

# 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  
Arthur Widdowfield

## Monthly Status Report – April 2013

### Board meeting summary

#### *DOE briefing on water quality compliance during drought conditions*

The cleanup remedy at Rocky Flats is designed to protect water quality. Activities associated with ensuring remedy compliance include surface water and groundwater monitoring. However, with the current drought, there is less water to monitor, thereby raising questions about how DOE can measure actinide movement and, in turn, remedy compliance. Since surface water was found to be the primary pathway for plutonium and americium, activities at the site are focused on surface water quality. The results at Rocky Flats Points of Compliance meet the standards for all uses of water. The post-closure land reconfiguration was intended to minimize runoff from the site, specifically in drainage ditches, minimize habitat and wetlands impacts.

#### *DOE briefing on vegetation management and adaptation*

Mature and diverse plant communities are central to reducing actinide migration, and thus ensuring the long-term viability of the site remedy. Seed mix to both address drought and increased moisture is therefore a critical ingredient of the site's adaptive management approach. At Rocky Flats, the seed mixes were designed based on the surrounding native prairies, which are most adapted to this particular climate, soils, and other conditions. The full list of seed mix combinations used are based on the type of location (i.e. pediment upland, hillside upland, riparian, wetland), and include both warm and cool season varieties, as well as classification of whether the species grows as sod or a bunch. DOE believes changes in the local climate would not cause current species of plants to disappear, but could change which species are dominant. Many of the plants used at Rocky Flats grow in vast areas, from Mexico to Canada, thereby accounting for both increased drought and increased precipitation. Staff from Jefferson County and Boulder County open spaces discussed that their vegetation strategies track the approach DOE is taking.

#### *CDPHE briefing on prairie fire at Rocky Flats*

Prairie fires at Rocky Flats generate broad concern in surrounding communities. DOE, CDPHE and EPA have studied these fires, including controlled burns, focusing on the impacts on actinide movement, re-vegetation efforts, and habitat restoration. Carl Spreng (CDPHE) said that the low levels of residual contamination allow Rocky Flats to meet a standard that is 100 times more conservative than city drinking water standards (0.15 for Rocky Flats vs. 15 pCi/l for the cities following the federal standard). He explained that while they were developing cleanup levels for soils, a controlled burn was done with a wind tunnel set up to measure the dust. Carl noted that

the time of year makes difference on recovery times for vegetation, and that all of this information was taken into account prior to setting the final cleanup levels. He noted that plants do not uptake plutonium, but can uptake uranium. When they looked at the risks to firefighters responding to a fire at Rocky Flats, radiological concerns were very low on the list of risks.

## Legacy Management monthly site inspection summary

DOE's March 2013 Rocky Flats activities included:

### *Groundwater and Surface Water Monitoring*

- Continued well redevelopment.
- Collected the Walnut Creek ambient surface water samples.
- Sampled the Original Landfill wells, completing quarterly groundwater sampling for first quarter 2013.
- Collected and processed automated surface water sample suites.
- Collected two full rounds of samples for the uranium geochemistry evaluation.
- Collected samples to evaluate the air strippers at the Mound Site Plume Treatment System and the East Trenches Plume Treatment System.
- Collected special samples at four Functional Channel 4 locations in support of the investigation of elevated actinide levels found in surface water near monitoring station GS-10 in South Walnut Creek.

### *Groundwater Treatment Systems*

Routine inspections of the treatment systems were conducted as follows.

- East Trenches Plume Treatment System (ETPTS): The new air stripper used to treat volatile organic compounds (solvents) in contaminated groundwater was fully activated. DOE also installed powered ventilation on the "periscope" air intake. (This is the vent that pipes air into the manhole at depth, so it can be drawn out by the attic vent on the lid and pass by all the sprayed water.)
- Mound Site Plume Treatment System: DOE reports the system is functioning normally. The new air stripper more than doubled the contaminant load reduction compared to the prototype.
- Solar Ponds Plume Treatment System: DOE reports the system is functioning normally. Lagoon samples were collected and shipped to the labs for nitrate analysis.

### *Ecology*

- Began the D-2 parcel re-vegetation project (parcel on west side of Rocky Flats where mineral rights were obtained and will eventually be transferred to the Refuge).
- Seeded and placed erosion control wattles at the ETPTS Conex container area. (Conex is a large steel storage container which have many uses around the world. In this case the ETPTS, Conex is used to house the batteries, charged by a large solar array, for operating the ETPTS.)

### *Site Monitoring & Maintenance*

- There were no significant changes to report at either landfill.
- Rebar and caps were installed for the Present Landfill slump monitoring project.

- Preble’s Meadow Jumping Mouse (federal endangered species) inspections were completed.

### New DOE-Legacy Management Contractor

In early April, DOE-Legacy Management (LM) awarded its management contract to Portage (<http://www.portageinc.com/>). Portage will take over from SM Stoller, the prime contractor for the past 6+ years. LM’s responsibilities include managing Rocky Flats. Stoller also competed for the contract, and is in the process of protesting the contract award. Per federal regulations, the GAO will rule on the protest. While the contract is being protested, Portage, at DOE’s direction, paused its transition activities. The protest process usually takes up to 100 days to resolve. As a small business Portage needs to hire staff for the many sites they will be managing, including Rocky Flats.

### Adaptive Management Plan

At its April 25<sup>th</sup> annual review of the sites adaptive management plan (AMP) monitoring results and biennial review of the AMP, DOE announced in September 2013 it would cease collecting water samples at the monitoring points along Walnut and Woman Creeks at Indiana Street. (This date was later pushed back to 10/1/15.) DOE’s reasoning is that the new regulatory points of compliance found just east of the outfall of the terminal ponds provide the data necessary to evaluate water compliance. As DOE explained in an email, the new water compliance points provide the data DOE needs to meet their water monitoring objectives. DOE also discussed plans to replace monitoring point GS10. (More on GS10 below)

### Contact Record, CR 2013-01

In late April, DOE posted on its website Contact Record 2013-01, “GS10 Flume Replacement Project and Soil Disturbance Review Plan.” As provided in the record,

The flume for Rocky Flats Legacy Management Agreement (RFLMA) Point of Evaluation (POE) monitoring location GS10 in South Walnut Creek was originally installed in 1993. DOE considered replacing the GS10 flume in 2000, when it replaced flumes for several other monitoring locations, but it was a low priority in relation to other cleanup and closure work at the time. The new surface water configuration resulting from breaching the dams for former retention ponds B-1, B-2, B-3, and B-4 in 2009 now allows DOE to propose replacing the GS10 flume and to move its location slightly downstream.

Also as provided in the record:

- DOE will replace the GS10 flume and move the flume to the downstream side of the diversion structure, which will, among other things, make flume operation and maintenance easier.
- Although the GS10 metal flume currently is operational, additional structure aging and movement of the south hillside could compromise the quality of data collected in the future.

One challenge DOE has faced is that there have been and continue to be reportable conditions for plutonium, americium and uranium at GS10. Concern has been raised that reconfiguring GS10 at this time could exacerbate the problems and/or impede DOE's evaluation of the reportable condition. DOE addresses this concern in the contract record, concluding "RFLMA parties agree that conducting the GS10 flume replacement project as described in this Contact Record is not likely to impede the reportable condition evaluation."

The contact record can be found at: [http://www.lm.doe.gov/Rocky\\_Flats/ContactRecords.aspx](http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx)

### Stewardship Council update

Next meetings:

June 3

September 9 (second Monday of the month)

October 28 (fourth Monday of the month)