

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\AREA FACTOR\FCS SOIL AF 2 DCGL 0.15 M.RAD

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FCS FGR11 Plus FGR 11

| Menu | Parameter | Current Value# | Base Case* | Parameter Name |
|------|--|----------------|------------|----------------|
| A-1 | DCF's for external ground radiation, (mrem/yr)/(pCi/g) | | | |
| A-1 | Ba-137m (Source: FGR 12) | 3.606E+00 | 3.606E+00 | DCF1(1) |
| A-1 | C-14 (Source: FGR 12) | 1.345E-05 | 1.345E-05 | DCF1(2) |
| A-1 | Co-60 (Source: FGR 12) | 1.622E+01 | 1.622E+01 | DCF1(3) |
| A-1 | Cs-137 (Source: FGR 12) | 7.510E-04 | 7.510E-04 | DCF1(4) |
| A-1 | Eu-152 (Source: FGR 12) | 7.006E+00 | 7.006E+00 | DCF1(5) |
| A-1 | Gd-152 (Source: FGR 12) | 0.000E+00 | 0.000E+00 | DCF1(6) |
| A-1 | Ni-63 (Source: FGR 12) | 0.000E+00 | 0.000E+00 | DCF1(7) |
| A-1 | Sr-90 (Source: FGR 12) | 7.043E-04 | 7.043E-04 | DCF1(8) |
| A-1 | Y-90 (Source: FGR 12) | 2.391E-02 | 2.391E-02 | DCF1(9) |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | C-14(p) (Class: ORGANIC) | 2.090E-06 | 2.090E-06 | DCF2(1) |
| B-1 | C-14(g) (Class: CO2) | 2.350E-08 | 2.350E-08 | C14GInhDCF |
| B-1 | Co-60 | 2.190E-04 | 2.190E-04 | DCF2(2) |
| B-1 | Cs-137+D | 3.190E-05 | 3.190E-05 | DCF2(3) |
| B-1 | Eu-152 | 2.210E-04 | 2.210E-04 | DCF2(4) |
| B-1 | Gd-152 | 2.430E-01 | 2.430E-01 | DCF2(6) |
| B-1 | Ni-63 | 6.290E-06 | 6.290E-06 | DCF2(7) |
| B-1 | Sr-90+D | 1.308E-03 | 1.300E-03 | DCF2(8) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | C-14 | 2.090E-06 | 2.090E-06 | DCF3(1) |
| D-1 | Co-60 | 2.690E-05 | 2.690E-05 | DCF3(2) |
| D-1 | Cs-137+D | 5.000E-05 | 5.000E-05 | DCF3(3) |
| D-1 | Eu-152 | 6.480E-06 | 6.480E-06 | DCF3(4) |
| D-1 | Gd-152 | 1.610E-04 | 1.610E-04 | DCF3(6) |
| D-1 | Ni-63 | 5.770E-07 | 5.770E-07 | DCF3(7) |
| D-1 | Sr-90+D | 1.528E-04 | 1.420E-04 | DCF3(8) |
| D-34 | Food transfer factors: | | | |
| D-34 | C-14 , plant/soil concentration ratio, dimensionless | 1.280E+00 | 5.500E+00 | RTF(1,1) |
| D-34 | C-14 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 6.110E-02 | 3.100E-02 | RTF(1,2) |
| D-34 | C-14 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.250E-02 | 1.200E-02 | RTF(1,3) |
| D-34 | Co-60 , plant/soil concentration ratio, dimensionless | 1.460E-01 | 8.000E-02 | RTF(2,1) |
| D-34 | Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.980E-02 | 2.000E-02 | RTF(2,2) |
| D-34 | Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3.220E-03 | 2.000E-03 | RTF(2,3) |
| D-34 | Cs-137+D , plant/soil concentration ratio, dimensionless | 7.830E-02 | 4.000E-02 | RTF(3,1) |
| D-34 | Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 6.560E-02 | 3.000E-02 | RTF(3,2) |
| D-34 | Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.370E-02 | 8.000E-03 | RTF(3,3) |
| D-34 | Eu-152 , plant/soil concentration ratio, dimensionless | 4.210E-03 | 2.500E-03 | RTF(4,1) |
| D-34 | Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 4.020E-03 | 2.000E-03 | RTF(4,2) |
| D-34 | Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.120E-04 | 5.000E-05 | RTF(4,3) |
| D-34 | Gd-152 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(6,1) |
| D-34 | Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF(6,2) |
| D-34 | Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(6,3) |

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: FCS FGR11 Plus FGR 11

| Menu | Parameter | Current Value# | Base Case* | Parameter Name |
|------|---|----------------|------------|----------------|
| D-34 | Ni-63 , plant/soil concentration ratio, dimensionless | 9.130E-02 | 5.000E-02 | RTF(7,1) |
| D-34 | Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 9.260E-03 | 5.000E-03 | RTF(7,2) |
| D-34 | Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3.190E-02 | 2.000E-02 | RTF(7,3) |
| D-34 | | | | |
| D-34 | Sr-90+D , plant/soil concentration ratio, dimensionless | 5.900E-01 | 3.000E-01 | RTF(8,1) |
| D-34 | Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.310E-02 | 8.000E-03 | RTF(8,2) |
| D-34 | Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.760E-03 | 2.000E-03 | RTF(8,3) |
| D-34 | | | | |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | C-14 , fish | 5.000E+04 | 5.000E+04 | BIOFAC(1,1) |
| D-5 | C-14 , crustacea and mollusks | 9.100E+03 | 9.100E+03 | BIOFAC(1,2) |
| D-5 | | | | |
| D-5 | Co-60 , fish | 3.000E+02 | 3.000E+02 | BIOFAC(2,1) |
| D-5 | Co-60 , crustacea and mollusks | 2.000E+02 | 2.000E+02 | BIOFAC(2,2) |
| D-5 | | | | |
| D-5 | Cs-137+D , fish | 2.000E+03 | 2.000E+03 | BIOFAC(3,1) |
| D-5 | Cs-137+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC(3,2) |
| D-5 | | | | |
| D-5 | Eu-152 , fish | 5.000E+01 | 5.000E+01 | BIOFAC(4,1) |
| D-5 | Eu-152 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(4,2) |
| D-5 | | | | |
| D-5 | Gd-152 , fish | 2.500E+01 | 2.500E+01 | BIOFAC(6,1) |
| D-5 | Gd-152 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(6,2) |
| D-5 | | | | |
| D-5 | Ni-63 , fish | 1.000E+02 | 1.000E+02 | BIOFAC(7,1) |
| D-5 | Ni-63 , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC(7,2) |
| D-5 | | | | |
| D-5 | Sr-90+D , fish | 6.000E+01 | 6.000E+01 | BIOFAC(8,1) |
| D-5 | Sr-90+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC(8,2) |

#For DCF1(xxx) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.

*Base Case means Default.Lib w/o Associate Nuclide contributions.

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Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|--|------------|------------|--|----------------|
| R014 | Saturated zone effective porosity | 2.000E-01 | 2.000E-01 | --- | EPSZ |
| R014 | Saturated zone field capacity | 2.400E-01 | 2.000E-01 | --- | FCSZ |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 4.350E+03 | 1.000E+02 | --- | HCSZ |
| R014 | Saturated zone hydraulic gradient | 8.400E-04 | 2.000E-02 | --- | HGWT |
| R014 | Saturated zone b parameter | not used | 5.300E+00 | --- | BSZ |
| R014 | Water table drop rate (m/yr) | 0.000E+00 | 1.000E-03 | --- | VWT |
| R014 | Well pump intake depth (m below water table) | 2.140E+01 | 1.000E+01 | --- | DWIBWT |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | ND | ND | --- | MODEL |
| R014 | Well pumping rate (m**3/yr) | 4.550E+03 | 2.500E+02 | --- | UW |
| R015 | Number of unsaturated zone strata | 1 | 1 | --- | NS |
| R015 | Unsat. zone 1, thickness (m) | 1.000E-01 | 4.000E+00 | --- | H (1) |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSUZ (1) |
| R015 | Unsat. zone 1, total porosity | 4.300E-01 | 4.000E-01 | --- | TPUZ (1) |
| R015 | Unsat. zone 1, effective porosity | 1.600E-01 | 2.000E-01 | --- | EPUZ (1) |
| R015 | Unsat. zone 1, field capacity | 2.800E-01 | 2.000E-01 | --- | FCUZ (1) |
| R015 | Unsat. zone 1, soil-specific b parameter | 3.600E+00 | 5.300E+00 | --- | BUZ (1) |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3.440E+01 | 1.000E+01 | --- | HCUZ (1) |
| R016 | Distribution coefficients for C-14 | | | | |
| R016 | Contaminated zone (cm**3/g) | 9.670E+01 | 0.000E+00 | --- | DCNUCC (1) |
| R016 | Unsaturated zone 1 (cm**3/g) | 9.670E+01 | 0.000E+00 | --- | DCNUCU (1,1) |
| R016 | Saturated zone (cm**3/g) | 1.100E+01 | 0.000E+00 | --- | DCNUCS (1) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.810E-03 | ALEACH (1) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (1) |
| R016 | Distribution coefficients for Co-60 | | | | |
| R016 | Contaminated zone (cm**3/g) | 5.050E+03 | 1.000E+03 | --- | DCNUCC (2) |
| R016 | Unsaturated zone 1 (cm**3/g) | 5.050E+03 | 1.000E+03 | --- | DCNUCU (2,1) |
| R016 | Saturated zone (cm**3/g) | 2.600E+02 | 1.000E+03 | --- | DCNUCS (2) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 5.391E-05 | ALEACH (2) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (2) |
| R016 | Distribution coefficients for Cs-137 | | | | |
| R016 | Contaminated zone (cm**3/g) | 3.500E+03 | 4.600E+03 | --- | DCNUCC (3) |
| R016 | Unsaturated zone 1 (cm**3/g) | 3.500E+03 | 4.600E+03 | --- | DCNUCU (3,1) |
| R016 | Saturated zone (cm**3/g) | 5.280E+02 | 4.600E+03 | --- | DCNUCS (3) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 7.778E-05 | ALEACH (3) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (3) |
| R016 | Distribution coefficients for Eu-152 | | | | |
| R016 | Contaminated zone (cm**3/g) | 7.270E+03 | -1.000E+00 | --- | DCNUCC (4) |
| R016 | Unsaturated zone 1 (cm**3/g) | 7.270E+03 | -1.000E+00 | --- | DCNUCU (4,1) |
| R016 | Saturated zone (cm**3/g) | 8.290E+02 | -1.000E+00 | --- | DCNUCS (4) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 3.745E-05 | ALEACH (4) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (4) |

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Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|--|------------|------------|--|----------------|
| R016 | Distribution coefficients for Ni-63 | | | | |
| R016 | Contaminated zone (cm**3/g) | 5.320E+02 | 1.000E+03 | --- | DCNUCC (7) |
| R016 | Unsaturated zone 1 (cm**3/g) | 5.320E+02 | 1.000E+03 | --- | DCNUCU (7,1) |
| R016 | Saturated zone (cm**3/g) | 1.300E+02 | 1.000E+03 | --- | DCNUCS (7) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 5.116E-04 | ALEACH (7) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (7) |
| R016 | Distribution coefficients for Sr-90 | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.680E+02 | 3.000E+01 | --- | DCNUCC (8) |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.680E+02 | 3.000E+01 | --- | DCNUCU (8,1) |
| R016 | Saturated zone (cm**3/g) | 2.200E+01 | 3.000E+01 | --- | DCNUCS (8) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 1.619E-03 | ALEACH (8) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (8) |
| R016 | Distribution coefficients for daughter Gd-152 | | | | |
| R016 | Contaminated zone (cm**3/g) | -1.000E+00 | -1.000E+00 | 8.249E+02 | DCNUCC (6) |
| R016 | Unsaturated zone 1 (cm**3/g) | -1.000E+00 | -1.000E+00 | 8.249E+02 | DCNUCU (6,1) |
| R016 | Saturated zone (cm**3/g) | -1.000E+00 | -1.000E+00 | 8.249E+02 | DCNUCS (6) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 3.300E-04 | ALEACH (6) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK (6) |
| R017 | Inhalation rate (m**3/yr) | 8.600E+03 | 8.400E+03 | --- | INHALR |
| R017 | Mass loading for inhalation (g/m**3) | 2.870E-05 | 1.000E-04 | --- | MLINH |
| R017 | Exposure duration | 3.000E+01 | 3.000E+01 | --- | ED |
| R017 | Shielding factor, inhalation | 7.500E-01 | 4.000E-01 | --- | SHF3 |
| R017 | Shielding factor, external gamma | 5.520E-01 | 7.000E-01 | --- | SHF1 |
| R017 | Fraction of time spent indoors | 6.600E-01 | 5.000E-01 | --- | FIND |
| R017 | Fraction of time spent outdoors (on site) | 1.200E-01 | 2.500E-01 | --- | FOTD |
| R017 | Shape factor flag, external gamma | 1.000E+00 | 1.000E+00 | >0 shows circular AREA. | FS |
| R017 | Radii of shape factor array (used if FS = -1): | | | | |
| R017 | Outer annular radius (m), ring 1: | not used | 5.000E+01 | --- | RAD_SHAPE (1) |
| R017 | Outer annular radius (m), ring 2: | not used | 7.071E+01 | --- | RAD_SHAPE (2) |
| R017 | Outer annular radius (m), ring 3: | not used | 0.000E+00 | --- | RAD_SHAPE (3) |
| R017 | Outer annular radius (m), ring 4: | not used | 0.000E+00 | --- | RAD_SHAPE (4) |
| R017 | Outer annular radius (m), ring 5: | not used | 0.000E+00 | --- | RAD_SHAPE (5) |
| R017 | Outer annular radius (m), ring 6: | not used | 0.000E+00 | --- | RAD_SHAPE (6) |
| R017 | Outer annular radius (m), ring 7: | not used | 0.000E+00 | --- | RAD_SHAPE (7) |
| R017 | Outer annular radius (m), ring 8: | not used | 0.000E+00 | --- | RAD_SHAPE (8) |
| R017 | Outer annular radius (m), ring 9: | not used | 0.000E+00 | --- | RAD_SHAPE (9) |
| R017 | Outer annular radius (m), ring 10: | not used | 0.000E+00 | --- | RAD_SHAPE (10) |
| R017 | Outer annular radius (m), ring 11: | not used | 0.000E+00 | --- | RAD_SHAPE (11) |
| R017 | Outer annular radius (m), ring 12: | not used | 0.000E+00 | --- | RAD_SHAPE (12) |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|--|------------|-----------|--|----------------|
| R017 | Fractions of annular areas within AREA: | | | | |
| R017 | Ring 1 | not used | 1.000E+00 | --- | FRACA(1) |
| R017 | Ring 2 | not used | 2.732E-01 | --- | FRACA(2) |
| R017 | Ring 3 | not used | 0.000E+00 | --- | FRACA(3) |
| R017 | Ring 4 | not used | 0.000E+00 | --- | FRACA(4) |
| R017 | Ring 5 | not used | 0.000E+00 | --- | FRACA(5) |
| R017 | Ring 6 | not used | 0.000E+00 | --- | FRACA(6) |
| R017 | Ring 7 | not used | 0.000E+00 | --- | FRACA(7) |
| R017 | Ring 8 | not used | 0.000E+00 | --- | FRACA(8) |
| R017 | Ring 9 | not used | 0.000E+00 | --- | FRACA(9) |
| R017 | Ring 10 | not used | 0.000E+00 | --- | FRACA(10) |
| R017 | Ring 11 | not used | 0.000E+00 | --- | FRACA(11) |
| R017 | Ring 12 | not used | 0.000E+00 | --- | FRACA(12) |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 2.240E+02 | 1.600E+02 | --- | DIET(1) |
| R018 | Leafy vegetable consumption (kg/yr) | 4.280E+01 | 1.400E+01 | --- | DIET(2) |
| R018 | Milk consumption (L/yr) | 2.330E+02 | 9.200E+01 | --- | DIET(3) |
| R018 | Meat and poultry consumption (kg/yr) | 6.510E+01 | 6.300E+01 | --- | DIET(4) |
| R018 | Fish consumption (kg/yr) | not used | 5.400E+00 | --- | DIET(5) |
| R018 | Other seafood consumption (kg/yr) | not used | 9.000E-01 | --- | DIET(6) |
| R018 | Soil ingestion rate (g/yr) | 1.830E+01 | 3.650E+01 | --- | SOIL |
| R018 | Drinking water intake (L/yr) | 4.780E+02 | 5.100E+02 | --- | DWI |
| R018 | Contamination fraction of drinking water | 1.000E+00 | 1.000E+00 | --- | FDW |
| R018 | Contamination fraction of household water | not used | 1.000E+00 | --- | FHHW |
| R018 | Contamination fraction of livestock water | 1.000E+00 | 1.000E+00 | --- | FLW |
| R018 | Contamination fraction of irrigation water | 1.000E+00 | 1.000E+00 | --- | FIRW |
| R018 | Contamination fraction of aquatic food | not used | 5.000E-01 | --- | FR9 |
| R018 | Contamination fraction of plant food | -1 | -1 | 0.100E-02 | FPLANT |
| R018 | Contamination fraction of meat | -1 | -1 | 0.100E-03 | FMEAT |
| R018 | Contamination fraction of milk | -1 | -1 | 0.100E-03 | FMILK |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- | LFI5 |
| R019 | Livestock fodder intake for milk (kg/day) | 6.321E+01 | 5.500E+01 | --- | LFI6 |
| R019 | Livestock water intake for meat (L/day) | 5.060E+01 | 5.000E+01 | --- | LWI5 |
| R019 | Livestock water intake for milk (L/day) | 6.000E+01 | 1.600E+02 | --- | LWI6 |
| R019 | Livestock soil intake (kg/day) | 7.000E-01 | 5.000E-01 | --- | LSI |
| R019 | Mass loading for foliar deposition (g/m**3) | 4.000E-04 | 1.000E-04 | --- | MLFD |
| R019 | Depth of soil mixing layer (m) | 2.300E-01 | 1.500E-01 | --- | DM |
| R019 | Depth of roots (m) | 1.230E+00 | 9.000E-01 | --- | DROOT |
| R019 | Drinking water fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWDW |
| R019 | Household water fraction from ground water | not used | 1.000E+00 | --- | FGWHH |
| R019 | Livestock water fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWLW |
| R019 | Irrigation fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWIR |
| R19B | Wet weight crop yield for Non-Leafy (kg/m**2) | 1.750E+00 | 7.000E-01 | --- | YV(1) |
| R19B | Wet weight crop yield for Leafy (kg/m**2) | 2.890E+00 | 1.500E+00 | --- | YV(2) |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.890E+00 | 1.100E+00 | --- | YV(3) |
| R19B | Growing Season for Non-Leafy (years) | 2.460E-01 | 1.700E-01 | --- | TE(1) |
| R19B | Growing Season for Leafy (years) | 1.230E-01 | 2.500E-01 | --- | TE(2) |
| R19B | Growing Season for Fodder (years) | 8.200E-02 | 8.000E-02 | --- | TE(3) |

Summary : RESRAD Default Parameters

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Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|--|------------|------------|--|----------------|
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | TIV(1) |
| R19B | Translocation Factor for Leafy | 1.000E+00 | 1.000E+00 | --- | TIV(2) |
| R19B | Translocation Factor for Fodder | 1.000E+00 | 1.000E+00 | --- | TIV(3) |
| R19B | Dry Foliar Interception Fraction for Non-Leafy | 3.500E-01 | 2.500E-01 | --- | RDRY(1) |
| R19B | Dry Foliar Interception Fraction for Leafy | 3.500E-01 | 2.500E-01 | --- | RDRY(2) |
| R19B | Dry Foliar Interception Fraction for Fodder | 3.500E-01 | 2.500E-01 | --- | RDRY(3) |
| R19B | Wet Foliar Interception Fraction for Non-Leafy | 3.500E-01 | 2.500E-01 | --- | RWET(1) |
| R19B | Wet Foliar Interception Fraction for Leafy | 5.800E-01 | 2.500E-01 | --- | RWET(2) |
| R19B | Wet Foliar Interception Fraction for Fodder | 3.500E-01 | 2.500E-01 | --- | RWET(3) |
| R19B | Weathering Removal Constant for Vegetation | 3.300E+01 | 2.000E+01 | --- | WLAM |
| C14 | C-12 concentration in water (g/cm**3) | 2.000E-05 | 2.000E-05 | --- | C12WTR |
| C14 | C-12 concentration in contaminated soil (g/g) | 3.000E-02 | 3.000E-02 | --- | C12CZ |
| C14 | Fraction of vegetation carbon from soil | 2.000E-02 | 2.000E-02 | --- | CSOIL |
| C14 | Fraction of vegetation carbon from air | 9.800E-01 | 9.800E-01 | --- | CAIR |
| C14 | C-14 evasion layer thickness in soil (m) | 3.000E-01 | 3.000E-01 | --- | DMC |
| C14 | C-14 evasion flux rate from soil (1/sec) | 7.000E-07 | 7.000E-07 | --- | EVSN |
| C14 | C-12 evasion flux rate from soil (1/sec) | 1.000E-10 | 1.000E-10 | --- | REVSN |
| C14 | Fraction of grain in beef cattle feed | 9.000E-02 | 8.000E-01 | --- | AVFG4 |
| C14 | Fraction of grain in milk cow feed | 3.000E-02 | 2.000E-01 | --- | AVFG5 |
| STOR | Storage times of contaminated foodstuffs (days): | | | | |
| STOR | Fruits, non-leafy vegetables, and grain | 1.400E+01 | 1.400E+01 | --- | STOR_T(1) |
| STOR | Leafy vegetables | 1.000E+00 | 1.000E+00 | --- | STOR_T(2) |
| STOR | Milk | 1.000E+00 | 1.000E+00 | --- | STOR_T(3) |
| STOR | Meat and poultry | 2.000E+01 | 2.000E+01 | --- | STOR_T(4) |
| STOR | Fish | 7.000E+00 | 7.000E+00 | --- | STOR_T(5) |
| STOR | Crustacea and mollusks | 7.000E+00 | 7.000E+00 | --- | STOR_T(6) |
| STOR | Well water | 1.000E+00 | 1.000E+00 | --- | STOR_T(7) |
| STOR | Surface water | 1.000E+00 | 1.000E+00 | --- | STOR_T(8) |
| STOR | Livestock fodder | 4.500E+01 | 4.500E+01 | --- | STOR_T(9) |
| R021 | Thickness of building foundation (m) | not used | 1.500E-01 | --- | FLOOR1 |
| R021 | Bulk density of building foundation (g/cm**3) | not used | 2.400E+00 | --- | DENSFL |
| R021 | Total porosity of the cover material | not used | 4.000E-01 | --- | TPCV |
| R021 | Total porosity of the building foundation | not used | 1.000E-01 | --- | TPFL |
| R021 | Volumetric water content of the cover material | not used | 5.000E-02 | --- | PH2OCV |
| R021 | Volumetric water content of the foundation | not used | 3.000E-02 | --- | PH2OFL |
| R021 | Diffusion coefficient for radon gas (m/sec): | | | | |
| R021 | in cover material | not used | 2.000E-06 | --- | DIFCV |
| R021 | in foundation material | not used | 3.000E-07 | --- | DIFFL |
| R021 | in contaminated zone soil | not used | 2.000E-06 | --- | DIFCZ |
| R021 | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- | HMIX |
| R021 | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- | REXG |
| R021 | Height of the building (room) (m) | not used | 2.500E+00 | --- | HRM |
| R021 | Building interior area factor | not used | 0.000E+00 | --- | FAI |
| R021 | Building depth below ground surface (m) | not used | -1.000E+00 | --- | DMFL |
| R021 | Emanating power of Rn-222 gas | not used | 2.500E-01 | --- | EMANA(1) |
| R021 | Emanating power of Rn-220 gas | not used | 1.500E-01 | --- | EMANA(2) |
| TITL | Number of graphical time points | 128 | --- | --- | NPTS |

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\AREA FACTOR\FCS SOIL AF 2 DCGL 0.15 M.RAD

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|---|------------|---------|--|----------------|
| TITL | Maximum number of integration points for dose | 17 | --- | --- | LYMAX |
| TITL | Maximum number of integration points for risk | 1 | --- | --- | KYMAX |

Summary of Pathway Selections

| Pathway | User Selection |
|-----------------------------|----------------|
| 1 -- external gamma | active |
| 2 -- inhalation (w/o radon) | active |
| 3 -- plant ingestion | active |
| 4 -- meat ingestion | active |
| 5 -- milk ingestion | active |
| 6 -- aquatic foods | suppressed |
| 7 -- drinking water | active |
| 8 -- soil ingestion | active |
| 9 -- radon | suppressed |
| Find peak pathway doses | suppressed |

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\AREA FACTOR\FCS SOIL AF 2 DCGL 0.15 M.RAD

| Contaminated Zone Dimensions | | Initial Soil Concentrations, pCi/g | |
|------------------------------|--------------------|------------------------------------|-----------|
| Area: | 2.00 square meters | C-14 | 1.000E+00 |
| Thickness: | 0.15 meters | Co-60 | 1.000E+00 |
| Cover Depth: | 0.00 meters | Cs-137 | 1.000E+00 |
| | | Eu-152 | 1.000E+00 |
| | | Ni-63 | 1.000E+00 |
| | | Sr-90 | 1.000E+00 |

Total Dose TDOSE(t), mrem/yr

Basic Radiation Dose Limit = 2.500E+01 mrem/yr

Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

| | | | | | | | | |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| t (years): | 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| TDOSE(t): | 1.552E+00 | 1.409E+00 | 1.168E+00 | 6.476E-01 | 1.939E-01 | 1.438E-02 | 1.952E-09 | 2.536E-20 |
| M(t): | 6.208E-02 | 5.635E-02 | 4.672E-02 | 2.590E-02 | 7.757E-03 | 5.754E-04 | 7.807E-11 | 1.015E-21 |

Maximum TDOSE(t): 1.552E+00 mrem/yr at t = 0.000E+00 years

