

Technical Review Group  
Comments on  
OU2 Tech Memo #7  
Surface Soil Sampling and Analysis Plan

Charlie Severson, USGS, Soil Scientist

The document underestimates the mobility of metals in the terrain at the Rocky Flats Plant. Mobility depends on the geochemistry of the area. Specifically, Table 1-2 describes the mobility as low to moderate. The Table should have a footnote which more quantifies the mobility; alternatively, the footnote could state that the mobility is variable.

The significance of the geochemistry along with the transport and mobility of common environmentally important metals such as Cd, Pb, As and Cs are downplayed.

Jerry Morse, CSM, Nuclear Physicist

Uranium-233 is referenced throughout the document.  $U^{233}$  is not a naturally occurring isotope. Why is it even included?

Page 3-5: The accuracy equation should include brackets:  $[A_T - A_e]$

Linda Figueroa, CSM, Asst. Professor of Environmental Engineering

Figure 2-6: Grid is not clear.

Page 1-21, Table 1-3: Migration Characteristics for Base-Neutral Extractables, PCB's and Pesticides should all be "low" rather than "no". May want to rework the table to reflect "High" and "Low".

Page 1-23: The adsorption coefficient ( $K_{oc}$ ) should have units included. If unitless, please explain.

Paula Elofson-Gardine, EIN, Inc., Executive Director

The sampling methodology used minimizes the levels of contamination within the soil sample. Soil fractions at the surface, 1 cm and 2.5 cm level should be analyzed separately for contaminants.

Soils samples should be split with splits run by an independent analytical laboratory.