

Phase I result for the Beaverlodge Lake test scenario

(presented by KAERI, Rep. Korea)

Methodology

Concentration in whole body = Transfer factor (CR) X Water concentration

	CR value used (fresh weight)			
	Lake white fish	White sucker	Chironomus sp.	Pisidium sp.
Pb210	2.20E2	3.60E2	1.00E4	1.70E3
Po210	2.40E4	2.40E2	9.90E3	3.80E4
Ra220	3.30E1	2.87E2	1.50E3	1.50E3
Th230	2.00E2	2.00E2	1.00E2	1.00E2
U238	4.00E0	1.70E1	5.00E2	1.80E2

Assumptions:

- 1) Above CR values came from the database in the ERICA assessment tool (May, 2008), except for a few data (red color) that were taken from other literatures.
- 2) It was assumed that Lake White Fish, White Sucker, Pisidium and Chironomous would be corresponded to the freshwater pelagic fish, benthic fish, bivalve mollusc and insect larvae in the ERICA database, respectively.
- 3) The different CR values (red color) from the ERICA database are
 - CR values for Pb210, Ra226 and U238 for White Sucker and Lake White Fish (Swanson, 1983)
 - Th230 CR for White Sucker was derived from the mean value of the dry-based bone Th230 CR for male, female and immature White Sucker (Pyle and Clulow, 1998) and the dry-to-wet weight conversion factor of 0.57 (Clulow et al., 1998)
 - Th230 CR for Lake White Fish was assumed to be equivalent to that for White Sucker