

Title : RESRAD Default Parameters  
File : FCS BURIED PIPE INSITU UA EU-155.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   | 0.95                                       | 0.95  | 0.91  | 0.95  | 0.95  | 0.91  | 0.10  | 0.11  | 0.09  | 0.08  | 0.09  | 0.07  | 15                        |   |  |  |   |  |  |
| b Parameter of Unsaturated zone                                | -0.08                                      | -0.08 | -0.04 | -0.03 | -0.02 | -0.02 | -0.05 | 0.04  | 0.03  | -0.04 | 0.03  | 0.02  | 6                         |   |  |  |   |  |  |
| Wind Speed   | 0.00                                       | -0.03 | -0.09 | 0.00  | -0.01 | -0.04 | 0.00  | 0.08  | 0.05  | 0.00  | 0.06  | 0.04  | 4                         |   |  |  |   |  |  |
| Contaminated zone b parameter                                  | -0.02                                      | 0.00  | -0.06 | -0.01 | 0.00  | -0.02 | 0.00  | 0.07  | -0.06 | 0.00  | 0.06  | -0.04 | 2                         |   |  |  |   |  |  |
| Evapotranspiration coefficient                                 | -0.01                                      | 0.02  | 0.05  | 0.00  | 0.01  | 0.02  | -0.04 | -0.02 | 0.01  | -0.03 | -0.02 | 0.01  | 3                         |   |  |  |   |  |  |
| Depth of roots   | -0.03                                      | 0.02  | -0.06 | -0.01 | 0.01  | -0.02 | 0.04  | 0.07  | 0.04  | 0.03  | 0.05  | 0.03  | 10                        |   |  |  |   |  |  |
| Indoor dust filtration factor                                  | 0.02                                       | -0.03 | 0.04  | 0.01  | -0.01 | 0.02  | -0.01 | -0.06 | -0.04 | 0.00  | -0.05 | -0.03 | 8                         |   |  |  |   |  |  |
| Runoff coefficient   | -0.04                                      | -0.05 | 0.03  | -0.01 | -0.02 | 0.01  | -0.02 | 0.00  | -0.03 | -0.01 | 0.00  | -0.02 | 5                         |   |  |  |   |  |  |
| Well pump intake depth   | -0.04                                      | -0.04 | 0.03  | -0.01 | -0.01 | 0.01  | -0.13 | -0.15 | -0.13 | -0.10 | -0.12 | -0.10 | 18                        |   |  |  |   |  |  |
| Weathering removal constant of all vegetation                  | -0.03                                      | 0.01  | 0.03  | -0.01 | 0.00  | 0.01  | -0.01 | -0.05 | 0.05  | -0.01 | -0.04 | 0.03  | 12                        |   |  |  |   |  |  |
| Contaminated zone erosion rate                                 | 0.02                                       | 0.00  | 0.01  | 0.01  | 0.00  | 0.00  | -0.02 | -0.01 | -0.04 | -0.01 | -0.01 | -0.03 | 1                         |   |  |  |   |  |  |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | -0.01                                      | 0.01  | -0.01 | 0.00  | 0.00  | -0.01 | 0.01  | -0.03 | 0.05  | 0.01  | -0.02 | 0.04  | 11                        |   |  |  |   |  |  |
| Depth of soil mixing layer                                     | 0.01                                       | 0.04  | -0.02 | 0.00  | 0.01  | -0.01 | -0.05 | 0.12  | -0.08 | -0.04 | 0.09  | -0.06 | 9                         |   |  |  |   |  |  |
| Wet foliar interception fraction of leafy vegetables           | 0.08                                       | -0.03 | -0.06 | 0.02  | -0.01 | -0.02 | -0.08 | 0.06  | 0.02  | -0.06 | 0.05  | 0.01  | 13                        |   |  |  |   |  |  |
| Mass loading for inhalation                                    | 0.04                                       | -0.01 | -0.01 | 0.01  | 0.00  | 0.00  | 0.03  | -0.01 | 0.00  | 0.03  | -0.01 | 0.00  | 7                         |   |  |  |   |  |  |
| Kd of Eu-155 in Contaminated Zone                              | -0.02                                      | 0.01  | 0.00  | 0.00  | 0.00  | 0.00  | -0.60 | -0.61 | -0.67 | -0.60 | -0.60 | -0.66 | 16                        |   |  |  |   |  |  |
| Humidity in air  | 0.04                                       | 0.07  | -0.08 | 0.01  | 0.02  | -0.03 | -0.01 | -0.01 | 0.01  | -0.01 | -0.01 | 0.01  | 14                        |   |  |  |   |  |  |
| Kd of Eu-155 in Saturated Zone                                 | -0.02                                      | 0.00  | 0.01  | -0.01 | 0.00  | 0.01  | -0.03 | -0.06 | -0.04 | -0.03 | -0.04 | -0.03 | 17                        |   |  |  |   |  |  |

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.