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Sent: Tuesday, November 15, 2011 11:37 AM
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Subject: Recap of GS10 Discussion at RFSC Meeting on 11/14/11

This is to recap the verbal information I provided at yesterday's Rocky Flats Stewardship Council meeting about an elevated sample result for Point of Evaluation GS10. Some of our usual technical contacts at the cities may not have been at the meeting, so this email serves to inform all of the information provided at the RFSC meeting yesterday. Please forward this email as appropriate.

Preliminary results for the GS10 composite sample collected for the period 7/21/2011 to 8/24/2011 were initially evaluated on 10/31/2011.

The preliminary results (unvalidated) were as follows:

Pu-239,240 = 0.938 pCi/L

Am-241 = 2.97 pCi/L

uranium = 7.82 ug/L

Preliminary results for the GS10 composite sample collected for the period 8/24/2011 to 9/29/2011 were also initially evaluated on 10/31/2011.

The preliminary results (unvalidated) were as follows:

Pu-239,240 = 0.02 pCi/L

Am-241 = 0.044 pCi/L

uranium = 8.16 ug/L

Calculation of the 12-month rolling averages using the above preliminary data indicated that the 8/31/2011 12-month rolling average for Am would be 0.18 pCi/L. The corresponding 12-month rolling average for Pu was determined to be 0.062 pCi/L. The applicable Am and Pu water-quality standard is 0.15 pCi/L.

Per normal data evaluation protocols, the elevated results were requested to be immediately validated; the initial elevated results were determined to be valid on 11/2/2011.

The Site normally sends ~4L of sample to the laboratory for Pu/Am analyses; the lab uses ~2L for the analysis. The remaining volume is retained at the lab for reanalysis if appropriate. The Site requested Pu/Am reanalysis of the remaining volume from the elevated sample on 11/2/2011.

In situations where a reanalysis is performed (essentially a sample split) an evaluation of the data pair is performed to determine the representativeness of the sample results. First, the duplicate error ratio (DER) for the data pair is calculated.

IF the DER is greater than or equal to 1.5, THEN the results will be determined to be nonrepresentative. The results will not be used for the calculation of 12-month rolling averages.

IF the DER is less than 1.5, THEN the results will be determined to be sufficiently representative. The arithmetic average of the results will be used for the calculation of 12-month rolling average values.

The reanalysis data are expected in the next few days. Once results are received, evaluation and notification will occur according to the normal RFLMA protocols. Background information on the normal data evaluation and notification protocols can be found in the RFLMA and the Rocky Flats Site Operations Guide (RFSOG):
http://www.lm.doe.gov/Rocky_Flats/Documents.aspx

Storm-event samples at both GS10 and B3OUTFLOW (Former Pond B-3 outlet) were also collected for runoff events on 5/18/11, 6/20/11, 7/8/11, and 7/14/11. Pu and Am results for the first three events were all below 0.015 pCi/L; results for the 7/14/11 event are pending.

Flow-through operations at Pond B-5 were initiated on 9/12/11 (the previous discharge was in March 2011). Pu and Am results from downstream locations GS08 (Pond B-5 outlet), WALPOC (Walnut Cr. at COU boundary), and GS03 (Walnut Cr. at Indiana St.) have been received through 9/26/11; all results were below 0.01 pCi/L.

Feel free to contact me if you have any questions. Thanks.

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