

The Rocky Flats Stewardship Council Monthly Status Report for September 2016 states under "Surface water": "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." I have four questions about this:

1) What is DOE and its contractor doing to end this exceedance of plutonium? Evidently the mitigation actions of 2015 referred to in the report are not working.

In an effort to reduce the transport of low-level residual contamination, extensive erosion-control enhancements have been implemented in the drainage basin that is tributary to Point of Evaluation (POE) SW027. Specifically:

- *Erosion matting, wattles, GeoRidge berms, and organic mulch were added to the area tributary to monitoring location GS51. This area includes portions of the former 903 Pad and Lip area, and data from GS51 have indicated that this tributary area is the primary contributor of actinides to SW027.*
- *Erosion-control matting has been installed at various locations in the South Interceptor Ditch.*

Water-quality data from samples collected at SW027 during calendar year (CY) 2016 suggest that these actions have been beneficial: average CY 2016 plutonium concentrations have been reduced by approximately 86% compared to those of CY 2015. However, the 12-month rolling average plutonium concentration remains reportable at SW027. As of October 31, 2016, the 12-month rolling average plutonium concentration at SW027 is 0.18 pCi/L (the plutonium water-quality standard is 0.15 pCi/L; americium is not reportable).

It is important to note that there has been no flow at SW027 since June 2, 2016. Because the 12-month rolling average covers the previous 12 months that includes both days with and without flow, the average can only change during periods of flow with sampling results to include in the calculation. Therefore, even though the 12-month rolling average remains reportable during the current dry period, there is no plutonium transport occurring at SW027.

While the monitoring data from SW027 continue to warrant scrutiny, data from the downstream Point of Compliance (POC; location WOMPOC) continue to demonstrate that the remedy remains protective. Both the 30-day and 12-month averages, for all monitored constituents at WOMPOC, remain below reportable levels.

2) What steps are being taken to dilute the plutonium in surface water before it reaches the monitors at a point of compliance?

The Site does not import any water nor does it consider the active implementation of dilution to reduce constituent concentrations as a responsible method to manage water quality.

3) What is the detailed record of plutonium exceedances over the last five years?

Reportable conditions at POE SW027 are discussed in depth in all quarterly and annual reports. In addition, the "POE Monitoring" and "Surface-Water Data Interpretation and Evaluation" sections of the Annual Report include plots, tables, and summary statistics that cover the entire post-closure period. These reports can be viewed and downloaded at http://www.lm.doe.gov/Rocky_Flats/Documents.aspx.

Each Reportable Condition at SW027 automatically triggers a consultation among the RFLMA parties. These consultations are documented in Contact Records that can be viewed and downloaded at http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx.

4) What is likely to be the result if the terminal ponds are breached?

While it is indisputable that Pond C-2 affects water quality, it is expected that the sampling results at WOMPOC will continue to demonstrate that the selected remedy is protective of human health and the environment. Because the relative proportion of water at WOMPOC that previously flows through POE SW027 is small (less than 5% of WOMPOC flow annually), water-quality effects at WOMPOC are measurable, though not significant. With the eventual breach of Pond C-2, increased variability in the WOMPOC 30-day average is expected, with reduced effects on the 12-month rolling average.