

Title : RESRAD Default Parameters
File : FCS BURIED PIPE INSITU UA SB-125.RAD

Regression Coefficients for Peak All Pathways

| Description of Probabilistic Variable | Repetition = | | | | | | | | | | | | Position in Variable List | | | | | | |
|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------|---|--|--|---|--|--|
| | 1 | | | 2 | | | 3 | | | 1 | | | | 2 | | | 3 | | |
| | Coefficient of Determination (R-squared) = | | | | | | | | | | | | | | | | | | |
| | PCC | PCC | PCC | SRC | SRC | SRC | PRCC | PRCC | PRCC | SRRC | SRRC | SRRC | | | | | | | |
| Cover erosion rate | 0.64 | 0.79 | 0.35 | 0.63 | 0.78 | 0.35 | 0.05 | 0.05 | 0.01 | 0.04 | 0.05 | 0.01 | 15 | | | | | | |
| Well pump intake depth | -0.14 | -0.08 | -0.09 | -0.11 | -0.05 | -0.08 | -0.30 | -0.30 | -0.25 | -0.29 | -0.28 | -0.23 | 18 | | | | | | |
| Evapotranspiration coefficient | 0.05 | 0.06 | 0.11 | 0.04 | 0.03 | 0.11 | 0.09 | 0.10 | 0.14 | 0.08 | 0.09 | 0.13 | 3 | | | | | | |
| Contaminated zone erosion rate | 0.08 | 0.00 | 0.04 | 0.06 | 0.00 | 0.04 | -0.05 | -0.10 | 0.00 | -0.04 | -0.09 | 0.00 | 1 | | | | | | |
| Wet foliar interception fraction of leafy vegetables | 0.09 | 0.02 | 0.01 | 0.06 | 0.01 | 0.01 | -0.06 | 0.06 | -0.01 | -0.06 | 0.05 | -0.01 | 13 | | | | | | |
| b Parameter of Unsaturated zone | -0.05 | -0.05 | -0.01 | -0.04 | -0.03 | -0.01 | -0.07 | 0.07 | 0.00 | -0.06 | 0.07 | 0.00 | 6 | | | | | | |
| Contaminated zone b parameter | 0.02 | -0.04 | -0.06 | 0.01 | -0.02 | -0.05 | -0.02 | 0.00 | -0.05 | -0.02 | 0.00 | -0.05 | 2 | | | | | | |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | 0.06 | -0.01 | 0.02 | 0.05 | 0.00 | 0.02 | -0.03 | -0.05 | 0.00 | -0.03 | -0.05 | 0.00 | 11 | | | | | | |
| Kd of Sb-125 in Contaminated Zone | -0.02 | 0.03 | -0.05 | -0.02 | 0.02 | -0.05 | -0.17 | -0.16 | -0.27 | -0.16 | -0.14 | -0.26 | 16 | | | | | | |
| Kd of Sb-125 in Saturated Zone | 0.01 | -0.03 | -0.02 | 0.00 | -0.02 | -0.02 | -0.20 | -0.27 | -0.22 | -0.19 | -0.25 | -0.20 | 17 | | | | | | |
| Mass loading for inhalation | 0.02 | 0.03 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | -0.02 | -0.03 | 0.02 | -0.02 | -0.03 | 7 | | | | | | |
| Weathering removal constant of all vegetation | -0.02 | 0.01 | 0.04 | -0.02 | 0.01 | 0.04 | -0.03 | -0.05 | 0.03 | -0.03 | -0.04 | 0.02 | 12 | | | | | | |
| Humidity in air | 0.04 | 0.01 | -0.02 | 0.03 | 0.01 | -0.02 | 0.00 | 0.01 | 0.02 | 0.00 | 0.01 | 0.01 | 14 | | | | | | |
| Wind Speed | 0.05 | -0.06 | -0.02 | 0.04 | -0.04 | -0.02 | 0.03 | 0.01 | 0.02 | 0.02 | 0.01 | 0.02 | 4 | | | | | | |
| Indoor dust filtration factor | -0.02 | 0.03 | 0.02 | -0.02 | 0.02 | 0.01 | -0.02 | -0.05 | 0.01 | -0.01 | -0.04 | 0.01 | 8 | | | | | | |
| Depth of roots | -0.02 | 0.03 | 0.01 | -0.01 | 0.02 | 0.01 | 0.08 | 0.14 | 0.06 | 0.07 | 0.13 | 0.05 | 10 | | | | | | |
| Runoff coefficient | -0.03 | -0.11 | 0.08 | -0.02 | -0.07 | 0.08 | 0.02 | 0.05 | 0.02 | 0.02 | 0.04 | 0.02 | 5 | | | | | | |
| Depth of soil mixing layer | 0.02 | 0.04 | -0.04 | 0.01 | 0.02 | -0.04 | -0.04 | 0.12 | -0.02 | -0.03 | 0.10 | -0.02 | 9 | | | | | | |

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.