

Title : RESRAD Default Parameters

File : FCS BFM INSITU UA NI-59.RAD

## Regression Coefficients for Peak All Pathways

Description of Probabilistic Variable	Repetition =			1			2			3			Position	
	PRCC	PRCC	PRCC	SRRC	SRRC	SRRC	PCC	PCC	PCC	SRC	SRC	SRC		
Coefficient of Determination (R-squared) =				0.67	0.67	0.67				0.03	0.02	0.04	in	
													Variable	
													List	
Kd of Ni-59 in Contaminated Zone	-0.77	-0.77	-0.77	-0.69	-0.71	-0.70	-0.07	-0.04	-0.06	-0.07	-0.04	-0.06	16	
Cover erosion rate	0.57	0.52	0.55	0.40	0.36	0.38	-0.02	-0.01	0.09	-0.02	-0.01	0.09	15	
Depth of roots	0.24	0.20	0.27	0.14	0.12	0.16	-0.01	0.02	0.08	-0.01	0.02	0.07	10	
Weathering removal constant of all vegetation	-0.13	-0.18	-0.13	-0.08	-0.10	-0.07	-0.02	-0.04	-0.05	-0.02	-0.04	-0.05	12	
Evapotranspiration coefficient	0.11	0.11	0.05	0.06	0.06	0.03	-0.04	0.00	0.00	-0.04	0.00	0.00	3	
Runoff coefficient	0.05	0.12	0.08	0.03	0.07	0.05	-0.06	0.02	-0.05	-0.06	0.02	-0.05	5	
Contaminated zone erosion rate	0.02	0.08	0.13	0.01	0.04	0.08	-0.02	-0.03	0.01	-0.02	-0.03	0.00	1	
b Parameter of Unsaturated zone	1	0.00	0.02	0.09	0.00	0.01	0.05	0.00	-0.02	0.01	0.00	-0.02	0.01	6
Wet weight crop yield of fruit, grain and non-leafy vegetables	-0.02	0.03	0.08	-0.01	0.02	0.05	0.07	0.01	-0.04	0.07	0.01	-0.04	11	
Contaminated zone b parameter	-0.02	0.04	0.06	-0.01	0.02	0.04	-0.08	0.02	0.02	-0.08	0.02	0.02	2	
Depth of soil mixing layer	-0.02	-0.04	-0.01	-0.01	-0.02	-0.01	-0.02	0.06	0.00	-0.02	0.06	0.00	9	
Humidity in air	0.06	-0.03	-0.10	0.04	-0.02	-0.06	0.09	0.00	-0.03	0.09	0.00	-0.03	14	
Wet foliar interception fraction of leafy vegetables	-0.04	0.06	0.01	-0.02	0.03	0.01	-0.04	0.04	0.01	-0.04	0.04	0.01	13	
Indoor dust filtration factor	0.02	-0.04	0.00	0.01	-0.03	0.00	0.03	-0.06	-0.02	0.03	-0.06	-0.02	8	
Kd of Ni-59 in Saturated Zone	-0.03	0.02	0.02	-0.02	0.01	0.01	-0.01	0.01	-0.01	-0.01	0.01	-0.01	17	
Wind Speed	-0.05	0.00	0.05	-0.03	0.00	0.03	0.03	0.06	-0.06	0.03	0.06	-0.06	4	
Mass loading for inhalation	-0.02	0.04	-0.02	-0.01	0.02	-0.01	-0.01	-0.01	0.13	-0.01	-0.01	0.13	7	

The coefficient of determination ranges from 0 to 1; it provides a measure of the variation in the dependent variable (Dose or Risk)

that is explained by the variation in the independent variables under the assumed linear regression model.