

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
Steven Franks

Monthly Status Report – March 2016

Board meeting summary

There was no meeting this month

Legacy Management monthly site inspection summary

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

Surface water and groundwater monitoring

- Collected 1st Quarter 2016 groundwater samples at the Original Landfill (OLF) and Present Landfill (PLF).
- Removed the GS03 surface water station.

Groundwater Treatment Systems

Flows at all three treatment systems remain above average. In addition,

- East Tranches Plume Treatment System (ETPTS): The system is working well.
- Mound Site Plume Treatment System (MSPTS): The system reconfiguration planning continues.
- Solar Ponds Plume Treatment System (SPPTS): In preparation for media removal, staff began lowering the water level in the Big Box to remove water from the media.

Ecology

- Conducted the quarterly Central Operable Unit (COU) sign inspection. DOE repaired one sign that had blown off the fence.
- Conducted the prairie dog town surveys north of the A-4 pond. Counted six prairie dogs in the Refuge. None were observed within the COU.
- Conducted erosion control surveys.
- Re-staked some of the erosion matting on the OLF.
- Installed additional GeoRidges in the Functional Channel (FC) 1 area.

Contact Record 2016-01

Reportable condition for evaluation purposes for uranium at Walnut Creek Point of Compliance (WALPOC).

On March 2, 2016, DOE notified the public that the 30-day average for uranium at the Walnut Creek Point of Compliance (WALPOC) exceeded the standard of 16.8 micrograms per liter ($\mu\text{g/L}$). The validated result was 16.9 $\mu\text{g/L}$.

As provided in the record, “The RFLMA Parties agreed on the evaluation steps described below and that no mitigating actions are necessary at this time, for the following reasons:

- The remedy remains protective. The remedy standard for total uranium at the WALPOC sampling location is the calculated 12-month rolling average. Using the most recent validated data, the calculated 12-month rolling average at WALPOC for total uranium on January 31, 2016, is 8.0 $\mu\text{g/L}$ and remains well below the 16.8 $\mu\text{g/L}$ remedy performance standard.
- WALPOC has been a RFLMA monitoring location for roughly 4.5 years. During that period, the Site experienced one of its driest years (2012), its wettest month (September 2013), and one of its wettest springs (2015), according to precipitation data collected since 1990. 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 both individual sample results and in the 30-day averages, the observed variability is not outside of anticipated ranges and remains well below 30 $\mu\text{g/L}$ drinking water standard (i.e., the maximum contaminant level [MCL]).
- Measured concentrations of total uranium at WALPOC include both naturally occurring and anthropogenic uranium. Previous high-resolution isotopic uranium analyses for WALPOC show signatures that are between 68–82 percent naturally occurring uranium. The variable concentrations discussed above and these signatures do not suggest the existence of a new source.
- The variability of the uranium concentration influenced by environmental conditions was detailed in a study conducted by a qualified geochemistry subcontractor, the results of which were published in the Evaluation of Water Quality Variability for Uranium and Other Selected Parameters in Walnut Creek at the Rocky Flats Site (September 2015) report that can be found at http://www.lm.doe.gov/Rocky_Flats/Documents.aspx
- Although the recent result was above the 16.8 $\mu\text{g/L}$ Site standard, it remains well below the 30 $\mu\text{g/L}$ drinking water standard. While the MCL is not applied at the Site, the fact that the uranium concentration triggering this reportable condition was well below that level indicates that the remedy remains protective of human health and the environment.”

Accordingly, the RFLMA parties agreed to the following plan:

- Flow-paced composite samples routinely being collected at WALPOC will continue to be analyzed on a 2-week turnaround.
- On March 7, 2016, DOE provided CDPHE with a split sample from the WALPOC composite sample collected during the period of February 16, 2016, to March 3, 2016,

which was the first sample collected after the March 1, 2016, consultation. This split sample will be analyzed for uranium at the State's Radiochemistry Laboratory.

CDPHE's split sample, which was for water collected from February 16th through March 3rd, recorded a concentration of 16 µg/L (0.016 mg/L). See the attached report from CDPHE.

The record can be found at: http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx

Stewardship Council Update

2016 Board meetings:

April 4

June 6

September 12

October 31



Dedicated to protecting and improving the health and environment of the people of Colorado

Laboratory Services Division
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303-692-3090
www.coloradostatelab.us

Laboratory Results For Sample Number: ENV-2016002479-1

Site ID/PWSID

Site
Address

Contact Carl Spreng
Phone x3358
Fax
Email

Site Description ROCKY FLATS WALPOC

_CollectionNum

Customer ID 00008835

Customer CDPHE - HMWMD - Rocky Flats Unit
4300 Cherry Creek Drive South

Denver CO 80246

Collected By DOE
Collected 02/16/2016 14:30:00
Received 03/08/2016 13:06:00
Reported 03/23/2016 10:00:00
Bottles 1 LM
Matrix Surface Water
Field Fluoride
Residual Chlorine
Temperature at Receipt 19.7

Test Name	Result	Units	MCL	MRL	Method Name	Date Analyzed	Qualifier
Uranium, Total*	0.016	mg/L	0.03	0.001	EPA 200.8	03/10/2016 00:00:00	

Comments:

Registry Comments: