

# 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 2012

### Board meeting summary

#### *Bylaws Amendment*

With changes to the Stewardship Council's Intergovernmental Agreement (IGA), the board needed to amend the bylaws to track changes to membership and voting numbers. The board reviewed the amendments at the February meeting and approved them at the April meeting. The revised bylaws are available at: [http://rockyflatssc.org/rocky\\_flats\\_stewardship\\_council.html](http://rockyflatssc.org/rocky_flats_stewardship_council.html) (click on "Bylaws" on the right hand navigation bar).

#### *Briefing on the History of the Rocky Flats Stewardship Council*

The Rocky Flats Stewardship Council formed in February 2006 to provide ongoing local government and community oversight of the post-closure management of Rocky Flats. The Stewardship Council's mandate is found in federal law. Our mission is to focus on the post-closure care and management of Rocky Flats. As provided in the legislation, the Stewardship Council is charged with

1. soliciting and encouraging public participation in appropriate activities relating to the closure and post-closure operations of the site;
2. disseminating information on the closure and post-closure operations of the site to the State government of the State in which the site is located, local and tribal governments in the vicinity of the site, and persons and entities having a stake in the closure or post-closure operations of the site;
3. transmitting to appropriate officers and employees of the Department of Energy questions and concerns of governments, persons, and entities referred to paragraph (2) on the closure and post-closure operations of the site; and
4. performing such other duties as the Secretary and the local stakeholder organization jointly determine appropriate to assist the Secretary in meeting post-closure obligations of the Department at the site.

The Stewardship Council in turn adopted the following mission:

The mission of the Rocky Flats Stewardship Council is to provide continuing local oversight of activities at the Rocky Flats site and to ensure local government and community interests are met with regards to long-term stewardship of residual contamination and refuge management. The mission also includes providing a forum to track issues related to former site employees and to provide an ongoing mechanism to

maintain public knowledge of Rocky Flats, including educating successive generations of ongoing needs and responsibilities regarding contaminant management and refuge management.

Funding is provided through a grant from DOE. Initial funding came through a 2005 direct Congressional appropriation; subsequent funding came directly from DOE at the agency's discretion.

*Briefing on the History of Rocky Flats and Cleanup Activities*

Scott Surovchak, DOE's site manager, briefed on the history of Rocky Flats. Key data points included:

1. Rocky Flats operated from 1951-1989, when the FBI raided the site. Cleanup operations began in earnest in 1995, and were completed in 2005. Groundwater remediation is ongoing.
2. Rocky Flats produced variety of components, not only nuclear. The site was fundamentally a state-of-the-art machining shop.
3. Rocky Flats was split into a plutonium side and a uranium side. Plutonium work took place in the 700 area. Uranium, stainless steel, and beryllium were used in the 400 and 800 areas. Administrative buildings were in the 100 area, with support buildings in the 200-300 areas.
4. A security area was built around the Protected Zone in 1981.
5. In the 1960s waste drums were stored on an area called the 903 pad. The drums corroded and they were eventually sent to the Idaho National Laboratory for disposal.
6. The Rocky Flats closure project was defined in the 1996 Rocky Flats Cleanup Agreement (RFCA). At the time, the regulatory structure was a fairly controversial. It essentially consisted of a consultative process with the regulators – the EPA and the Colorado Department of Public Health and Environment (CDPHE).
7. The cleanup took 10 years and cost \$7 billion.
8. The cleanup encompassed 385 acres, and 800 buildings and structures, including Building 771, called “the most dangerous building in America.”
9. 21 tons of weapons grade material was shipped to other sites, and 100 metric tons of plutonium residues were dispositioned.
10. Of 421 potentially contaminated sites, 121 required remediation.
11. 50 picocuries per gram (pCi/g) was set as the standard for the top three feet of soil. However, the majority of site was cleaned to below 7 pCi/g.
12. Some plutonium and americium contamination was fixed and left in place in two building foundations, and some process piping was filled with grout and left in place. This contamination is deeper than six feet below ground.
13. 275,000 cubic meters of radioactive waste was also disposed. Approximately 600,000 property items were dispositioned by transfer, sale, donation or disposal as contaminated waste.
14. Two landfills were closed with engineered covers and monitoring wells.
15. Four groundwater treatment systems were built to remove contaminant loading to surface water. Those remediation activities continue.
16. Regulatory completion involved the remedy selected in the CAD/ROD. The CAD/ROD established two Operable Units (OUs) at the site.

- a. The Central Operable Unit (COU) consists of 1309 acres encompassing all of the areas requiring institutional controls and ongoing maintenance. DOE is responsible for this area.
  - b. The Peripheral Operable Unit (POU) is 4,000 acres of land that the EPA determined could be released for unrestricted use. The area was taken off of the CERCLA National Priorities List (NPL). This means that there are no more requirements for monitoring, access controls, or maintenance. In 2007, most of the lands were transferred to the U.S. Fish and Wildlife Service (USFWS) and became the Rocky Flats National Wildlife Refuge.
  - c. DOE has a responsibility for an additional 945 acres of POU land on the west side of the site. Because of mineral rights issues, this land was not suitable for the Refuge.
17. The remedy for the COU is intended to protect surface water quality based on Colorado Water Quality Control Commission standards for all surface water use classifications. It also serves to protect human health and the environment by controlling potential exposure pathways.

#### *Briefing on Adaptive Management Plan*

See discussion below.

### Legacy Management monthly site inspection summary

DOE's March 2012 Rocky Flats activities included:

#### *Groundwater and Surface Water Monitoring.*

- Completed first quarter sampling.
- Collected and processed automated surface water sample suites with the associated grab samples.
- Collected the Walnut Creek ambient grab samples.
- Collected special seep samples at five locations on the former Building 995 Hillside in support of the investigation into elevated levels of americium found in surface water at sampling location GS10 in the South Walnut Creek drainage.
- Collected seep samples along the Solar Ponds hillside.
- Reinstalled surface water monitoring location GS12, immediately east of the dam breach project at pond A-3. Sampling equipment had been removed from this location during the dam breach project.

#### *Groundwater Treatment Systems*

Routine inspections of the treatment systems were conducted as follows:

- East Trenches Plume Treatment System (ETPTS): DOE reports the system is functioning normally.
- Mound Site Plume Treatment System (MSTPS): DOE reports the system is functioning normally.
- Solar Ponds Plume Treatment System (SPPTS): DOE reports optimization of the system is ongoing.

#### *Ecology*

- Conducted Original Landfill (OLF)/Present Landfill (PLF) quarterly vegetation surveys.

- Conducted Preble’s Meadow Jumping Mouse (endangered species) inspections.
- Rescued a number of turtles from the small pool at the PLF and relocated them to Pond B-1.
- Conducted erosion control maintenance work on surface water monitoring location SW027 hillside where in the recent elevated level of plutonium was found in surface water.
- Seeded pond A-2 wetland margin with native grasses where Canada thistle was sprayed with herbicide last year.
- Evaluated potential locations to apply herbicides for weed control.
- Cut willow stakes and planted at ponds A-1, A-2, B-1, B-2, B-3, and B-4 wetland areas, and A-3 wetland mitigation area.
- Seeded shrub species (four wing salt-bush and rabbit-brush) on SPPTS hillside area and old Solar Ponds area on top of pediment.

#### *Site Monitoring & Maintenance*

- There were no significant changes to report at either landfill.
- Downloaded OLF inclinometers (instruments used to detect earth movement).
- Completed dam A-3 breach, including installing articulated concrete block (ACB) mat, grouting ACB block and boulders, placing pond bottom fill, grade work, and re-vegetation.
- Completed PLF dam breach excavation and grading for ACB installation. Dewatering behind coffer dam is ongoing.

### Site Document Update—Adaptive Management Plan

The Adaptive Management Plan (AMP) for the Surface Water Configuration Environmental Assessment (EA) is a “monitoring and data evaluation program to assist in deciding to implement proposed action for terminal ponds in 2018-2020 timeframe or delay to gather additional data.” The AMP is in addition to mitigating actions included in EA. Approved in May 2011, the AMP process includes provisions about reporting timeframes, summary reports, and an annual report.

On February 28, 2012, DOE posted the first annual report on its website. The AMP group then met on April 2, 2012, following the Stewardship Council board meeting, to discuss the monitoring results. As presented to the public at the Stewardship Council meeting, the results are as follows:

- Water quality standards at POCs are being met
- Targeted groundwater (Area of Concern wells) – no indication plumes discharging to surface water
- Flow-through operations – water quality comparable to batch release results
- Storm event – no increase in Pu, Am, TSS; uranium both increases and decreases
- Continuous flow-paced sampling, U – significant variability, but well below standard at locations nearest site boundary; all other locations below EPA’s maximum concentration limit for drinking water
- Grab-sampling North and South Walnut Creeks

- Uranium – noticeable spatial variation in average concentration upstream to downstream
- Nitrate – spatial variation upstream, natural biodegradation apparent downstream; SPPTS small load impact on N Walnut Creek

The briefing at the Stewardship Council meeting can be found at:

[http://www.lm.doe.gov/Rocky\\_Flats/Sites.aspx?view=5](http://www.lm.doe.gov/Rocky_Flats/Sites.aspx?view=5)

## Stewardship Council update

Next meetings:

June 4

September 10