

ROCKY FLATS STEWARDSHIP COUNCIL

P.O. Box 17670
Boulder, CO 80308-0670
www.rockyflatssc.org

(303) 412-1200
(303) 600-7773 (f)

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 – September 2016

Board meeting summary

2017 Work Plan and Budget

The Board reviewed the draft work plan and budget. Both will be approved at the October 31st meeting.

DOE Quarterly Update – 1st Quarter 2016

Highlights include:

1. Surface water:
 - a. All Point of Compliance analyte concentrations remained below reportable levels.
 - b. Selenium concentrations at GS59 (near the Original Landfill) were 5.26 mg/L (the RFLMA standard is 4.6 mg/L). Sampling frequency increased.
 - c. Vinyl chloride exceeded the standard at the Present Landfill Treatment System. Sampling increased, but with the third monthly sample it was not detected, so sampling returned to quarterly. (See below for additional information)
 - d. The 12-month rolling average for plutonium and americium at Point of Evaluation SW027 (down drainage from the 903 Lip Area) continues to exceed the standard. There was very little flow during the quarter. Contact Record 2015-05 addresses mitigation actions.
2. Groundwater:
 - a. The first quarter is a light sampling quarter.
 - b. Ten RCRA well were sampled; the results are consistent with prior results.
 - c. Maintenance at the three groundwater systems continued.
 - d. The reconfigured projects at the Mounds Site treatment system and the Solar Ponds treatment system continued.

Legacy Management monthly site inspection summary

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

Groundwater

- Conducted 3rd Quarter 2016 groundwater sampling.

Groundwater Treatment Systems

- East Trenches Plume Treatment System (ETPTS): DOE reports the system is working as designed. In order to provide more backup power during inclement weather, the solar power system is being expanded. Work is in process.
- Mound Site Plume Treatment System (MSPTS): DOE reports the subcontractor continued digging the trench and installing the transfer pipeline that will connect the Mound Site influent to the ETPTS air stripper system. The contractor also set the lift station, installed plumbing, and backfilled the excavation site.
- Solar Ponds Plume Treatment System (SPPTS): DOE reports the interim nitrate treatment full-scale test lagoon began in late July. It will take time for the lagoon system to stabilize, but initial sampling results show good nitrate treatment despite the bacterial population having not equilibrated.

Landfills

- Began geoprobe investigation of the groundwater levels and former storm drain lines upgradient of the Original Landfill.

Ecology

- Conducted erosion control surveys.
- Began Preble's meadow jumping mouse monitoring.
- Continued wetland delineation mapping.
- Completed diffuse knapweed mapping.
- Revegetated the SPPTS reconfiguration project area.
- Conducted nest surveys in the geoprobe work area upgradient of the Original Landfill.
- Conducted the quarterly Central Operable Unit sign inspection. One sign was missing at one of the gate areas, and another was missing a letter. DOE replaced both signs.

Vinyl Chloride Concentrations at the Present Landfill Treatment System

At the September 2016 meeting, a Board member asked whether there is a pattern to the frequency of vinyl chloride concentrations above the applicable Rocky Flats Legacy Management Agreement (RFLMA) standards at the Present Landfill Treatment System (PLFTS). DOE investigated the question and provided the following.

The attached plot shows all of the vinyl chloride sample results collected at the effluent of the PLFTS since site closure.

In accordance with RFLMA data evaluation protocols, routine quarterly sample results (concentrations) that are higher than the RFLMA water-quality standard automatically trigger increased sampling frequency (from quarterly to monthly). If three consecutive monthly results are higher than the standard, the consultative process between the RFLMA parties is triggered and the downstream receiving water is sampled to determine if there are any surface-water impacts. This downstream sampling location is at the point where water passes through the engineered breach in the former Present Landfill Dam (location code NNG01; formerly PLFPONDEFF).

Since closure, sampling for vinyl chloride at location NNG01 has been triggered three times: September 2007, March 2014, and July 2015. For all three sampling events, vinyl chloride was not detected.

The plot referenced in DOE's response is attached to this update.

Stewardship Council Update

Upcoming Board meetings:

October 31

February 6, 2017

