
League of Women Voters -- Rocky Flats Cold War Museum -- Rocky Flats Homesteaders
Nancy Newell

Monthly Status Report – January 2015

Board meeting summary

Election of Stewardship Council Officers for 2015

The Board elected the following officers. The terms run until the February 2016 meeting.

Chairman – Joyce Downing (Northglenn)
Vice Chairman – Lisa Morzel (Boulder)
Secretary/Treasurer – Jeannette Hillery (League of Women Voters)

2015 Meeting Schedule

The Board adopted the following meeting schedule:

January 26
April 6
June 1
September 14 (second Monday of the month)
October 26

DOE Quarterly Update – 3rd Quarter 2014 (June-September)

DOE discussed surface water monitoring, groundwater monitoring, and site operations (inspections, security, general maintenance, etc.). Highlights included:

- Original Landfill – All samples met the quarterly water quality standards.
- Present Landfill – Arsenic was above the standard, until August when it dropped below the standard. Under the site regulatory framework, DOE will return to quarterly sampling.
- Surface water – All samples at the points of compliance and points of evaluation remained below the applicable standards.
- Groundwater – The 3rd quarter is a light sampling quarter. Maintenance and upgrades continue at the three groundwater treatment systems.
- Easter Perimeter Channel – Gradual slumping was noted outside of the boundary of the Original Landfill.

USFWS Proposed Prescribed Burn – USFWS and CDPHE briefing/discussion

Note: In mid-February, USFWS announced it would not initiate in 2015 a proposed burn on the refuge lands that previously were part of the Rocky Flats plant.

USFWS provided an overview of the agency's management options to address weeds at the Rocky Flats National Wildlife Refuge. While the preferred option is the use of prescribed fire, USFWS had not made a final decision and was evaluating other options.

CDPHE addressed contaminant levels in that area of the refuge, noting they are essentially at background, and available for all uses. Prior to the meeting, CDPHE issued a fire permit that sets conditions for when a burn would be allowed.

Legacy Management monthly site inspection summary

DOE reports that in addition to routine monitoring and maintenance activities, site personnel conducted the following activities in December.

Surface water and groundwater monitoring

- Completed collecting 4th Quarter 2014 groundwater samples.
- Processed several surface water composite samples and submitted to the lab for analysis.

Groundwater Treatment Systems

- Mound Site Plume Treatment System: DOE reports the system is functioning normally.
- East Trenches Plume Treatment System reconfiguration project: DOE reports the system reconfiguration project is ongoing:
 - Completed enclosure structural framing and installing interior finish, sheet metal exterior and doors, and concrete flooring
 - Installed steel tank supports and tanks.
 - Electrical wiring and plumbing were installed at the enclosure, tank, and Conex.
 - Solar heat equipment was installed outside of the structure.
- Solar Ponds Plume Treatment System: DOE reports staff is evaluating ways to improve flow through the original treatment cells. The concrete blankets installed last month have helped conserve heat in the lagoons.

Ecology

- Conducted erosion control surveys.
- Added some Central Operable Unit (DOE lands) fence signs to a couple locations in Woman Creek.

Landfills

Work continued on the Original Landfill east perimeter channel reconfiguration project.

Contact Record 2015-01

Reportable condition for uranium 12-month rolling average at Point of Compliance WALPOC (this Contact Record supersedes RFLMA CR 2014-10)

In early January 2015, CDPHE notified DOE that it was rescinding its approval of contact record 2014-10. That contact record addressed a reportable condition for uranium at the Walnut Creek point of compliance (WALPOC). As CDPHE explains in its January 5, 2015, letter:

Internal consultation at CDPHE clarified the applicability of Water Quality Control Commission Regulations No. 31 and No. 38 to surface water exceedances at Rocky Flats. Contact Record 2014-10 included references to the hyphenated state-wide surface water standard for uranium in Regulation No. 31 as part of the rationale for the addressing the exceedance. Those references, however, are not consistent with the standard in RFLMA. Therefore, approval of that contact record is rescinded and DOE is asked to show Contact Record 2014-10 as withdrawn. A new contact record should be drafted to document DOE's response to the exceedance. In addition, because this exceedance involves a radionuclide, EPA has been notified that it will need to determine whether DOE is subject to CERCLA penalties.

Contact Record 2015-01 replaces 2014-10. As provided in 2015-01, the parties agreed that further evaluation should be completed, and no mitigating actions are necessary at this time. The relevant factors evaluated in making this determination include: (quoting from the document)

- Preliminary results from the ongoing geochemistry study, referenced in Contact Record (CR) 2014-05 (“Reportable condition for evaluation purposes for uranium at Point of Compliance WALPOC,” dated April 8, 2014), indicate that the increases in the 30-day rolling average uranium concentrations at WALPOC were caused by the September 2013 100-plus-year flood event, and will eventually return to below the 16.8 µg/L concentration. This projected decrease in uranium concentrations at WALPOC did occur in May 2014, when the 30-day average and composite samples concentrations dropped below 16.8 µg/L (see Attachment 1).
- WALPOC has been a RFLMA monitoring location for roughly 3 years. According to precipitation data collected across the Rocky Flats site since 1990, over the course of that 3-year period the Site experienced one of its driest years (2012) and its wettest month (September 2013). Because uranium concentrations are influenced by changing environmental conditions, varying uranium concentrations at WALPOC are anticipated. While significant uranium concentration variability can be seen in individual sample results as well as in the 30-day and 12-month averages, the observed variability is not outside of anticipated ranges nor do these levels suggest the existence of a new source term.
- Although the forecasted 17.2 µg/L result will be above the Site standard of 16.8 µg/L, it remains well below the drinking water standard (i.e., the maximum contaminant level [MCL]) of 30 µg/L. The 30 µg/L was determined to be an acceptable level of uranium in public water supplies by EPA in 2000 and adopted by the State of Colorado in 2005 as the statewide stream standard. Therefore, because the forecasted result remains below the 30 µg/L drinking water standard, the remedy remains protective of the downstream water uses.

The RFLMA parties agreed that the following steps were or will be taken to aid the evaluation: (quoting from the document)

- Several samples were collected from WALPOC and other Walnut Creek locations and were analyzed using high-resolution methods to determine the isotopic uranium distribution. Many of these samples were collected as part of the RFLMA CR 2014-05 reportable action plan and included multiple post-flood WALPOC samples that were compared with historical data. Analytical results confirmed the uranium reported at WALPOC includes both naturally occurring and anthropogenic uranium. These samples included a split from the December 18, 2013, composite sample that triggered the earlier reportable 30-day average condition. Samples were also collected at Pond A-4, GS11 (Pond A-4 outlet), Pond B-5, and GS08 (Pond B-5 outlet) for high-resolution analysis. The isotopic results show that before the September 2013 storm, the uranium reported at WALPOC ranged from 76 to 80 percent natural; following this storm, the uranium at WALPOC was between 75 and 82 percent natural. These results do not indicate a significant shift in the uranium signature related to the heavy precipitation, nor do they suggest the existence of a new source term.
- The information in the geochemistry study identified in CR 2014-05 will be utilized as part of the evaluation of this current WALPOC reportable condition. The purpose of this study, as it relates to this reportable condition, is to evaluate variability in uranium concentrations—due to seasonal, hydrologic, geochemical, and geographic effects—through the collection of targeted analytical and field data. The study also incorporates the ongoing calculation of the percentages of natural uranium versus anthropogenic uranium in Walnut Creek.
- Split samples will continue to be collected from each flow-paced composite collected at WALPOC and held for possible high-resolution isotopic uranium analysis.
- Additional, recently collected split samples from WALPOC will be submitted for high-resolution isotopic uranium analysis to determine if the natural uranium concentrations have changed now that the effects of the September 2013 event have waned.
- Flow-paced composite samples routinely being collected at WALPOC will continue to be analyzed on a 2-week turnaround.
- Additional actions may be implemented as appropriate based on the data gathered from the above evaluations.

CDPHE's letter and the contact record can be found at:
http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx

Stewardship Council update

Next meetings:

April 6, June 1, September 14, October 26