

Average Soil Concentrations

Honeywell provides average soil concentration data for each pond in the Pond Characterization Report (Appendix T of November 22, 2010, License Amendment Request Report - Agencywide Documents Access and Management System Accession No. ML103420434). These values are based on the analyses conducted on cores collected from each of the ponds. The following table includes the average U-234, U-235, and U-238 concentrations for each pond, along with the average total uranium concentrations calculated by adding the average concentrations of U-234, U-235, and U-238. The U.S. Environmental Protection Agency's (EPA's) Memorandum of Understanding (MOU) trigger values are also included for reference.

Table 1: Comparison of Average Radionuclide Concentrations for Each Pond with the Appropriate EPA's MOU Trigger Values

Radionuclide	Pond				EPA MOU Trigger Value ¹
	B	C	D	E	
U-234 (pCi/g)	114.1	264.6	1229.1	266.2	3310
U-235 (pCi/g)	7.3	13.8	21.4	11.0	39
U-238 (pCi/g)	119.1	272.1	1289.0	275.3	179
Total U (mg/kg) ²	350	800	3700	810	1230

¹The EPA's MOU trigger values are for an industrial/commercial land use site.

²Total U is the sum of U-234, U-235, and U-238; and units conversion to mg/kg.

Values in bold exceed the corresponding EPA's MOU trigger values.

As shown in the table, U-238 exceeds the EPA's MOU trigger value in Ponds C, D, and E. The total uranium trigger value is exceeded in Pond D. Please note that NRC anticipates that some of the soil concentrations listed in the above table will be revised based on responses to requests for additional information. These revisions, however, are not expected to impact which radionuclides in which pond trigger EPA's MOU.

Enclosure