

NOL01-09 data evaluation

Excavation

Radionuclide	Am-241	C-14	Cm-243/244	Cm-245/246	Co-60
DCGL	25	6.3	29	17	3.8
avg conc detected	-0.03586	4.22E-02	-0.00927	0.0805	0.007717
No of measurements	15	15			15
SOF	0	0.006702	0	0.0047353	0.002031

CSM Wall

Radionuclide	Am-241	C-14	Cm-243/244	Cm-245/246	Co-60
DCGL	25	6.3	29	17	3.8
avg conc detected	0	0	-0.00927	0.0805	
No of measurements					
SOF	0	0	0	0.0047353	0

Backfill material (wants)

Radionuclide	Am-241	C-14	Cm-243/244	Cm-245/246	Co-60
DCGL	25	6.3	29	17	3.8
avg conc detected (~2-2.5' BG)	0	0	-0.00927	0.0805	
avg conc detected (~2.5-25' BG)	0	0	-0.00927	0.0805	
avg conc detected (~25-50' BG)	0	0	-0.00927	0.0805	
avg conc detected (~50-75' BG)	0	0	-0.00927	0.0805	
avg of all bkfl material	0	0	-0.00927	0.0805	
SOF	0	0	0	0.0047353	0

NE Well

radionuclide	Co-60	Cs-137	Eu-152	Eu-154
conc in well	0.3	4	6.6	
avg conc in su	0.007717	0.0012577		
DCGLemc	35.8	104	85.8	
DCGLw	3.58	7.45	9.43	
SOF in SU	0.002156	0.0001688	0	
SOF	0.008164	0.0384494	0.0769231	

Note: Staff presume the licensee would prefer to use the concentrations from the "deselected nuc
Excavation data obtained from Table 3.1 of submittal + table 2.7 of submittal
CSM data obtained from Table 1.1 of submittal + Table 2.7 of submittal
Backfill material data obtained from Table 3.3 of submittal + Table 2.7 of submittal
Well data obtained from NX-503, Rev 0, Part 1 "Results"

Cs-137	Eu-152	Eu-154	H-3	Nb-94	Ni-59	Ni-63	Np-237	Pu-238
7.9	10	9.4	680	7.1	1,900	720	1.1	29
0.001258	-0.02898	-0.01904	1.03		-3.22	-0.0591		0.0216
15	15	15						
0.000159	0	0	0.001515	0	0	0	0	0.000745

Cs-137	Eu-152	Eu-154	H-3	Nb-94	Ni-59	Ni-63	Np-237	Pu-238
7.9	10	9.4	680	7.1	1,900	720	1.1	29
0.448			0.01		-3.22	-0.0591		0.0216
11			11					
0.056709	0	0	1.47E-05	0	0	0	0	0.000745

Cs-137	Eu-152	Eu-154	H-3	Nb-94	Ni-59	Ni-63	Np-237	Pu-238
7.9	10	9.4	680	7.1	1,900	720	1.1	29
0.026172			1.03		-3.22	-0.0591		0.0216
			1.03		-3.22	-0.0591		0.0216
			1.03		-3.22	-0.0591		0.0216
			1.03		-3.22	-0.0591		0.0216
0.026172			1.03		-3.22	-0.0591		0.0216
0.003313	0	0	0.001515	0	0	0	0	0.000745

C-14	Sr-90	missing all	other ROCs
3.18	0.635		
0.042225	0.1578		
1.07E+05	1350		
5.94E+00	1.41		
0.007109	0.111915		0.121348
2.93E-05	0.000353		0.12392 2.922025
			5.783412 0.245268

slides" table (Table 2.7) when concentrations of ROCs are not presented. (still leaves some ROCs una

Pu-239/24(Pu-241	Sr-90	Tc-99	SOF
26	860	1.5	12
0.014	-3.31	0.1578	0.00515
		15	
0.000538	0	0.1052	0.000429
			0.122055 0.014055 0.351374

Pu-239/24(Pu-241	Sr-90	Tc-99	SOF
26	860	1.5	12
0.014	-3.31	0.043	0.00515
		11	
0.000538	0	0.028667	0.000429
			0.091838

Pu-239/24(Pu-241	Sr-90	Tc-99	SOF
26	860	1.5	12
0.014	-3.31	0.0446	0.00515
0.014	-3.31	0.0446	0.00515
0.014	-3.31	0.0446	0.00515
0.014	-3.31	0.0446	0.00515
0.014	-3.31	0.0446	0.00515
0.000538	0	0.029733	0.000429
			0.041009

accounted for)