

| Menu | Parameter | Current Value | Default | Parameter Name |
|---|--|---------------|-----------|----------------|
| Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | H-3 | 6.400E-08 | 6.400E-08 | DCF2(1) |
| Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | H-3 | 6.400E-08 | 6.400E-08 | DCF3(1) |
| Food transfer factors: | | | | |
| D-34 | H-3, plant/soil concentration ratio, dimensionless | 4.800E+00 | 4.800E+00 | RTF(1,1) |
| D-34 | H-3, beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.200E-02 | 1.200E-02 | RTF(1,2) |
| D-34 | H-3, milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-02 | 1.000E-02 | RTF(1,3) |
| Bioaccumulation factors, fresh water, L/kg: | | | | |
| D-5 | H-3, fish | 1.000E+00 | 1.000E+00 | BIOFAC(1,1) |
| D-5 | H-3, crustacea and mollusks | 1.000E+00 | 1.000E+00 | BIOFAC(1,2) |

Site-Specific Parameter Summary

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|---|------------|-----------|--|----------------|
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- | AREA |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- | THICK0 |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- | LCZPAQ |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- | BRDL |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- | TI |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- | T(2) |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- | T(3) |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- | T(4) |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- | T(5) |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- | T(6) |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- | T(7) |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- | T(8) |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- | T(9) |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- | T(10) |
| R012 | Initial principal radionuclide (pCi/g): H-3 | 8.527E+02 | 0.000E+00 | --- | S1(1) |
| R012 | Concentration in groundwater (pCi/L): H-3 | not used | 0.000E+00 | --- | W1(1) |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- | COVER0 |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- | DENSCV |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- | VCV |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- | DENSCZ |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- | VCZ |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- | TPCZ |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- | FCCZ |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 5.550E+02 | 1.000E+01 | --- | HCCZ |
| R013 | Contaminated zone b parameter | 4.380E+00 | 5.300E+00 | --- | BCZ |
| R013 | Average annual wind speed (m/sec) | 2.030E+00 | 2.000E+00 | --- | WIND |
| R013 | Humidity in air (g/m**3) | 6.100E+00 | 8.000E+00 | --- | HUMID |
| R013 | Evapotranspiration coefficient | 7.500E-01 | 5.000E-01 | --- | EVAPTR |
| R013 | Precipitation (m/yr) | 1.200E+00 | 1.000E+00 | --- | PRECIP |
| R013 | Irrigation (m/yr) | 4.350E-01 | 2.000E-01 | --- | RI |
| R013 | Irrigation mode | overhead | overhead | --- | IDITCH |
| R013 | Runoff coefficient | 6.000E-01 | 2.000E-01 | --- | RUNOFF |
| R013 | Watershed area for nearby stream or pond (m**2) | 7.770E+05 | 1.000E+06 | --- | WAREA |
| R013 | Accuracy for water/soil computations | 1.000E-03 | 1.000E-03 | --- | EPS |
| R014 | Density of saturated zone (g/cm**3) | 2.120E+00 | 1.500E+00 | --- | DENSAQ |
| R014 | Saturated zone total porosity | 3.000E-01 | 4.000E-01 | --- | TPSZ |
| R014 | Saturated zone effective porosity | 2.100E-01 | 2.000E-01 | --- | EPSZ |
| R014 | Saturated zone field capacity | 9.000E-02 | 2.000E-01 | --- | FCSZ |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 1.000E-01 | 1.000E+02 | --- | HCSZ |
| R014 | Saturated zone hydraulic gradient | 1.000E-01 | 2.000E-02 | --- | HGWT |
| R014 | Saturated zone b parameter | 4.900E+00 | 5.300E+00 | --- | BSZ |
| R014 | Water table drop rate (m/yr) | 1.000E-03 | 1.000E-03 | --- | VWT |
| R014 | Well pump intake depth (m below water table) | 1.451E+01 | 1.000E+01 | --- | DWIBWT |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | ND | ND | --- | MODEL |
| R014 | Well pumping rate (m**3/yr) | 1.323E+03 | 2.500E+02 | --- | UW |
| R015 | Number of unsaturated zone strata | 1 | 1 | --- | NS |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|-------|--|------------|-----------|--|----------------|
| ***** | ***** | ***** | ***** | ***** | ***** |
| R015 | Unsat. zone 1, thickness (m) | 1.430E+00 | 4.000E+00 | --- | H(1) |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 1.860E+00 | 1.500E+00 | --- | DENSUZ(1) |
| R015 | Unsat. zone 1, total porosity | 3.500E-01 | 4.000E-01 | --- | TPUZ(1) |
| R015 | Unsat. zone 1, effective porosity | 2.500E-01 | 2.000E-01 | --- | EPUZ(1) |
| R015 | Unsat. zone 1, field capacity | 1.000E-01 | 2.000E-01 | --- | FCUZ(1) |
| R015 | Unsat. zone 1, soil-specific b parameter | 4.380E+00 | 5.300E+00 | --- | BUZ(1) |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 5.550E+02 | 1.000E+01 | --- | HCUZ(1) |
| ***** | ***** | ***** | ***** | ***** | ***** |
| R016 | Distribution coefficients for H-3 | | | | |
| R016 | Contaminated zone (cm**3/g) | 6.000E-02 | 0.000E+00 | --- | DCNUCC(1) |
| R016 | Unsaturated zone 1 (cm**3/g) | 6.000E-02 | 0.000E+00 | --- | DCNUCU(1,1) |
| R016 | Saturated zone (cm**3/g) | 6.000E-02 | 0.000E+00 | --- | DCNUCS(1) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 4.974E-01 | ALEACH(1) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK(1) |
| ***** | ***** | ***** | ***** | ***** | ***** |
| R017 | Inhalation rate (m**3/yr) | 8.400E+03 | 8.400E+03 | --- | INHALR |
| R017 | Mass loading for inhalation (g/m**3) | 2.330E-05 | 1.000E-04 | --- | MLINH |
| R017 | Exposure duration | 3.000E+01 | 3.000E+01 | --- | ED |
| R017 | Shielding factor, inhalation | 5.500E-01 | 4.000E-01 | --- | SHF3 |
| R017 | Shielding factor, external gamma | 2.725E-01 | 7.000E-01 | --- | SHF1 |
| R017 | Fraction of time spent indoors | 6.571E-01 | 5.000E-01 | --- | FIND |
| R017 | Fraction of time spent outdoors (on site) | 1.181E-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) |
| ***** | ***** | ***** | ***** | ***** | ***** |
| 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) |
| ***** | ***** | ***** | ***** | ***** | ***** |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|--|--|------------|-----------|--|----------------|
| AA | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | --- | DIET (1) |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | --- | DIET (5) |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | DIET (6) |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | --- | SOIL |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | --- | FR9 |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | --- | FPLANT |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | --- | FMEAT |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | --- | FMILK |
| | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- | LFI5 |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | --- | YV (2) |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) |
| 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) | not used | 2.000E-05 | --- | C12WTR |
| C14 | C-12 concentration in contaminated soil (g/g) | not used | 3.000E-02 | --- | C12CZ |
| C14 | Fraction of vegetation carbon from soil | not used | 2.000E-02 | --- | CSOIL |
| C14 | Fraction of vegetation carbon from air | not used | 9.800E-01 | --- | CAIR |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|------|--|------------|------------|--|----------------|
| C14 | C-14 evasion layer thickness in soil (m) | not used | 3.000E-01 | --- | DMC |
| C14 | C-14 evasion flux rate from soil (1/sec) | not used | 7.000E-07 | --- | EVSN |
| C14 | C-12 evasion flux rate from soil (1/sec) | not used | 1.000E-10 | --- | REVSN |
| C14 | Fraction of grain in beef cattle feed | not used | 8.000E-01 | --- | AVFG4 |
| C14 | Fraction of grain in milk cow feed | not used | 2.000E-01 | --- | AVFG5 |
| C14 | DCF correction factor for gaseous forms of C14 | not used | 8.894E+01 | --- | CO2F |
| 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 | 32 | --- | --- | NPTS |
| 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 | ³ | User Selection |
|--|--------------|----------------|
| AA | | |
| 1 -- external gamma | ³ | active |
| 2 -- inhalation (w/o radon) | ³ | active |
| 3 -- plant ingestion | ³ | active |
| 4 -- meat ingestion | ³ | active |
| 5 -- milk ingestion | ³ | active |
| 6 -- aquatic foods | ³ | active |
| 7 -- drinking water | ³ | active |
| 8 -- soil ingestion | ³ | active |
| 9 -- radon | ³ | suppressed |
| Find peak pathway doses | ³ | active |
| ii | | |

| Menu | Parameter | Current Value | Default | Parameter Name |
|---|---|---------------|-----------|----------------|
| Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | C-14 | 2.090E-06 | 2.090E-06 | DCF2 (1) |
| Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | C-14 | 2.090E-06 | 2.090E-06 | DCF3 (1) |
| Food transfer factors: | | | | |
| D-34 | C-14, plant/soil concentration ratio, dimensionless | 5.500E+00 | 5.500E+00 | RTF (1,1) |
| D-34 | C-14, beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.100E-02 | 3.100E-02 | RTF (1,2) |
| D-34 | C-14, milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.200E-02 | 1.200E-02 | RTF (1,3) |
| 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) |
| 1RESRAD, Version 6.21 T« Limit = 0.5 year 04/21/2003 21:09 Page 3 | | | | |
| Summary : DCGL to Dose for C-14 File: C-14.rad | | | | |

| Parameter Menu input) | Name | Parameter | User Input | Default | (If different from user | Used by RESRAD |
|--|--|-----------|------------|-----------|-------------------------|----------------|
| AA | | | | | | |
| R011 | Area of contaminated zone (m**2) | AREA | 1.302E+04 | 1.000E+04 | --- | |
| R011 | Thickness of contaminated zone (m) | THICK0 | 1.575E+00 | 2.000E+00 | --- | |
| R011 | Length parallel to aquifer flow (m) | LCZPAQ | 1.290E+02 | 1.000E+02 | --- | |
| R011 | Basic radiation dose limit (mrem/yr) | BRDL | 2.500E+01 | 2.500E+01 | --- | |
| R011 | Time since placement of material (yr) | TI | 0.000E+00 | 0.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(2) | 1.000E+00 | 1.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(3) | 3.000E+00 | 3.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(4) | 1.000E+01 | 1.000E+01 | --- | |
| R011 | Times for calculations (yr) | T(5) | 3.000E+01 | 3.000E+01 | --- | |
| R011 | Times for calculations (yr) | T(6) | 1.000E+02 | 1.000E+02 | --- | |
| R011 | Times for calculations (yr) | T(7) | 3.000E+02 | 3.000E+02 | --- | |
| R011 | Times for calculations (yr) | T(8) | 1.000E+03 | 1.000E+03 | --- | |
| R011 | Times for calculations (yr) | T(9) | not used | 0.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(10) | not used | 0.000E+00 | --- | |
| R012 | Initial principal radionuclide (pCi/g): C-14 | S1(1) | 1.123E+01 | 0.000E+00 | --- | |
| R012 | Concentration in groundwater (pCi/L): C-14 | W1(1) | not used | 0.000E+00 | --- | |
| R013 | Cover depth (m) | COVER0 | 0.000E+00 | 0.000E+00 | --- | |
| R013 | Density of cover material (g/cm**3) | DENSCV | not used | 1.500E+00 | --- | |
| R013 | Cover depth erosion rate (m/yr) | VCV | not used | 1.000E-03 | --- | |
| R013 | Density of contaminated zone (g/cm**3) | DENSCZ | 1.860E+00 | 1.500E+00 | --- | |
| R013 | Contaminated zone erosion rate (m/yr) | VCZ | 8.500E-04 | 1.000E-03 | --- | |
| R013 | Contaminated zone total porosity | TPCZ | 3.500E-01 | 4.000E-01 | --- | |
| R013 | Contaminated zone field capacity | | 1.000E-01 | 2.000E-01 | --- | |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : DCGL to Dose for C-14 File: C-14.rad

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; margin-bottom: 2px;"></div> <div style="border: 1px solid black; height: 1.2em; margin-bottom: 2px;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for C-14 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 1.100E+01 | 3 | 0.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 1.100E+01 | 3 | 0.000E+00 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 1.100E+01 | 3 0.000E+00 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 7.037E-03 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | 3 | 3 | 3 | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|---|-----------|--|-------|-----------|-------------------------|
| 0 | 3 | 3 | User | 3 | |
| 3 | Parameter | Parameter | Input | Default | (If different from user |
| Menu | 3 | | | | input) |
| input) | 3 | Name | | | |
| AAA | | | | | |
| AAAAAAAAAAAAAAAAAAAAA | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 1.600E+02 3 --- |
| 3 | DIET(1) | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 1.400E+01 3 --- |
| 3 | DIET(2) | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 9.200E+01 3 --- |
| 3 | DIET(3) | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 6.300E+01 3 --- |
| 3 | DIET(4) | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 5.400E+00 3 --- |
| 3 | DIET(5) | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 9.000E-01 3 --- |
| 3 | DIET(6) | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 3.650E+01 3 --- |
| 3 | SOIL | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 5.100E+02 3 --- |
| 3 | DWI | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FDW | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FHHW | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FLW | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FIRW | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 5.000E-01 3 --- |
| 3 | FR9 | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FPLANT | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMEAT | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMILK | | | | |
| 3 | | | 3 | | 3 |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 6.800E+01 3 --- |
| 3 | LFI5 | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 5.500E+01 3 --- |
| 3 | LFI6 | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 5.000E+01 3 --- |
| 3 | LWI5 | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 1.600E+02 3 --- |
| 3 | LWI6 | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 5.000E-01 3 --- |
| 3 | LSI | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 1.000E-04 3 --- |
| 3 | MLFD | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 1.500E-01 3 --- |
| 3 | DM | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 9.000E-01 3 --- |
| 3 | DROOT | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWDW | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FGWHH | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWLW | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWIR | | | | |
| 3 | | | 3 | | 3 |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 7.000E-01 3 --- |
| 3 | YV(1) | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 1.500E+00 3 --- |
| 3 | YV(2) | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 1.100E+00 3 --- |
| 3 | YV(3) | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 1.700E-01 3 --- |
| 3 | TE(1) | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 2.500E-01 3 --- |
| 3 | TE(2) | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 8.000E-02 3 --- |
| 3 | TE(3) | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 1.000E-01 3 --- |
| 3 | TIV(1) | | | | |

| | | | | | | | | | |
|---------------------------------|---------|--|------------|-------|-----------|----------|-----------|---|-----|
| R19B | ³ | Translocation Factor for Leafy | | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ | TIV(2) | | | | | | | | |
| R19B | ³ | Translocation Factor for Fodder | | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ | TIV(3) | | | | | | | | |
| R19B | ³ | Dry Foliar Interception Fraction for Non-Leafy | | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ | RDRY(1) | | | | | | | | |
| R19B | ³ | Dry Foliar Interception Fraction for Leafy | | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ | RDRY(2) | | | | | | | | |
| R19B | ³ | Dry Foliar Interception Fraction for Fodder | | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ | RDRY(3) | | | | | | | | |
| R19B | ³ | Wet Foliar Interception Fraction for Non-Leafy | | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ | RWET(1) | | | | | | | | |
| R19B | ³ | Wet Foliar Interception Fraction for Leafy | | ³ | 5.800E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ | RWET(2) | | | | | | | | |
| R19B | ³ | Wet Foliar Interception Fraction for Fodder | | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ | RWET(3) | | | | | | | | |
| R19B | ³ | Weathering Removal Constant for Vegetation | | ³ | 3.300E+01 | ³ | 2.000E+01 | ³ | --- |
| ³ | WLAM | | | | | | | | |
| ³ | | | | ³ | | ³ | | ³ | |
| ³ | | | | | | | | | |
| C14 | ³ | C-12 concentration in water (g/cm**3) | | ³ | 2.000E-05 | ³ | 2.000E-05 | ³ | --- |
| ³ | C12WTR | | | | | | | | |
| C14 | ³ | C-12 concentration in contaminated soil (g/g) | | ³ | 3.000E-02 | ³ | 3.000E-02 | ³ | --- |
| ³ | C12CZ | | | | | | | | |
| C14 | ³ | Fraction of vegetation carbon from soil | | ³ | 2.000E-02 | ³ | 2.000E-02 | ³ | --- |
| ³ | CSOIL | | | | | | | | |
| C14 | ³ | Fraction of vegetation carbon from air | | ³ | 9.800E-01 | ³ | 9.800E-01 | ³ | --- |
| ³ | CAIR | | | | | | | | |
| <hr/> | | | | | | | | | |
| 1RESRAD, Version 6.21 | | T« Limit = 0.5 year | 04/21/2003 | 21:09 | Page | 6 | | | |
| Summary : DCGL to Dose for C-14 | | | | | File: | C-14.rad | | | |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| | | | | | |
|---|---|-----------|-----------------|-----------|----------------|
| | Menu | Parameter | Current Value | Default | Parameter Name |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | Mn-54 | | 6.700E-06 | 6.700E-06 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | Mn-54 | | 2.770E-06 | 2.770E-06 | DCF3(1) |
| D-34 | Food transfer factors: | | | | |
| D-34 | Mn-54 , plant/soil concentration ratio, dimensionless | | 3.000E-01 | 3.000E-01 | RTF(1,1) |
| D-34 | Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | | 5.000E-04 | 5.000E-04 | RTF(1,2) |
| D-34 | Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | | 3.000E-04 | 3.000E-04 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | | |
| D-5 | Mn-54 , fish | | 4.000E+02 | 4.000E+02 | BIOFAC(1,1) |
| D-5 | Mn-54 , crustacea and mollusks | | 9.000E+04 | 9.000E+04 | BIOFAC(1,2) |
| 1RESRAD, Version 6.21 T« Limit = 0.5 year 04/21/2003 20:17 Page 3 | | | | | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | File: MN-54.RAD | | |

Site-Specific Parameter Summary

| Parameter Menu input) | Name | Parameter | User Input | Default | (If different from user | Used by RESRAD |
|--|---|-----------|------------|-----------|-------------------------|----------------|
| AA | | | | | | |
| R011 | Area of contaminated zone (m**2) | AREA | 1.302E+04 | 1.000E+04 | --- | |
| R011 | Thickness of contaminated zone (m) | THICK0 | 1.575E+00 | 2.000E+00 | --- | |
| R011 | Length parallel to aquifer flow (m) | LCZPAQ | 1.290E+02 | 1.000E+02 | --- | |
| R011 | Basic radiation dose limit (mrem/yr) | BRDL | 2.500E+01 | 2.500E+01 | --- | |
| R011 | Time since placement of material (yr) | TI | 0.000E+00 | 0.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(2) | 1.000E+00 | 1.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(3) | 3.000E+00 | 3.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(4) | 1.000E+01 | 1.000E+01 | --- | |
| R011 | Times for calculations (yr) | T(5) | 3.000E+01 | 3.000E+01 | --- | |
| R011 | Times for calculations (yr) | T(6) | 1.000E+02 | 1.000E+02 | --- | |
| R011 | Times for calculations (yr) | T(7) | 3.000E+02 | 3.000E+02 | --- | |
| R011 | Times for calculations (yr) | T(8) | 1.000E+03 | 1.000E+03 | --- | |
| R011 | Times for calculations (yr) | T(9) | not used | 0.000E+00 | --- | |
| R011 | Times for calculations (yr) | T(10) | not used | 0.000E+00 | --- | |
| R012 | Initial principal radionuclide (pCi/g): Mn-54 | S1(1) | 2.166E+01 | 0.000E+00 | --- | |
| R012 | Concentration in groundwater (pCi/L): Mn-54 | W1(1) | not used | 0.000E+00 | --- | |
| R013 | Cover depth (m) | COVER0 | 0.000E+00 | 0.000E+00 | --- | |
| R013 | Density of cover material (g/cm**3) | DENSCV | not used | 1.500E+00 | --- | |
| R013 | Cover depth erosion rate (m/yr) | VCV | not used | 1.000E-03 | --- | |
| R013 | Density of contaminated zone (g/cm**3) | DENSCZ | 1.860E+00 | 1.500E+00 | --- | |
| R013 | Contaminated zone erosion rate (m/yr) | VCZ | 8.500E-04 | 1.000E-03 | --- | |
| R013 | Contaminated zone total porosity | TPCZ | 3.500E-01 | 4.000E-01 | --- | |
| R013 | Contaminated zone field capacity | | 1.000E-01 | 2.000E-01 | --- | |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: MN-54.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Mn-54 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 1.580E+02 | 3 | 2.000E+02 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 1.580E+02 | 3 | 2.000E+02 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 1.580E+02 | 3 2.000E+02 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 4.939E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | 3 | 3 | 3 | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|--|-----------|--|-------|-----------|---------------------------|
| 0 | 3 | 3 | User | 3 | |
| 3 | Parameter | | | | |
| Menu | 3 | Parameter | Input | Default | 3 (If different from user |
| input) | 3 | Name | | | |
| AA | | | | | |
| AAAAAAAAAAAAAAAA | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 1.600E+02 3 --- |
| 3 | DIET(1) | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 1.400E+01 3 --- |
| 3 | DIET(2) | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 9.200E+01 3 --- |
| 3 | DIET(3) | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 6.300E+01 3 --- |
| 3 | DIET(4) | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 5.400E+00 3 --- |
| 3 | DIET(5) | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 9.000E-01 3 --- |
| 3 | DIET(6) | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 3.650E+01 3 --- |
| 3 | SOIL | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 5.100E+02 3 --- |
| 3 | DWI | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FDW | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FHHW | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FLW | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FIRW | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 5.000E-01 3 --- |
| 3 | FR9 | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3-1 3 --- |
| 3 | FPLANT | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3-1 3 --- |
| 3 | FMEAT | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3-1 3 --- |
| 3 | FMILK | | | | |
| 3 | | | 3 | | 3 |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 6.800E+01 3 --- |
| 3 | LFI5 | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 5.500E+01 3 --- |
| 3 | LFI6 | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 5.000E+01 3 --- |
| 3 | LWI5 | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 1.600E+02 3 --- |
| 3 | LWI6 | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 5.000E-01 3 --- |
| 3 | LSI | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 1.000E-04 3 --- |
| 3 | MLFD | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 1.500E-01 3 --- |
| 3 | DM | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 9.000E-01 3 --- |
| 3 | DROOT | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWDW | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FGWHH | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWLW | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWIR | | | | |
| 3 | | | 3 | | 3 |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 7.000E-01 3 --- |
| 3 | YV(1) | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 1.500E+00 3 --- |
| 3 | YV(2) | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 1.100E+00 3 --- |
| 3 | YV(3) | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 1.700E-01 3 --- |
| 3 | TE(1) | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 2.500E-01 3 --- |
| 3 | TE(2) | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 8.000E-02 3 --- |
| 3 | TE(3) | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 1.000E-01 3 --- |
| 3 | TIV(1) | | | | |

| | | | | | | | | |
|---|---|--|---|------------|---|-----------|-----------------|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| | | Site-Specific Parameter Summary (continued) | | | | |
|--|-----------|--|---|-----------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | 3 | Input | 3 | Default |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | 3 | Input | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| | Menu | Parameter | Current Value | Default | Parameter Name |
|------|---|-----------|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | Fe-55 | | 2.690E-06 | 2.690E-06 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | Fe-55 | | 6.070E-07 | 6.070E-07 | DCF3(1) |
| D-34 | Food transfer factors: | | | | |
| D-34 | Fe-55 , plant/soil concentration ratio, dimensionless | | 1.000E-03 | 1.000E-03 | RTF(1,1) |
| D-34 | Fe-55 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | | 2.000E-02 | 2.000E-02 | RTF(1,2) |
| D-34 | Fe-55 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | | 3.000E-04 | 3.000E-04 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | | |
| D-5 | Fe-55 , fish | | 2.000E+02 | 2.000E+02 | BIOFAC(1,1) |
| D-5 | Fe-55 , crustacea and mollusks | | 3.200E+03 | 3.200E+03 | BIOFAC(1,2) |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: FE-55.RAD

Site-Specific Parameter Summary

[illegible]

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: FE-55.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Fe-55 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 2.090E+02 | 3 | 1.000E+03 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 2.090E+02 | 3 | 1.000E+03 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 2.090E+02 | 3 1.000E+03 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 3.734E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | 3 | 3 | 3 | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|---|-----------|--|-------|-----------|-------------------------|
| 0 | 3 | 3 | User | 3 | |
| 3 | Parameter | Parameter | Input | Default | (If different from user |
| Menu | 3 | | | | input) |
| input) | 3 | Name | | | |
| AAA | | | | | |
| AAAAAAAAAAAAAAAAAAAAA | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 1.600E+02 3 --- |
| 3 | DIET(1) | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 1.400E+01 3 --- |
| 3 | DIET(2) | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 9.200E+01 3 --- |
| 3 | DIET(3) | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 6.300E+01 3 --- |
| 3 | DIET(4) | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 5.400E+00 3 --- |
| 3 | DIET(5) | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 9.000E-01 3 --- |
| 3 | DIET(6) | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 3.650E+01 3 --- |
| 3 | SOIL | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 5.100E+02 3 --- |
| 3 | DWI | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FDW | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FHHW | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FLW | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FIRW | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 5.000E-01 3 --- |
| 3 | FR9 | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FPLANT | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMEAT | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMILK | | | | |
| 3 | | | 3 | | 3 |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 6.800E+01 3 --- |
| 3 | LFI5 | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 5.500E+01 3 --- |
| 3 | LFI6 | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 5.000E+01 3 --- |
| 3 | LWI5 | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 1.600E+02 3 --- |
| 3 | LWI6 | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 5.000E-01 3 --- |
| 3 | LSI | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 1.000E-04 3 --- |
| 3 | MLFD | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 1.500E-01 3 --- |
| 3 | DM | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 9.000E-01 3 --- |
| 3 | DROOT | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWDW | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FGWHH | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWLW | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWIR | | | | |
| 3 | | | 3 | | 3 |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 7.000E-01 3 --- |
| 3 | YV(1) | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 1.500E+00 3 --- |
| 3 | YV(2) | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 1.100E+00 3 --- |
| 3 | YV(3) | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 1.700E-01 3 --- |
| 3 | TE(1) | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 2.500E-01 3 --- |
| 3 | TE(2) | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 8.000E-02 3 --- |
| 3 | TE(3) | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 1.000E-01 3 --- |
| 3 | TIV(1) | | | | |

| | | | | | | | | |
|---|---------|--|---|-----------|-----------------|-----------|---|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(2) | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(3) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(1) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(2) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(3) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(1) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(2) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(3) | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 | WLAM | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 | C12WTR | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 | C12CZ | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 | CSOIL | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 | CAIR | | | | | | | |
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| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | | File: FE-55.RAD | | | |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| | | | | | |
|--|---|-----------|-----------------|--------------|----------------|
| | Menu | Parameter | Current Value | Default | Parameter Name |
| AA | | | | | |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | Ni-59 | | 2.700E-06 | 2.700E-06 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | Ni-59 | | 2.100E-07 | 2.100E-07 | DCF3(1) |
| D-34 | Food transfer factors: | | | | |
| D-34 | Ni-59 , plant/soil concentration ratio, dimensionless | | 5.000E-02 | 5.000E-02 | RTF(1,1) |
| D-34 | Ni-59 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | | 5.000E-03 | 5.000E-03 | RTF(1,2) |
| D-34 | Ni-59 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | | 2.000E-02 | 2.000E-02 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | | |
| D-5 | Ni-59 , fish | | 1.000E+02 | 1.000E+02 | BIOFAC(1,1) |
| D-5 | Ni-59 , crustacea and mollusks | | 1.000E+02 | 1.000E+02 | BIOFAC(1,2) |
| iii | | | | | |
| RESRAD, Version 6.21 T« Limit = 0.5 year | | | 04/25/2003 | 10:55 Page 3 | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | File: NI-59.RAD | | |

Site-Specific Parameter Summary

| 0 | 3 | User | 3 | Used by RESRAD |
|--|--|-------------|-------------|-------------------------|
| 3 | Parameter | Input | Default | (If different from user |
| Menu | Parameter | | | |
| input) | Name | | | |
| AA | | | | |
| | R011 3 Area of contaminated zone (m**2) | 3 1.302E+04 | 3 1.000E+04 | --- |
| 3 | AREA | | | |
| | R011 3 Thickness of contaminated zone (m) | 3 1.575E+00 | 3 2.000E+00 | --- |
| 3 | THICK0 | | | |
| | R011 3 Length parallel to aquifer flow (m) | 3 1.290E+02 | 3 1.000E+02 | --- |
| 3 | LCZPAQ | | | |
| | R011 3 Basic radiation dose limit (mrem/yr) | 3 2.500E+01 | 3 2.500E+01 | --- |
| 3 | BRDL | | | |
| | R011 3 Time since placement of material (yr) | 3 0.000E+00 | 3 0.000E+00 | --- |
| 3 | TI | | | |
| | R011 3 Times for calculations (yr) | 3 1.000E+00 | 3 1.000E+00 | --- |
| 3 | T(2) | | | |
| | R011 3 Times for calculations (yr) | 3 3.000E+00 | 3 3.000E+00 | --- |
| 3 | T(3) | | | |
| | R011 3 Times for calculations (yr) | 3 1.000E+01 | 3 1.000E+01 | --- |
| 3 | T(4) | | | |
| | R011 3 Times for calculations (yr) | 3 3.000E+01 | 3 3.000E+01 | --- |
| 3 | T(5) | | | |
| | R011 3 Times for calculations (yr) | 3 1.000E+02 | 3 1.000E+02 | --- |
| 3 | T(6) | | | |
| | R011 3 Times for calculations (yr) | 3 3.000E+02 | 3 3.000E+02 | --- |
| 3 | T(7) | | | |
| | R011 3 Times for calculations (yr) | 3 1.000E+03 | 3 1.000E+03 | --- |
| 3 | T(8) | | | |
| | R011 3 Times for calculations (yr) | 3 not used | 3 0.000E+00 | --- |
| 3 | T(9) | | | |
| | R011 3 Times for calculations (yr) | 3 not used | 3 0.000E+00 | --- |
| 3 | T(10) | | | |
| 3 | | 3 | 3 | |
| | R012 3 Initial principal radionuclide (pCi/g): Ni-59 | 3 4.007E+03 | 3 0.000E+00 | --- |
| 3 | S1(1) | | | |
| | R012 3 Concentration in groundwater (pCi/L): Ni-59 | 3 not used | 3 0.000E+00 | --- |
| 3 | W1(1) | | | |
| 3 | | 3 | 3 | |
| | R013 3 Cover depth (m) | 3 0.000E+00 | 3 0.000E+00 | --- |
| 3 | COVER0 | | | |
| | R013 3 Density of cover material (g/cm**3) | 3 not used | 3 1.500E+00 | --- |
| 3 | DENSCV | | | |
| | R013 3 Cover depth erosion rate (m/yr) | 3 not used | 3 1.000E-03 | --- |
| 3 | VCV | | | |
| | R013 3 Density of contaminated zone (g/cm**3) | 3 1.860E+00 | 3 1.500E+00 | --- |
| 3 | DENSCZ | | | |
| | R013 3 Contaminated zone erosion rate (m/yr) | 3 8.500E-04 | 3 1.000E-03 | --- |
| 3 | VCZ | | | |
| | R013 3 Contaminated zone total porosity | 3 3.500E-01 | 3 4.000E-01 | --- |
| 3 | TPCZ | | | |
| | R013 3 Contaminated zone field capacity | 3 1.000E-01 | 3 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: NI-59.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Ni-59 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 4.240E+02 | 3 | 1.000E+03 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 4.240E+02 | 3 | 1.000E+03 | --- |

| | | | |
|-----------------|--|---------------------------|-------------------------|
| 3 DCNUCU(1,1) | | | |
| R016 3 | Saturated zone (cm**3/g) | 3 4.240E+02 3 1.000E+03 3 | --- |
| 3 DCNUCS(1) | | | |
| R016 3 | Leach rate (/yr) | 3 0.000E+00 3 0.000E+00 3 | 1.841E-04 |
| 3 ALEACH(1) | | | |
| R016 3 | Solubility constant | 3 0.000E+00 3 0.000E+00 3 | not used |
| 3 SOLUBK(1) | | | |
| 3 | | | |
| R017 3 | Inhalation rate (m**3/yr) | 3 8.400E+03 3 8.400E+03 3 | --- |
| 3 INHALR | | | |
| R017 3 | Mass loading for inhalation (g/m**3) | 3 2.330E-05 3 1.000E-04 3 | --- |
| 3 MLINH | | | |
| R017 3 | Exposure duration | 3 3.000E+01 3 3.000E+01 3 | --- |
| 3 ED | | | |
| R017 3 | Shielding factor, inhalation | 3 5.500E-01 3 4.000E-01 3 | --- |
| 3 SHF3 | | | |
| R017 3 | Shielding factor, external gamma | 3 2.725E-01 3 7.000E-01 3 | --- |
| 3 SHF1 | | | |
| R017 3 | Fraction of time spent indoors | 3 6.571E-01 3 5.000E-01 3 | --- |
| 3 FIND | | | |
| R017 3 | Fraction of time spent outdoors (on site) | 3 1.181E-01 3 2.500E-01 3 | --- |
| 3 FOTD | | | |
| R017 3 | Shape factor flag, external gamma | 3 1.000E+00 3 1.000E+00 3 | >0 shows circular AREA. |
| 3 FS | | | |
| R017 3 | Radii of shape factor array (used if FS = -1): | 3 3 3 | |
| 3 | | | |
| R017 3 | Outer annular radius (m), ring 1: | 3 not used 3 5.000E+01 3 | --- |
| 3 RAD_SHAPE(1) | | | |
| R017 3 | Outer annular radius (m), ring 2: | 3 not used 3 7.071E+01 3 | --- |
| 3 RAD_SHAPE(2) | | | |
| R017 3 | Outer annular radius (m), ring 3: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(3) | | | |
| R017 3 | Outer annular radius (m), ring 4: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(4) | | | |
| R017 3 | Outer annular radius (m), ring 5: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(5) | | | |
| R017 3 | Outer annular radius (m), ring 6: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(6) | | | |
| R017 3 | Outer annular radius (m), ring 7: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(7) | | | |
| R017 3 | Outer annular radius (m), ring 8: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(8) | | | |
| R017 3 | Outer annular radius (m), ring 9: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(9) | | | |
| R017 3 | Outer annular radius (m), ring 10: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(10) | | | |
| R017 3 | Outer annular radius (m), ring 11: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(11) | | | |
| R017 3 | Outer annular radius (m), ring 12: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(12) | | | |
| 3 | | | |
| R017 3 | Fractions of annular areas within AREA: | 3 3 3 | |
| 3 | | | |
| R017 3 | Ring 1 | 3 not used 3 1.000E+00 3 | --- |
| 3 FRACA(1) | | | |
| R017 3 | Ring 2 | 3 not used 3 2.732E-01 3 | --- |
| 3 FRACA(2) | | | |
| R017 3 | Ring 3 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(3) | | | |
| R017 3 | Ring 4 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(4) | | | |
| R017 3 | Ring 5 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(5) | | | |
| R017 3 | Ring 6 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(6) | | | |
| R017 3 | Ring 7 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(7) | | | |
| R017 3 | Ring 8 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(8) | | | |
| R017 3 | Ring 9 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(9) | | | |
| R017 3 | Ring 10 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(10) | | | |
| R017 3 | Ring 11 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(11) | | | |
| R017 3 | Ring 12 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(12) | | | |
| 3 | | | |

| Site-Specific | | | Parameter Summary (continued) | | | Used by RESRAD |
|--|--|-----------|-------------------------------|---------|-------------------------|----------------|
| 0 | 3 | 3 | 3 | 3 | 3 | |
| 3 | Parameter | Parameter | User | Default | (If different from user | |
| Menu | Name | Input | | | input) | |
| AA AAAAAAAAAAAAAAAAAA | | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | --- | | |
| DIET(1) | | | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | --- | | |
| DIET(5) | | | | | | |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | | |
| DIET(6) | | | | | | |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | --- | | |
| SOIL | | | | | | |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | --- | | |
| FR9 | | | | | | |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | --- | | |
| FPLANT | | | | | | |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | --- | | |
| FMEAT | | | | | | |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | --- | | |
| FMILK | | | | | | |
| | | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- | | |
| LFI5 | | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | --- | | |
| YV(2) | | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) | | | | | | |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | | |
| TIV(1) | | | | | | |

| | | | | | | | | |
|---|---|--|---|------------|---|-----------|---|-----------------|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | | | | | File: NI-59.RAD |

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|-----------|--|---|-----------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | 3 | Input | 3 | Default |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | 3 | Input | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| | | | | |
|---|---|---------------|-----------|----------------|
| Menu | Parameter | Current Value | Default | Parameter Name |
| AAA | | | | |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Ni-63 | 6.290E-06 | 6.290E-06 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Ni-63 | 5.770E-07 | 5.770E-07 | DCF3(1) |
| D-34 | Food transfer factors: | | | |
| D-34 | Ni-63 , plant/soil concentration ratio, dimensionless | 5.000E-02 | 5.000E-02 | RTF(1,1) |
| D-34 | Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.000E-03 | 5.000E-03 | RTF(1,2) |
| D-34 | Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-02 | 2.000E-02 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Ni-63 , fish | 1.000E+02 | 1.000E+02 | BIOFAC(1,1) |
| D-5 | Ni-63 , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC(1,2) |
| iii | | | | |
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| Summary : Yankee Rowe Sensitivity Analysis=soil File: YR Ni-63.RAD | | | | |

Site-Specific Parameter Summary

| Parameter Menu input) | Parameter Name | User Input | Default | Used by RESRAD (If different from user |
|-----------------------|---|------------|-----------|--|
| ***** | | | | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T(2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T(3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T(4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T(5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T(6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T(7) | | | | |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T(8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(10) | | | | |
| | | | | |
| R012 | Initial principal radionuclide (pCi/g): Ni-63 | 1.464E+03 | 0.000E+00 | --- |
| S1(1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Ni-63 | not used | 0.000E+00 | --- |
| W1(1) | | | | |
| | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Ni-63.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Ni-63 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 4.240E+02 | 3 | 1.000E+03 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 4.240E+02 | 3 | 1.000E+03 | --- |

| | | | | |
|---|---|-----------|---|-------------------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 | 4.240E+02 | 3 | 1.000E+03 3 --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 | 0.000E+00 | 3 | 0.000E+00 3 1.841E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 | 0.000E+00 | 3 | 0.000E+00 3 not used |
| 3 SOLUBK(1) | 3 | | 3 | |
| 3 | | | | |
| R017 3 Inhalation rate (m**3/yr) | 3 | 8.400E+03 | 3 | 8.400E+03 3 --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 | 2.330E-05 | 3 | 1.000E-04 3 --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 | 3.000E+01 | 3 | 3.000E+01 3 --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 | 5.500E-01 | 3 | 4.000E-01 3 --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 | 2.725E-01 | 3 | 7.000E-01 3 --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 | 6.571E-01 | 3 | 5.000E-01 3 --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 | 1.181E-01 | 3 | 2.500E-01 3 --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 | 1.000E+00 | 3 | 1.000E+00 3 >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 | not used | 3 | 5.000E+01 3 --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 | not used | 3 | 7.071E+01 3 --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(12) | 3 | | 3 | |
| 3 | | | | |
| R017 3 Fractions of annular areas within AREA: | 3 | | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 | not used | 3 | 1.000E+00 3 --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 | not used | 3 | 2.732E-01 3 --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(12) | 3 | | 3 | |
| 3 | | | | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|--|--|-------------------------------|-----------|-------------------------|----------------|
| Menu | Parameter | Input | Default | (If different from user | |
| input) | Name | | | | |
| AA | | | | | |
| AAAAAAAAAAAAAAAAAAAAAAAA | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | | --- |
| DIET(1) | | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | | --- |
| DIET(5) | | | | | |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | | --- |
| DIET(6) | | | | | |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | | --- |
| SOIL | | | | | |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | | --- |
| FR9 | | | | | |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | | --- |
| FPLANT | | | | | |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | | --- |
| FMEAT | | | | | |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | | --- |
| FMILK | | | | | |
| | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | | --- |
| LFI5 | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | | --- |
| YV(2) | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) | | | | | |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | | --- |
| TIV(1) | | | | | |

| | | | | | | | | |
|---|---------|--|---------------------|-----------|------------------|-----------|--------------------|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(2) | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(3) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(1) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(2) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(3) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(1) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(2) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(3) | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 | WLAM | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 | C12WTR | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 | C12CZ | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 | CSOIL | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 | CAIR | | | | | | | |
| 1RESRAD, Version 6.21 | | | T« Limit = 0.5 year | | 04/29/2003 19:36 | | Page 6 | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | | | | File: YR Ni-63.RAD | |


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1RESRAD, Version 6.21      T« Limit = 0.5 year      04/21/2003 16:51 Page 3
Summary : DCGL to Dose for Co-60                      File: Co-60.RAD
```

| Parameter Menu input) | Name | Parameter | User Input | Default | (If different from user Used by RESRAD |
|--|---|-----------|------------|-----------|--|
| AA | | | | | |
| R011 | Area of contaminated zone (m**2) | AREA | 1.302E+04 | 1.000E+04 | --- |
| R011 | Thickness of contaminated zone (m) | THICK0 | 1.575E+00 | 2.000E+00 | --- |
| R011 | Length parallel to aquifer flow (m) | LCZPAQ | 1.290E+02 | 1.000E+02 | --- |
| R011 | Basic radiation dose limit (mrem/yr) | BRDL | 2.500E+01 | 2.500E+01 | --- |
| R011 | Time since placement of material (yr) | TI | 0.000E+00 | 0.000E+00 | --- |
| R011 | Times for calculations (yr) | T(2) | 1.000E+00 | 1.000E+00 | --- |
| R011 | Times for calculations (yr) | T(3) | 3.000E+00 | 3.000E+00 | --- |
| R011 | Times for calculations (yr) | T(4) | 1.000E+01 | 1.000E+01 | --- |
| R011 | Times for calculations (yr) | T(5) | 3.000E+01 | 3.000E+01 | --- |
| R011 | Times for calculations (yr) | T(6) | 1.000E+02 | 1.000E+02 | --- |
| R011 | Times for calculations (yr) | T(7) | 3.000E+02 | 3.000E+02 | --- |
| R011 | Times for calculations (yr) | T(8) | 1.000E+03 | 1.000E+03 | --- |
| R011 | Times for calculations (yr) | T(9) | not used | 0.000E+00 | --- |
| R011 | Times for calculations (yr) | T(10) | not used | 0.000E+00 | --- |
| R012 | Initial principal radionuclide (pCi/g): Co-60 | S1(1) | 4.838E+00 | 0.000E+00 | --- |
| R012 | Concentration in groundwater (pCi/L): Co-60 | W1(1) | not used | 0.000E+00 | --- |
| R013 | Cover depth (m) | COVER0 | 0.000E+00 | 0.000E+00 | --- |
| R013 | Density of cover material (g/cm**3) | DENSCV | not used | 1.500E+00 | --- |
| R013 | Cover depth erosion rate (m/yr) | VCV | not used | 1.000E-03 | --- |
| R013 | Density of contaminated zone (g/cm**3) | DENSCZ | 1.860E+00 | 1.500E+00 | --- |
| R013 | Contaminated zone erosion rate (m/yr) | VCZ | 8.500E-04 | 1.000E-03 | --- |
| R013 | Contaminated zone total porosity | TPCZ | 3.500E-01 | 4.000E-01 | --- |
| R013 | Contaminated zone field capacity | | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : DCGL to Dose for Co-60 File: Co-60.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Co-60 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 2.350E+02 | 3 | 1.000E+03 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 2.350E+02 | 3 | 1.000E+03 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 2.350E+02 | 3 1.000E+03 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 3.321E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | | | | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | | | | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | | | | |

| | | | Site-Specific Parameter Summary (continued) | | | Used by RESRAD | | |
|--|-----------|--|---|-----------|---|----------------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | | | |
| 3 | Parameter | | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default | 3 | (If different from user |
| input) | 3 | Name | | | | | | |
| AA AAAAAAAAAAAAAAAAAA | | | | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 | 1.600E+02 | 3 | --- |
| 3 | DIET(1) | | | | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 | 1.400E+01 | 3 | --- |
| 3 | DIET(2) | | | | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 | 9.200E+01 | 3 | --- |
| 3 | DIET(3) | | | | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 | 6.300E+01 | 3 | --- |
| 3 | DIET(4) | | | | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 | 5.400E+00 | 3 | --- |
| 3 | DIET(5) | | | | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 | 9.000E-01 | 3 | --- |
| 3 | DIET(6) | | | | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 | 3.650E+01 | 3 | --- |
| 3 | SOIL | | | | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 | 5.100E+02 | 3 | --- |
| 3 | DWI | | | | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FDW | | | | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FHHW | | | | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FLW | | | | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FIRW | | | | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 | 5.000E-01 | 3 | --- |
| 3 | FR9 | | | | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FPLANT | | | | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMEAT | | | | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMILK | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 | 6.800E+01 | 3 | --- |
| 3 | LFI5 | | | | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 | 5.500E+01 | 3 | --- |
| 3 | LFI6 | | | | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 | 5.000E+01 | 3 | --- |
| 3 | LWI5 | | | | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 | 1.600E+02 | 3 | --- |
| 3 | LWI6 | | | | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 | 5.000E-01 | 3 | --- |
| 3 | LSI | | | | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 | 1.000E-04 | 3 | --- |
| 3 | MLFD | | | | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 | 1.500E-01 | 3 | --- |
| 3 | DM | | | | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 | 9.000E-01 | 3 | --- |
| 3 | DROOT | | | | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWDW | | | | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWHH | | | | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWLW | | | | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWIR | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 | 7.000E-01 | 3 | --- |
| 3 | YV(1) | | | | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 | 1.500E+00 | 3 | --- |
| 3 | YV(2) | | | | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 | 1.100E+00 | 3 | --- |
| 3 | YV(3) | | | | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 | 1.700E-01 | 3 | --- |
| 3 | TE(1) | | | | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | TE(2) | | | | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 | 8.000E-02 | 3 | --- |
| 3 | TE(3) | | | | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 | 1.000E-01 | 3 | --- |
| 3 | TIV(1) | | | | | | | |

| | | | | | | | | |
|----------------------------------|---|--|---|------------|---|-----------|---|-----------------|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| Summary : DCGL to Dose for Co-60 | | | | | | | | File: Co-60.RAD |

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|---|--|------|-----------|---|-------------------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 Parameter | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | | | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

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Summary : DCGL to Dose for Co-60                      File: Co-60.RAD

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

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| | | | | |
|--|---|---------------|-----------|----------------|
| Menu | Parameter | Current Value | Default | Parameter Name |
| AAA | | | | |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Sr-90+D | 1.310E-03 | 1.310E-03 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Sr-90+D | 1.530E-04 | 1.530E-04 | DCF3(1) |
| D-34 | Food transfer factors: | | | |
| D-34 | Sr-90+D , plant/soil concentration ratio, dimensionless | 3.000E-01 | 3.000E-01 | RTF(1,1) |
| D-34 | Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-03 | 8.000E-03 | RTF(1,2) |
| D-34 | Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Sr-90+D , fish | 6.000E+01 | 6.000E+01 | BIOFAC(1,1) |
| D-5 | Sr-90+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC(1,2) |
| iii | | | | |
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| Summary : Yankee Rowe Sensitivity Analysis=soil File: YR Sr-90.RAD | | | | |

Site-Specific Parameter Summary

| Menu | Parameter Name | Input | Default | Used by RESRAD |
|--------|---|-----------|-----------|----------------|
| ***** | | | | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T(2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T(3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T(4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T(5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T(6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T(7) | | | | |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T(8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(10) | | | | |
| | | | | |
| R012 | Initial principal radionuclide (pCi/g): Sr-90 | 2.680E+00 | 0.000E+00 | --- |
| S1(1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Sr-90 | not used | 0.000E+00 | --- |
| W1(1) | | | | |
| | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Sr-90.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Sr-90 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 3.200E+01 | 3 | 3.000E+01 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 3.200E+01 | 3 | 3.000E+01 | --- |

| | | | |
|-----------------|--|---------------------------|-------------------------|
| 3 DCNUCU(1,1) | | | |
| R016 3 | Saturated zone (cm**3/g) | 3 3.200E+01 3 3.000E+01 3 | --- |
| 3 DCNUCS(1) | | | |
| R016 3 | Leach rate (/yr) | 3 0.000E+00 3 0.000E+00 3 | 2.433E-03 |
| 3 ALEACH(1) | | | |
| R016 3 | Solubility constant | 3 0.000E+00 3 0.000E+00 3 | not used |
| 3 SOLUBK(1) | | | |
| 3 | | | |
| R017 3 | Inhalation rate (m**3/yr) | 3 8.400E+03 3 8.400E+03 3 | --- |
| 3 INHALR | | | |
| R017 3 | Mass loading for inhalation (g/m**3) | 3 2.330E-05 3 1.000E-04 3 | --- |
| 3 MLINH | | | |
| R017 3 | Exposure duration | 3 3.000E+01 3 3.000E+01 3 | --- |
| 3 ED | | | |
| R017 3 | Shielding factor, inhalation | 3 5.500E-01 3 4.000E-01 3 | --- |
| 3 SHF3 | | | |
| R017 3 | Shielding factor, external gamma | 3 2.725E-01 3 7.000E-01 3 | --- |
| 3 SHF1 | | | |
| R017 3 | Fraction of time spent indoors | 3 6.571E-01 3 5.000E-01 3 | --- |
| 3 FIND | | | |
| R017 3 | Fraction of time spent outdoors (on site) | 3 1.181E-01 3 2.500E-01 3 | --- |
| 3 FOTD | | | |
| R017 3 | Shape factor flag, external gamma | 3 1.000E+00 3 1.000E+00 3 | >0 shows circular AREA. |
| 3 FS | | | |
| R017 3 | Radii of shape factor array (used if FS = -1): | 3 3 3 | |
| 3 | | | |
| R017 3 | Outer annular radius (m), ring 1: | 3 not used 3 5.000E+01 3 | --- |
| 3 RAD_SHAPE(1) | | | |
| R017 3 | Outer annular radius (m), ring 2: | 3 not used 3 7.071E+01 3 | --- |
| 3 RAD_SHAPE(2) | | | |
| R017 3 | Outer annular radius (m), ring 3: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(3) | | | |
| R017 3 | Outer annular radius (m), ring 4: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(4) | | | |
| R017 3 | Outer annular radius (m), ring 5: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(5) | | | |
| R017 3 | Outer annular radius (m), ring 6: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(6) | | | |
| R017 3 | Outer annular radius (m), ring 7: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(7) | | | |
| R017 3 | Outer annular radius (m), ring 8: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(8) | | | |
| R017 3 | Outer annular radius (m), ring 9: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(9) | | | |
| R017 3 | Outer annular radius (m), ring 10: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(10) | | | |
| R017 3 | Outer annular radius (m), ring 11: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(11) | | | |
| R017 3 | Outer annular radius (m), ring 12: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(12) | | | |
| 3 | | | |
| R017 3 | Fractions of annular areas within AREA: | 3 3 3 | |
| 3 | | | |
| R017 3 | Ring 1 | 3 not used 3 1.000E+00 3 | --- |
| 3 FRACA(1) | | | |
| R017 3 | Ring 2 | 3 not used 3 2.732E-01 3 | --- |
| 3 FRACA(2) | | | |
| R017 3 | Ring 3 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(3) | | | |
| R017 3 | Ring 4 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(4) | | | |
| R017 3 | Ring 5 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(5) | | | |
| R017 3 | Ring 6 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(6) | | | |
| R017 3 | Ring 7 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(7) | | | |
| R017 3 | Ring 8 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(8) | | | |
| R017 3 | Ring 9 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(9) | | | |
| R017 3 | Ring 10 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(10) | | | |
| R017 3 | Ring 11 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(11) | | | |
| R017 3 | Ring 12 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(12) | | | |
| 3 | | | |

| Site-Specific | | Parameter Summary (continued) | | |
|---|--|-------------------------------|-----------|-------------------------|
| Menu | Parameter | User | Default | Used by RESRAD |
| input) | Name | Input | Default | (If different from user |
| <div style="border: 1px solid black; height: 15px; width: 100%;"></div> | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | --- |
| DIET(1) | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | --- |
| DIET(5) | | | | |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- |
| DIET(6) | | | | |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | --- |
| SOIL | | | | |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | --- |
| FR9 | | | | |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | --- |
| FPLANT | | | | |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | --- |
| FMEAT | | | | |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | --- |
| FMILK | | | | |
| | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- |
| LFI5 | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | --- |
| YV(2) | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) | | | | |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- |
| TIV(1) | | | | |

| | | | | | | | | |
|---|---|--|---|------------|---|-----------|---|--------------------|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | | | | | File: YR_Sr-90.RAD |

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|-----------|--|---|-----------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | 3 | Input | 3 | Default |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | 3 | Input | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|---|---|---|---|---------------|---|-----------|---|-----------------|---|
| Menu | 3 | Parameter | 3 | Current Value | 3 | Default | 3 | Parameter Name | 3 |
| AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 |
| B-1 | 3 | Dose conversion factors for inhalation, mrem/pCi: | 3 | | 3 | | 3 | | 3 |
| B-1 | 3 | Nb-94 | 3 | 4.140E-04 | 3 | 4.140E-04 | 3 | DCF2 (1) | 3 |
| D-1 | 3 | Dose conversion factors for ingestion, mrem/pCi: | 3 | | 3 | | 3 | | 3 |
| D-1 | 3 | Nb-94 | 3 | 7.140E-06 | 3 | 7.140E-06 | 3 | DCF3 (1) | 3 |
| D-34 | 3 | Food transfer factors: | 3 | | 3 | | 3 | | 3 |
| D-34 | 3 | Nb-94 , plant/soil concentration ratio, dimensionless | 3 | 1.000E-02 | 3 | 1.000E-02 | 3 | RTF (1,1) | 3 |
| D-34 | 3 | Nb-94 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3 | 3.000E-07 | 3 | 3.000E-07 | 3 | RTF (1,2) | 3 |
| D-34 | 3 | Nb-94 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3 | 2.000E-06 | 3 | 2.000E-06 | 3 | RTF (1,3) | 3 |
| D-5 | 3 | Bioaccumulation factors, fresh water, L/kg: | 3 | | 3 | | 3 | | 3 |
| D-5 | 3 | Nb-94 , fish | 3 | 3.000E+02 | 3 | 3.000E+02 | 3 | BIOFAC (1,1) | 3 |
| D-5 | 3 | Nb-94 , crustacea and mollusks | 3 | 1.000E+02 | 3 | 1.000E+02 | 3 | BIOFAC (1,2) | 3 |
| 1RESRAD, Version 6.21 | 3 | T< Limit = 0.5 year | 3 | 04/21/2003 | 3 | 21:10 | 3 | Page 3 | 3 |
| Summary : Yankee Rowe Sensitivity Analysis=soil | 3 | | 3 | | 3 | | 3 | File: NB-94.RAD | 3 |

Site-Specific Parameter Summary

| 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|-----------|---|---|---|-----------|---|-----------|---|-------------------------|---|
| Menu | 3 | Parameter | 3 | User | 3 | Default | 3 | Used by RESRAD | 3 |
| input) 3 | 3 | Name | 3 | Input | 3 | Default | 3 | (If different from user | 3 |
| AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 |
| R011 | 3 | Area of contaminated zone (m**2) | 3 | 1.302E+04 | 3 | 1.000E+04 | 3 | --- | 3 |
| 3 AREA | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Thickness of contaminated zone (m) | 3 | 1.575E+00 | 3 | 2.000E+00 | 3 | --- | 3 |
| 3 THICK0 | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Length parallel to aquifer flow (m) | 3 | 1.290E+02 | 3 | 1.000E+02 | 3 | --- | 3 |
| 3 LCZPAQ | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Basic radiation dose limit (mrem/yr) | 3 | 2.500E+01 | 3 | 2.500E+01 | 3 | --- | 3 |
| 3 BRDL | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Time since placement of material (yr) | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 TI | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- | 3 |
| 3 T (2) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 3.000E+00 | 3 | 3.000E+00 | 3 | --- | 3 |
| 3 T (3) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+01 | 3 | 1.000E+01 | 3 | --- | 3 |
| 3 T (4) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 3.000E+01 | 3 | 3.000E+01 | 3 | --- | 3 |
| 3 T (5) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+02 | 3 | 1.000E+02 | 3 | --- | 3 |
| 3 T (6) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 3.000E+02 | 3 | 3.000E+02 | 3 | --- | 3 |
| 3 T (7) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+03 | 3 | 1.000E+03 | 3 | --- | 3 |
| 3 T (8) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | not used | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 T (9) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | not used | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 T(10) | 3 | | 3 | | 3 | | 3 | | 3 |
| R012 | 3 | Initial principal radionuclide (pCi/g): Nb-94 | 3 | 8.532E+00 | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 S1 (1) | 3 | | 3 | | 3 | | 3 | | 3 |
| R012 | 3 | Concentration in groundwater (pCi/L): Nb-94 | 3 | not used | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 W1 (1) | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Cover depth (m) | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 COVER0 | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Density of cover material (g/cm**3) | 3 | not used | 3 | 1.500E+00 | 3 | --- | 3 |
| 3 DENSCV | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Cover depth erosion rate (m/yr) | 3 | not used | 3 | 1.000E-03 | 3 | --- | 3 |
| 3 VCV | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Density of contaminated zone (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | 3 | --- | 3 |
| 3 DENSCZ | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Contaminated zone erosion rate (m/yr) | 3 | 8.500E-04 | 3 | 1.000E-03 | 3 | --- | 3 |
| 3 VCV | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Contaminated zone total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | 3 | --- | 3 |
| 3 TPCZ | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Contaminated zone field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | 3 | --- | 3 |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

1RESRAD, Version 6.21 T< Limit = 0.5 year 04/21/2003 21:10 Page 4
Summary : Yankee Rowe Sensitivity Analysis=soil File: NB-94.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Nb-94 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 3.800E+02 | 3 | 0.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 3.800E+02 | 3 | 0.000E+00 | --- |

| | | | | |
|---|---|-----------|-------------|---------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 | 3.800E+02 | 3 0.000E+00 | 3 --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 | 0.000E+00 | 3 0.000E+00 | 3 2.054E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 | 0.000E+00 | 3 0.000E+00 | 3 not used |
| 3 SOLUBK(1) | 3 | | 3 | 3 |
| 3 | | | | |
| R017 3 Inhalation rate (m**3/yr) | 3 | 8.400E+03 | 3 8.400E+03 | 3 --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 | 2.330E-05 | 3 1.000E-04 | 3 --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 | 3.000E+01 | 3 3.000E+01 | 3 --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 | 5.500E-01 | 3 4.000E-01 | 3 --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 | 2.725E-01 | 3 7.000E-01 | 3 --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 | 6.571E-01 | 3 5.000E-01 | 3 --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 | 1.181E-01 | 3 2.500E-01 | 3 --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 | 1.000E+00 | 3 1.000E+00 | 3 >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | | 3 | 3 |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 | not used | 3 5.000E+01 | 3 --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 | not used | 3 7.071E+01 | 3 --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 RAD_SHAPE(12) | 3 | | 3 | 3 |
| 3 | | | | |
| R017 3 Fractions of annular areas within AREA: | 3 | | 3 | 3 |
| 3 | | | | |
| R017 3 Ring 1 | 3 | not used | 3 1.000E+00 | 3 --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 | not used | 3 2.732E-01 | 3 --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 | not used | 3 0.000E+00 | 3 --- |
| 3 FRACA(12) | 3 | | 3 | 3 |
| 3 | | | | |

| | | Site-Specific Parameter Summary (continued) | | | Used by RESRAD | |
|--|--|---|-----------|-------------------------|----------------|--|
| Parameter | | User | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| AA | | | | | | |
| AAAAAAAAAAAAAAAA | | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | --- | | |
| DIET(1) | | | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | --- | | |
| DIET(5) | | | | | | |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | | |
| DIET(6) | | | | | | |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | --- | | |
| SOIL | | | | | | |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | --- | | |
| FR9 | | | | | | |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | --- | | |
| FPLANT | | | | | | |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | --- | | |
| FMEAT | | | | | | |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | --- | | |
| FMILK | | | | | | |
| | | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- | | |
| LFI5 | | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | --- | | |
| YV(2) | | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) | | | | | | |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | | |
| TIV(1) | | | | | | |

| | | | | | | | | |
|---|---|--|---|------------|---|-----------|---|-----------------|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
| 1RESRAD, Version 6.21 | | T< Limit = 0.5 year | | 04/21/2003 | | 21:10 | | Page 6 |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | | | | | File: NB-94.RAD |

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|-----------|--|---|-----------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | 3 | Input | 3 | Default |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | 3 | Input | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

Dose Conversion Factor (and Related) Parameter Summary
 File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|---|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Tc-99 | 8.330E-06 | 8.330E-06 | DCF2 (1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Tc-99 | 1.460E-06 | 1.460E-06 | DCF3 (1) |
| D-34 | Food transfer factors: | | | |
| D-34 | Tc-99 , plant/soil concentration ratio, dimensionless | 5.000E+00 | 5.000E+00 | RTF (1,1) |
| D-34 | Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF (1,2) |
| D-34 | Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF (1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Tc-99 , fish | 2.000E+01 | 2.000E+01 | BIOFAC (1,1) |
| D-5 | Tc-99 , crustacea and mollusks | 5.000E+00 | 5.000E+00 | BIOFAC (1,2) |

Site-Specific Parameter Summary
 User

| Menu | Parameter | Input | Default | Used by RESRAD |
|---------|---|-----------|-------------------------|----------------|
| input) | Name | | (If different from user | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T (2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T (3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T (4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T (5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T (6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T (7) | | | | |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T (8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T (9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T (10) | | | | |
| R012 | Initial principal radionuclide (pCi/g): Tc-99 | 2.528E+01 | 0.000E+00 | --- |
| S1 (1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Tc-99 | not used | 0.000E+00 | --- |
| W1 (1) | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Tc-99.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Tc-99 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 5.100E-01 | 3 | 0.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 5.100E-01 | 3 | 0.000E+00 | --- |

| | | | |
|-----------------|--|---------------------------|-------------------------|
| 3 DCNUCU(1,1) | | | |
| R016 3 | Saturated zone (cm**3/g) | 3 5.100E-01 3 0.000E+00 3 | --- |
| 3 DCNUCS(1) | | | |
| R016 3 | Leach rate (/yr) | 3 0.000E+00 3 0.000E+00 3 | 1.286E-01 |
| 3 ALEACH(1) | | | |
| R016 3 | Solubility constant | 3 0.000E+00 3 0.000E+00 3 | not used |
| 3 SOLUBK(1) | | | |
| 3 | | | |
| R017 3 | Inhalation rate (m**3/yr) | 3 8.400E+03 3 8.400E+03 3 | --- |
| 3 INHALR | | | |
| R017 3 | Mass loading for inhalation (g/m**3) | 3 2.330E-05 3 1.000E-04 3 | --- |
| 3 MLINH | | | |
| R017 3 | Exposure duration | 3 3.000E+01 3 3.000E+01 3 | --- |
| 3 ED | | | |
| R017 3 | Shielding factor, inhalation | 3 5.500E-01 3 4.000E-01 3 | --- |
| 3 SHF3 | | | |
| R017 3 | Shielding factor, external gamma | 3 2.725E-01 3 7.000E-01 3 | --- |
| 3 SHF1 | | | |
| R017 3 | Fraction of time spent indoors | 3 6.571E-01 3 5.000E-01 3 | --- |
| 3 FIND | | | |
| R017 3 | Fraction of time spent outdoors (on site) | 3 1.181E-01 3 2.500E-01 3 | --- |
| 3 FOTD | | | |
| R017 3 | Shape factor flag, external gamma | 3 1.000E+00 3 1.000E+00 3 | >0 shows circular AREA. |
| 3 FS | | | |
| R017 3 | Radii of shape factor array (used if FS = -1): | 3 3 3 | |
| 3 | | | |
| R017 3 | Outer annular radius (m), ring 1: | 3 not used 3 5.000E+01 3 | --- |
| 3 RAD_SHAPE(1) | | | |
| R017 3 | Outer annular radius (m), ring 2: | 3 not used 3 7.071E+01 3 | --- |
| 3 RAD_SHAPE(2) | | | |
| R017 3 | Outer annular radius (m), ring 3: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(3) | | | |
| R017 3 | Outer annular radius (m), ring 4: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(4) | | | |
| R017 3 | Outer annular radius (m), ring 5: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(5) | | | |
| R017 3 | Outer annular radius (m), ring 6: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(6) | | | |
| R017 3 | Outer annular radius (m), ring 7: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(7) | | | |
| R017 3 | Outer annular radius (m), ring 8: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(8) | | | |
| R017 3 | Outer annular radius (m), ring 9: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(9) | | | |
| R017 3 | Outer annular radius (m), ring 10: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(10) | | | |
| R017 3 | Outer annular radius (m), ring 11: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(11) | | | |
| R017 3 | Outer annular radius (m), ring 12: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(12) | | | |
| 3 | | | |
| R017 3 | Fractions of annular areas within AREA: | 3 3 3 | |
| 3 | | | |
| R017 3 | Ring 1 | 3 not used 3 1.000E+00 3 | --- |
| 3 FRACA(1) | | | |
| R017 3 | Ring 2 | 3 not used 3 2.732E-01 3 | --- |
| 3 FRACA(2) | | | |
| R017 3 | Ring 3 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(3) | | | |
| R017 3 | Ring 4 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(4) | | | |
| R017 3 | Ring 5 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(5) | | | |
| R017 3 | Ring 6 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(6) | | | |
| R017 3 | Ring 7 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(7) | | | |
| R017 3 | Ring 8 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(8) | | | |
| R017 3 | Ring 9 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(9) | | | |
| R017 3 | Ring 10 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(10) | | | |
| R017 3 | Ring 11 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(11) | | | |
| R017 3 | Ring 12 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(12) | | | |
| 3 | | | |

| Site-Specific | | | Parameter Summary (continued) | | | Used by RESRAD |
|--|--|-----------|-------------------------------|---------|-------------------------|----------------|
| 0 | 3 | 3 | 3 | 3 | 3 | |
| 3 | Parameter | Parameter | User | Default | (If different from user | |
| Menu | Name | Input | | | input) | |
| AA AAAAAAAAAAAAAAAAAA | | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | --- | | |
| DIET(1) | | | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | --- | | |
| DIET(5) | | | | | | |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | | |
| DIET(6) | | | | | | |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | --- | | |
| SOIL | | | | | | |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | --- | | |
| FR9 | | | | | | |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | --- | | |
| FPLANT | | | | | | |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | --- | | |
| FMEAT | | | | | | |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | --- | | |
| FMILK | | | | | | |
| | | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- | | |
| LFI5 | | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | --- | | |
| YV(2) | | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) | | | | | | |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | | |
| TIV(1) | | | | | | |

| | | | | | | | | |
|---|---------|--|---|--------------------|-------|-----------|---|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(2) | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(3) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(1) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(2) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(3) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(1) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(2) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(3) | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 | WLAM | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 | C12WTR | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 | C12CZ | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 | CSOIL | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 | CAIR | | | | | | | |
| 1RESRAD, Version 6.21 T« Limit = 0.5 year | | | | 04/24/2003 | 17:36 | Page | 6 | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | File: YR Tc-99.RAD | | | | |


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1RESRAD, Version 6.21      T« Limit = 0.5 year      04/21/2003  20:52  Page   3
Summary : DCGL to Dose for Ru106                      File: Ru-106.RAD
```

| Menu | Parameter Name | Input | Default | Used by RESRAD |
|--------|--|-----------|-----------|----------------|
| ***** | | | | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T(2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T(3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T(4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T(5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T(6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T(7) | | | | |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T(8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(10) | | | | |
| | | | | |
| R012 | Initial principal radionuclide (pCi/g): Ru-106 | 6.821E+01 | 0.000E+00 | --- |
| S1(1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Ru-106 | not used | 0.000E+00 | --- |
| W1(1) | | | | |
| | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : DCGL to Dose for Ru106 File: Ru-106.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Ru-106 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 1.588E+03 | 3 | 0.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 1.588E+03 | 3 | 0.000E+00 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 1.588E+03 | 3 0.000E+00 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 4.917E-05 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | 3 | 3 | 3 | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|---|-----------|--|-------|-----------|---------------------------|
| 0 | 3 | 3 | User | 3 | |
| 3 | Parameter | | | | |
| Menu | 3 | Parameter | Input | Default | 3 (If different from user |
| input) | 3 | Name | | | |
| AAA | | | | | |
| AAAAAAAAAAAAAAAAAAAA | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 1.600E+02 3 --- |
| 3 | DIET(1) | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 1.400E+01 3 --- |
| 3 | DIET(2) | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 9.200E+01 3 --- |
| 3 | DIET(3) | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 6.300E+01 3 --- |
| 3 | DIET(4) | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 5.400E+00 3 --- |
| 3 | DIET(5) | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 9.000E-01 3 --- |
| 3 | DIET(6) | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 3.650E+01 3 --- |
| 3 | SOIL | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 5.100E+02 3 --- |
| 3 | DWI | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FDW | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FHHW | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FLW | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FIRW | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 5.000E-01 3 --- |
| 3 | FR9 | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FPLANT | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMEAT | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMILK | | | | |
| 3 | | | 3 | | 3 |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 6.800E+01 3 --- |
| 3 | LFI5 | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 5.500E+01 3 --- |
| 3 | LFI6 | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 5.000E+01 3 --- |
| 3 | LWI5 | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 1.600E+02 3 --- |
| 3 | LWI6 | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 5.000E-01 3 --- |
| 3 | LSI | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 1.000E-04 3 --- |
| 3 | MLFD | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 1.500E-01 3 --- |
| 3 | DM | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 9.000E-01 3 --- |
| 3 | DROOT | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWDW | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FGWHH | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWLW | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWIR | | | | |
| 3 | | | 3 | | 3 |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 7.000E-01 3 --- |
| 3 | YV(1) | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 1.500E+00 3 --- |
| 3 | YV(2) | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 1.100E+00 3 --- |
| 3 | YV(3) | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 1.700E-01 3 --- |
| 3 | TE(1) | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 2.500E-01 3 --- |
| 3 | TE(2) | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 8.000E-02 3 --- |
| 3 | TE(3) | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 1.000E-01 3 --- |
| 3 | TIV(1) | | | | |

| | | | | | | | | |
|----------------------------------|---|--|---|------------|---|-----------|------------------|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| Summary : DCGL to Dose for Ru106 | | | | | | | File: Ru-106.RAD | |

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|---|--|------|-----------|---|-------------------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 Parameter | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | | | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

| | | | | | |
|------|----------|--|----------|------------|-----|
| R021 | PH2OCV | Volumetric water content of the cover material | not used | 5.000E-02 | --- |
| R021 | PH2OFL | Volumetric water content of the foundation | not used | 3.000E-02 | --- |
| R021 | | Diffusion coefficient for radon gas (m/sec): | | | |
| R021 | DIFCV | in cover material | not used | 2.000E-06 | --- |
| R021 | DIFFL | in foundation material | not used | 3.000E-07 | --- |
| R021 | DIFCZ | in contaminated zone soil | not used | 2.000E-06 | --- |
| R021 | HMIX | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- |
| R021 | REXG | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- |
| R021 | HRM | Height of the building (room) (m) | not used | 2.500E+00 | --- |
| R021 | FAI | Building interior area factor | not used | 0.000E+00 | --- |
| R021 | DMFL | Building depth below ground surface (m) | not used | -1.000E+00 | --- |
| R021 | EMANA(1) | Emanating power of Rn-222 gas | not used | 2.500E-01 | --- |
| R021 | EMANA(2) | Emanating power of Rn-220 gas | not used | 1.500E-01 | --- |
| TITL | NPTS | Number of graphical time points | 32 | --- | --- |
| TITL | LYMAX | Maximum number of integration points for dose | 17 | --- | --- |
| TITL | KYMAX | Maximum number of integration points for risk | 1 | --- | --- |

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 Summary : DCGL to Dose for Ru106 File: Ru-106.RAD

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 | active |
| 7 -- drinking water | active |
| 8 -- soil ingestion | active |
| 9 -- radon | suppressed |
| Find peak pathway doses | active |

| Menu | Parameter | Current Value | Default | Parameter Name |
|--|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Ag-108m+D | 2.830E-04 | 2.830E-04 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Ag-108m+D | 7.620E-06 | 7.620E-06 | DCF3(1) |
| D-34 | Food transfer factors: | | | |
| D-34 | Ag-108m+D, plant/soil concentration ratio, dimensionless | 1.500E-01 | 1.500E-01 | RTF(1,1) |
| D-34 | Ag-108m+D, beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.000E-03 | 3.000E-03 | RTF(1,2) |
| D-34 | Ag-108m+D, milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.500E-02 | 2.500E-02 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Ag-108m+D, fish | 5.000E+00 | 5.000E+00 | BIOFAC(1,1) |
| D-5 | Ag-108m+D, crustacea and mollusks | 7.700E+02 | 7.700E+02 | BIOFAC(1,2) |
| <div style="border-top: 1px solid black; height: 1px;"></div> | | | | |
| RESRAD, Version 6.21 T« Limit = 0.5 year 06/03/2003 22:07 Page 3 | | | | |
| Summary : DCLG to Dose for Ag108m File: Ag-108m.RAD | | | | |

| | User | Used by RESRAD |
|--|---|----------------|
| Parameter Menu Parameter input) Name | Input Default (If different from user | |
| AA | | |
| R011 Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 --- |
| AREA | | |
| R011 Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 --- |
| THICK0 | | |
| R011 Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 --- |
| LCZPAQ | | |
| R011 Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 --- |
| BRDL | | |
| R011 Time since placement of material (yr) | 0.000E+00 | 0.000E+00 --- |
| TI | | |
| R011 Times for calculations (yr) | 1.000E+00 | 1.000E+00 --- |
| T(2) | | |
| R011 Times for calculations (yr) | 3.000E+00 | 3.000E+00 --- |
| T(3) | | |
| R011 Times for calculations (yr) | 1.000E+01 | 1.000E+01 --- |
| T(4) | | |
| R011 Times for calculations (yr) | 3.000E+01 | 3.000E+01 --- |
| T(5) | | |
| R011 Times for calculations (yr) | 1.000E+02 | 1.000E+02 --- |
| T(6) | | |
| R011 Times for calculations (yr) | 3.000E+02 | 3.000E+02 --- |
| T(7) | | |
| R011 Times for calculations (yr) | 1.000E+03 | 1.000E+03 --- |
| T(8) | | |
| R011 Times for calculations (yr) | not used | 0.000E+00 --- |
| T(9) | | |
| R011 Times for calculations (yr) | not used | 0.000E+00 --- |
| T(10) | | |
| | | |
| R012 Initial principal radionuclide (pCi/g): Ag-108m | 8.521E+00 | 0.000E+00 --- |
| S1(1) | | |
| R012 Concentration in groundwater (pCi/L): Ag-108m | not used | 0.000E+00 --- |
| W1(1) | | |
| | | |
| R013 Cover depth (m) | 0.000E+00 | 0.000E+00 --- |
| COVER0 | | |
| R013 Density of cover material (g/cm**3) | not used | 1.500E+00 --- |
| DENSCV | | |
| R013 Cover depth erosion rate (m/yr) | not used | 1.000E-03 --- |
| VCV | | |
| R013 Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 --- |
| DENSCZ | | |
| R013 Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 --- |
| VCZ | | |
| R013 Contaminated zone total porosity | 3.500E-01 | 4.000E-01 --- |
| TPCZ | | |
| R013 Contaminated zone field capacity | 1.000E-01 | 2.000E-01 --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

1RESRAD, Version 6.21 T< Limit = 0.5 year 06/03/2003 22:07 Page 4
Summary : DCGL to Dose for Ag108m File: Ag-108m.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Ag-108m | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 2.160E+02 | 3 | 0.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 2.160E+02 | 3 | 0.000E+00 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 2.160E+02 | 3 0.000E+00 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 3.613E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | | | | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | | | | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | | | | |

| | | Site-Specific Parameter Summary (continued) | | | Used by RESRAD | |
|--|--|---|-----------|-------------------------|----------------|--|
| Parameter | | User | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| AA | | | | | | |
| AAAAAAAAAAAAAAAA | | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.120E+02 | 1.600E+02 | --- | | |
| DIET(1) | | | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | 2.140E+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) | 2.060E+01 | 5.400E+00 | --- | | |
| DIET(5) | | | | | | |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | | |
| DIET(6) | | | | | | |
| R018 | Soil ingestion rate (g/yr) | 1.826E+01 | 3.650E+01 | --- | | |
| SOIL | | | | | | |
| R018 | Drinking water intake (L/yr) | 4.785E+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 | 1.000E+00 | 5.000E-01 | --- | | |
| FR9 | | | | | | |
| R018 | Contamination fraction of plant food | 1.000E+00 | -1 | --- | | |
| FPLANT | | | | | | |
| R018 | Contamination fraction of meat | 1.000E+00 | -1 | --- | | |
| FMEAT | | | | | | |
| R018 | Contamination fraction of milk | 1.000E+00 | -1 | --- | | |
| FMILK | | | | | | |
| | | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 2.710E+01 | 6.800E+01 | --- | | |
| LFI5 | | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | 6.320E+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) | 5.000E-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) | 2.150E+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) | 2.889E+00 | 1.500E+00 | --- | | |
| YV(2) | | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.887E+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) | | | | | | |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | | |
| TIV(1) | | | | | | |

| | | | | | | | | |
|-----------------------------------|---|--|---|------------|---|-----------|---|-------------------|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
| 1RESRAD, Version 6.21 | | T< Limit = 0.5 year | | 06/03/2003 | | 22:07 | | Page 6 |
| Summary : DCGL to Dose for Ag108m | | | | | | | | File: Ag-108m.RAD |

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|---|--|------|-----------|---|-------------------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 Parameter | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | | | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

Dose Conversion Factor (and Related) Parameter Summary
 File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Sb-125+D | 1.386E-05 | 1.386E-05 | DCF2 (1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Sb-125+D | 3.647E-06 | 3.647E-06 | DCF3 (1) |
| D-34 | Food transfer factors: | | | |
| D-34 | Sb-125+D , plant/soil concentration ratio, dimensionless | 1.000E-02 | 1.000E-02 | RTF (1,1) |
| D-34 | Sb-125+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF (1,2) |
| D-34 | Sb-125+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF (1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Sb-125+D , fish | 1.000E+02 | 1.000E+02 | BIOFAC (1,1) |
| D-5 | Sb-125+D , crustacea and mollusks | 1.000E+01 | 1.000E+01 | BIOFAC (1,2) |

Site-Specific Parameter Summary
 User

| Menu | Parameter | Input | Default | Used by RESRAD |
|---------|--|-----------|-------------------------|----------------|
| input) | Name | | (If different from user | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T (2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T (3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T (4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T (5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T (6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T (7) | | | | |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T (8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T (9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T (10) | | | | |
| R012 | Initial principal radionuclide (pCi/g): Sb-125 | 3.773E+01 | 0.000E+00 | --- |
| S1 (1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Sb-125 | not used | 0.000E+00 | --- |
| W1 (1) | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Sb-125.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Sb-125 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 3.800E+02 | 3 | 0.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 3.800E+02 | 3 | 0.000E+00 | --- |

| | | | | |
|---|---|-----------|---|-------------------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 | 3.800E+02 | 3 | 0.000E+00 3 --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 | 0.000E+00 | 3 | 0.000E+00 3 2.054E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 | 0.000E+00 | 3 | 0.000E+00 3 not used |
| 3 SOLUBK(1) | 3 | | 3 | |
| 3 | | | | |
| R017 3 Inhalation rate (m**3/yr) | 3 | 8.400E+03 | 3 | 8.400E+03 3 --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 | 2.330E-05 | 3 | 1.000E-04 3 --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 | 3.000E+01 | 3 | 3.000E+01 3 --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 | 5.500E-01 | 3 | 4.000E-01 3 --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 | 2.725E-01 | 3 | 7.000E-01 3 --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 | 6.571E-01 | 3 | 5.000E-01 3 --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 | 1.181E-01 | 3 | 2.500E-01 3 --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 | 1.000E+00 | 3 | 1.000E+00 3 >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 | not used | 3 | 5.000E+01 3 --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 | not used | 3 | 7.071E+01 3 --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 RAD_SHAPE(12) | 3 | | 3 | |
| 3 | | | | |
| R017 3 Fractions of annular areas within AREA: | 3 | | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 | not used | 3 | 1.000E+00 3 --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 | not used | 3 | 2.732E-01 3 --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 | not used | 3 | 0.000E+00 3 --- |
| 3 FRACA(12) | 3 | | 3 | |
| 3 | | | | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|---|-----------|--|-------|-----------|-------------------------|
| 0 | 3 | 3 | User | 3 | |
| 3 | Parameter | Parameter | Input | Default | (If different from user |
| Menu | 3 | | | | input) |
| input) | 3 | Name | | | |
| AAA | | | | | |
| AAAAAAAAAAAAAAAAAAAA | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 1.600E+02 3 --- |
| 3 | DIET(1) | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 1.400E+01 3 --- |
| 3 | DIET(2) | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 9.200E+01 3 --- |
| 3 | DIET(3) | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 6.300E+01 3 --- |
| 3 | DIET(4) | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 5.400E+00 3 --- |
| 3 | DIET(5) | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 9.000E-01 3 --- |
| 3 | DIET(6) | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 3.650E+01 3 --- |
| 3 | SOIL | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 5.100E+02 3 --- |
| 3 | DWI | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FDW | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FHHW | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FLW | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FIRW | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 5.000E-01 3 --- |
| 3 | FR9 | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FPLANT | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMEAT | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 -1 3 --- |
| 3 | FMILK | | | | |
| 3 | | | 3 | | 3 |
| 3 | | | | | |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 6.800E+01 3 --- |
| 3 | LFI5 | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 5.500E+01 3 --- |
| 3 | LFI6 | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 5.000E+01 3 --- |
| 3 | LWI5 | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 1.600E+02 3 --- |
| 3 | LWI6 | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 5.000E-01 3 --- |
| 3 | LSI | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 1.000E-04 3 --- |
| 3 | MLFD | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 1.500E-01 3 --- |
| 3 | DM | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 9.000E-01 3 --- |
| 3 | DROOT | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWDW | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FGWHH | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWLW | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWIR | | | | |
| 3 | | | 3 | | 3 |
| 3 | | | | | |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 7.000E-01 3 --- |
| 3 | YV(1) | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 1.500E+00 3 --- |
| 3 | YV(2) | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 1.100E+00 3 --- |
| 3 | YV(3) | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 1.700E-01 3 --- |
| 3 | TE(1) | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 2.500E-01 3 --- |
| 3 | TE(2) | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 8.000E-02 3 --- |
| 3 | TE(3) | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 1.000E-01 3 --- |
| 3 | TIV(1) | | | | |

| | | | | | | | | |
|---|---------|--|---|---------------------|-------|-----------|---|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(2) | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(3) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(1) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(2) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(3) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(1) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(2) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(3) | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 | WLAM | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 | C12WTR | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 | C12CZ | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 | CSOIL | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 | CAIR | | | | | | | |
| 1RESRAD, Version 6.21 T« Limit = 0.5 year | | | | 04/24/2003 | 17:57 | Page | 6 | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | File: YR Sb-125.RAD | | | | |


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1RESRAD, Version 6.21      T« Limit = 0.5 year      04/21/2003  21:41  Page   3
Summary : DCGL to Dose for Cs134                      File: Cs-134.RAD
```

| Parameter Menu input) | Parameter Name | User Input | Default | Used by RESRAD (If different from user |
|--|--|------------|-----------|--|
| AA | | | | |
| R011 AREA | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| R011 THICK0 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| R011 LCZPAQ | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| R011 BRDL | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| R011 TI | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| R011 T(2) | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| R011 T(3) | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| R011 T(4) | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| R011 T(5) | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| R011 T(6) | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| R011 T(7) | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| R011 T(8) | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| R011 T(9) | Times for calculations (yr) | not used | 0.000E+00 | --- |
| R011 T(10) | Times for calculations (yr) | not used | 0.000E+00 | --- |
| | | | | |
| R012 S1(1) | Initial principal radionuclide (pCi/g): Cs-134 | 6.706E+00 | 0.000E+00 | --- |
| R012 W1(1) | Concentration in groundwater (pCi/L): Cs-134 | not used | 0.000E+00 | --- |
| | | | | |
| R013 COVER0 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| R013 DENSCV | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| R013 VCV | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| R013 DENSCZ | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| R013 VCZ | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| R013 TPCZ | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : DCGL to Dose for Cs134 File: Cs-134.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Cs-134 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 4.460E+02 | 3 | 1.000E+03 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 4.460E+02 | 3 | 1.000E+03 | --- |

| | | | | |
|---|-------------|-------------|---|-------------------------|
| 3 DCNUCU(1,1) | | | | |
| R016 3 Saturated zone (cm**3/g) | 3 4.460E+02 | 3 1.000E+03 | 3 | --- |
| 3 DCNUCS(1) | | | | |
| R016 3 Leach rate (/yr) | 3 0.000E+00 | 3 0.000E+00 | 3 | 1.750E-04 |
| 3 ALEACH(1) | | | | |
| R016 3 Solubility constant | 3 0.000E+00 | 3 0.000E+00 | 3 | not used |
| 3 SOLUBK(1) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Inhalation rate (m**3/yr) | 3 8.400E+03 | 3 8.400E+03 | 3 | --- |
| 3 INHALR | | | | |
| R017 3 Mass loading for inhalation (g/m**3) | 3 2.330E-05 | 3 1.000E-04 | 3 | --- |
| 3 MLINH | | | | |
| R017 3 Exposure duration | 3 3.000E+01 | 3 3.000E+01 | 3 | --- |
| 3 ED | | | | |
| R017 3 Shielding factor, inhalation | 3 5.500E-01 | 3 4.000E-01 | 3 | --- |
| 3 SHF3 | | | | |
| R017 3 Shielding factor, external gamma | 3 2.725E-01 | 3 7.000E-01 | 3 | --- |
| 3 SHF1 | | | | |
| R017 3 Fraction of time spent indoors | 3 6.571E-01 | 3 5.000E-01 | 3 | --- |
| 3 FIND | | | | |
| R017 3 Fraction of time spent outdoors (on site) | 3 1.181E-01 | 3 2.500E-01 | 3 | --- |
| 3 FOTD | | | | |
| R017 3 Shape factor flag, external gamma | 3 1.000E+00 | 3 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 FS | | | | |
| R017 3 Radii of shape factor array (used if FS = -1): | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Outer annular radius (m), ring 1: | 3 not used | 3 5.000E+01 | 3 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 3 Outer annular radius (m), ring 2: | 3 not used | 3 7.071E+01 | 3 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 3 Outer annular radius (m), ring 3: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 3 Outer annular radius (m), ring 4: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 3 Outer annular radius (m), ring 5: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 3 Outer annular radius (m), ring 6: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 3 Outer annular radius (m), ring 7: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 3 Outer annular radius (m), ring 8: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 3 Outer annular radius (m), ring 9: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 3 Outer annular radius (m), ring 10: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 3 Outer annular radius (m), ring 11: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 3 Outer annular radius (m), ring 12: | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | 3 | 3 | 3 | |
| R017 3 Fractions of annular areas within AREA: | 3 | 3 | 3 | |
| 3 | | | | |
| R017 3 Ring 1 | 3 not used | 3 1.000E+00 | 3 | --- |
| 3 FRACA(1) | | | | |
| R017 3 Ring 2 | 3 not used | 3 2.732E-01 | 3 | --- |
| 3 FRACA(2) | | | | |
| R017 3 Ring 3 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(3) | | | | |
| R017 3 Ring 4 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(4) | | | | |
| R017 3 Ring 5 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(5) | | | | |
| R017 3 Ring 6 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(6) | | | | |
| R017 3 Ring 7 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(7) | | | | |
| R017 3 Ring 8 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(8) | | | | |
| R017 3 Ring 9 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(9) | | | | |
| R017 3 Ring 10 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(10) | | | | |
| R017 3 Ring 11 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(11) | | | | |
| R017 3 Ring 12 | 3 not used | 3 0.000E+00 | 3 | --- |
| 3 FRACA(12) | | | | |
| 3 | 3 | 3 | 3 | |

| | | | Site-Specific Parameter Summary (continued) | | | Used by RESRAD | | |
|--|-----------|--|---|-----------|---|----------------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | | | |
| 3 | Parameter | | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default | 3 | (If different from user |
| input) | 3 | Name | | | | | | |
| AA AAAAAAAAAAAAAAAAAA | | | | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 | 1.600E+02 | 3 | --- |
| 3 | DIET(1) | | | | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 | 1.400E+01 | 3 | --- |
| 3 | DIET(2) | | | | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 | 9.200E+01 | 3 | --- |
| 3 | DIET(3) | | | | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 | 6.300E+01 | 3 | --- |
| 3 | DIET(4) | | | | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 | 5.400E+00 | 3 | --- |
| 3 | DIET(5) | | | | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 | 9.000E-01 | 3 | --- |
| 3 | DIET(6) | | | | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 | 3.650E+01 | 3 | --- |
| 3 | SOIL | | | | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 | 5.100E+02 | 3 | --- |
| 3 | DWI | | | | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FDW | | | | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FHHW | | | | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FLW | | | | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FIRW | | | | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 | 5.000E-01 | 3 | --- |
| 3 | FR9 | | | | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FPLANT | | | | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMEAT | | | | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMILK | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 | 6.800E+01 | 3 | --- |
| 3 | LFI5 | | | | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 | 5.500E+01 | 3 | --- |
| 3 | LFI6 | | | | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 | 5.000E+01 | 3 | --- |
| 3 | LWI5 | | | | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 | 1.600E+02 | 3 | --- |
| 3 | LWI6 | | | | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 | 5.000E-01 | 3 | --- |
| 3 | LSI | | | | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 | 1.000E-04 | 3 | --- |
| 3 | MLFD | | | | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 | 1.500E-01 | 3 | --- |
| 3 | DM | | | | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 | 9.000E-01 | 3 | --- |
| 3 | DROOT | | | | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWDW | | | | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWHH | | | | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWLW | | | | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWIR | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 | 7.000E-01 | 3 | --- |
| 3 | YV(1) | | | | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 | 1.500E+00 | 3 | --- |
| 3 | YV(2) | | | | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 | 1.100E+00 | 3 | --- |
| 3 | YV(3) | | | | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 | 1.700E-01 | 3 | --- |
| 3 | TE(1) | | | | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | TE(2) | | | | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 | 8.000E-02 | 3 | --- |
| 3 | TE(3) | | | | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 | 1.000E-01 | 3 | --- |
| 3 | TIV(1) | | | | | | | |

| | | | | | | | | |
|----------------------------------|---|--|---|------------|---|-----------|---|------------------|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| | | Site-Specific Parameter Summary (continued) | | | | |
|---|-----------|--|---|-----------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | 3 | Input | 3 | Default |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | 3 | Input | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

| | | | | | |
|------|----------|--|----------|------------|-----|
| R021 | PH2OCV | Volumetric water content of the cover material | not used | 5.000E-02 | --- |
| R021 | PH2OFL | Volumetric water content of the foundation | not used | 3.000E-02 | --- |
| R021 | | Diffusion coefficient for radon gas (m/sec): | | | |
| R021 | DIFCV | in cover material | not used | 2.000E-06 | --- |
| R021 | DIFFL | in foundation material | not used | 3.000E-07 | --- |
| R021 | DIFCZ | in contaminated zone soil | not used | 2.000E-06 | --- |
| R021 | HMIX | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- |
| R021 | REXG | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- |
| R021 | HRM | Height of the building (room) (m) | not used | 2.500E+00 | --- |
| R021 | FAI | Building interior area factor | not used | 0.000E+00 | --- |
| R021 | DMFL | Building depth below ground surface (m) | not used | -1.000E+00 | --- |
| R021 | EMANA(1) | Emanating power of Rn-222 gas | not used | 2.500E-01 | --- |
| R021 | EMANA(2) | Emanating power of Rn-220 gas | not used | 1.500E-01 | --- |
| TITL | NPTS | Number of graphical time points | 32 | --- | --- |
| TITL | LYMAX | Maximum number of integration points for dose | 17 | --- | --- |
| TITL | KYMAX | Maximum number of integration points for risk | 1 | --- | --- |

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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 | active |
| 7 -- drinking water | active |
| 8 -- soil ingestion | active |
| 9 -- radon | suppressed |
| Find peak pathway doses | active |

| | | | | | |
|---|--|-----------|------------------|-----------|----------------|
| | Menu | Parameter | Current Value | Default | Parameter Name |
| A-1 | Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | Cs-137+D | | 3.190E-05 | 3.190E-05 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | Cs-137+D | | 5.000E-05 | 5.000E-05 | DCF3(1) |
| D-34 | Food transfer factors: | | | | |
| D-34 | Cs-137+D , plant/soil concentration ratio, dimensionless | | 4.000E-02 | 4.000E-02 | RTF(1,1) |
| D-34 | Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | | 5.000E-02 | 5.000E-02 | RTF(1,2) |
| D-34 | Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | | 8.000E-03 | 8.000E-03 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | | |
| D-5 | Cs-137+D , fish | | 2.000E+03 | 2.000E+03 | BIOFAC(1,1) |
| D-5 | Cs-137+D , crustacea and mollusks | | 1.000E+02 | 1.000E+02 | BIOFAC(1,2) |
| RESRAD, Version 6.21 T« Limit = 0.5 year 04/21/2003 21:55 Page 3 | | | | | |
| Summary : DCGI to Dose for Cs137 | | | File: Cs-137.RAD | | |

| Parameter Menu input) | Name | Parameter | User Input | Default | (If different from user Used by RESRAD |
|--|--|-----------|------------|-----------|--|
| AA | | | | | |
| R011 | Area of contaminated zone (m**2) | AREA | 1.302E+04 | 1.000E+04 | --- |
| R011 | Thickness of contaminated zone (m) | THICK0 | 1.575E+00 | 2.000E+00 | --- |
| R011 | Length parallel to aquifer flow (m) | LCZPAQ | 1.290E+02 | 1.000E+02 | --- |
| R011 | Basic radiation dose limit (mrem/yr) | BRDL | 2.500E+01 | 2.500E+01 | --- |
| R011 | Time since placement of material (yr) | TI | 0.000E+00 | 0.000E+00 | --- |
| R011 | Times for calculations (yr) | T(2) | 1.000E+00 | 1.000E+00 | --- |
| R011 | Times for calculations (yr) | T(3) | 3.000E+00 | 3.000E+00 | --- |
| R011 | Times for calculations (yr) | T(4) | 1.000E+01 | 1.000E+01 | --- |
| R011 | Times for calculations (yr) | T(5) | 3.000E+01 | 3.000E+01 | --- |
| R011 | Times for calculations (yr) | T(6) | 1.000E+02 | 1.000E+02 | --- |
| R011 | Times for calculations (yr) | T(7) | 3.000E+02 | 3.000E+02 | --- |
| R011 | Times for calculations (yr) | T(8) | 1.000E+03 | 1.000E+03 | --- |
| R011 | Times for calculations (yr) | T(9) | not used | 0.000E+00 | --- |
| R011 | Times for calculations (yr) | T(10) | not used | 0.000E+00 | --- |
| R012 | Initial principal radionuclide (pCi/g): Cs-137 | S1(1) | 1.224E+01 | 0.000E+00 | --- |
| R012 | Concentration in groundwater (pCi/L): Cs-137 | W1(1) | not used | 0.000E+00 | --- |
| R013 | Cover depth (m) | COVER0 | 0.000E+00 | 0.000E+00 | --- |
| R013 | Density of cover material (g/cm**3) | DENSCV | not used | 1.500E+00 | --- |
| R013 | Cover depth erosion rate (m/yr) | VCV | not used | 1.000E-03 | --- |
| R013 | Density of contaminated zone (g/cm**3) | DENSCZ | 1.860E+00 | 1.500E+00 | --- |
| R013 | Contaminated zone erosion rate (m/yr) | VCZ | 8.500E-04 | 1.000E-03 | --- |
| R013 | Contaminated zone total porosity | TPCZ | 3.500E-01 | 4.000E-01 | --- |
| R013 | Contaminated zone field capacity | | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|-----------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Cs-137 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 4.460E+02 | 3 | 1.000E+03 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 4.460E+02 | 3 | 1.000E+03 | --- |

| | | | |
|-----------------|--|---------------------------|-------------------------|
| 3 DCNUCU(1,1) | | | |
| R016 3 | Saturated zone (cm**3/g) | 3 4.460E+02 3 1.000E+03 3 | --- |
| 3 DCNUCS(1) | | | |
| R016 3 | Leach rate (/yr) | 3 0.000E+00 3 0.000E+00 3 | 1.750E-04 |
| 3 ALEACH(1) | | | |
| R016 3 | Solubility constant | 3 0.000E+00 3 0.000E+00 3 | not used |
| 3 SOLUBK(1) | | | |
| 3 | | | |
| R017 3 | Inhalation rate (m**3/yr) | 3 8.400E+03 3 8.400E+03 3 | --- |
| 3 INHALR | | | |
| R017 3 | Mass loading for inhalation (g/m**3) | 3 2.330E-05 3 1.000E-04 3 | --- |
| 3 MLINH | | | |
| R017 3 | Exposure duration | 3 3.000E+01 3 3.000E+01 3 | --- |
| 3 ED | | | |
| R017 3 | Shielding factor, inhalation | 3 5.500E-01 3 4.000E-01 3 | --- |
| 3 SHF3 | | | |
| R017 3 | Shielding factor, external gamma | 3 2.725E-01 3 7.000E-01 3 | --- |
| 3 SHF1 | | | |
| R017 3 | Fraction of time spent indoors | 3 6.571E-01 3 5.000E-01 3 | --- |
| 3 FIND | | | |
| R017 3 | Fraction of time spent outdoors (on site) | 3 1.181E-01 3 2.500E-01 3 | --- |
| 3 FOTD | | | |
| R017 3 | Shape factor flag, external gamma | 3 1.000E+00 3 1.000E+00 3 | >0 shows circular AREA. |
| 3 FS | | | |
| R017 3 | Radii of shape factor array (used if FS = -1): | 3 3 3 | |
| 3 | | | |
| R017 3 | Outer annular radius (m), ring 1: | 3 not used 3 5.000E+01 3 | --- |
| 3 RAD_SHAPE(1) | | | |
| R017 3 | Outer annular radius (m), ring 2: | 3 not used 3 7.071E+01 3 | --- |
| 3 RAD_SHAPE(2) | | | |
| R017 3 | Outer annular radius (m), ring 3: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(3) | | | |
| R017 3 | Outer annular radius (m), ring 4: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(4) | | | |
| R017 3 | Outer annular radius (m), ring 5: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(5) | | | |
| R017 3 | Outer annular radius (m), ring 6: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(6) | | | |
| R017 3 | Outer annular radius (m), ring 7: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(7) | | | |
| R017 3 | Outer annular radius (m), ring 8: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(8) | | | |
| R017 3 | Outer annular radius (m), ring 9: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(9) | | | |
| R017 3 | Outer annular radius (m), ring 10: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(10) | | | |
| R017 3 | Outer annular radius (m), ring 11: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(11) | | | |
| R017 3 | Outer annular radius (m), ring 12: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(12) | | | |
| 3 | | | |
| R017 3 | Fractions of annular areas within AREA: | 3 3 3 | |
| 3 | | | |
| R017 3 | Ring 1 | 3 not used 3 1.000E+00 3 | --- |
| 3 FRACA(1) | | | |
| R017 3 | Ring 2 | 3 not used 3 2.732E-01 3 | --- |
| 3 FRACA(2) | | | |
| R017 3 | Ring 3 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(3) | | | |
| R017 3 | Ring 4 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(4) | | | |
| R017 3 | Ring 5 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(5) | | | |
| R017 3 | Ring 6 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(6) | | | |
| R017 3 | Ring 7 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(7) | | | |
| R017 3 | Ring 8 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(8) | | | |
| R017 3 | Ring 9 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(9) | | | |
| R017 3 | Ring 10 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(10) | | | |
| R017 3 | Ring 11 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(11) | | | |
| R017 3 | Ring 12 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(12) | | | |
| 3 | | | |

| | | | Site-Specific Parameter Summary (continued) | | | Used by RESRAD | | |
|--|-----------|--|---|-----------|---|----------------|---|-------------------------|
| 0 | 3 | | 3 | User | 3 | | | |
| 3 | Parameter | | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default | 3 | (If different from user |
| input) | 3 | Name | | | | | | |
| AA AAAAAAAAAAAAAAAAAA | | | | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 | 1.600E+02 | 3 | --- |
| 3 | DIET(1) | | | | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 | 1.400E+01 | 3 | --- |
| 3 | DIET(2) | | | | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 | 9.200E+01 | 3 | --- |
| 3 | DIET(3) | | | | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 | 6.300E+01 | 3 | --- |
| 3 | DIET(4) | | | | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 | 5.400E+00 | 3 | --- |
| 3 | DIET(5) | | | | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 | 9.000E-01 | 3 | --- |
| 3 | DIET(6) | | | | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 | 3.650E+01 | 3 | --- |
| 3 | SOIL | | | | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 | 5.100E+02 | 3 | --- |
| 3 | DWI | | | | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FDW | | | | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FHHW | | | | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FLW | | | | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FIRW | | | | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 | 5.000E-01 | 3 | --- |
| 3 | FR9 | | | | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FPLANT | | | | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMEAT | | | | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMILK | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 | 6.800E+01 | 3 | --- |
| 3 | LFI5 | | | | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 | 5.500E+01 | 3 | --- |
| 3 | LFI6 | | | | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 | 5.000E+01 | 3 | --- |
| 3 | LWI5 | | | | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 | 1.600E+02 | 3 | --- |
| 3 | LWI6 | | | | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 | 5.000E-01 | 3 | --- |
| 3 | LSI | | | | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 | 1.000E-04 | 3 | --- |
| 3 | MLFD | | | | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 | 1.500E-01 | 3 | --- |
| 3 | DM | | | | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 | 9.000E-01 | 3 | --- |
| 3 | DROOT | | | | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWDW | | | | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWHH | | | | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWLW | | | | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWIR | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 | 7.000E-01 | 3 | --- |
| 3 | YV(1) | | | | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 | 1.500E+00 | 3 | --- |
| 3 | YV(2) | | | | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 | 1.100E+00 | 3 | --- |
| 3 | YV(3) | | | | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 | 1.700E-01 | 3 | --- |
| 3 | TE(1) | | | | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | TE(2) | | | | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 | 8.000E-02 | 3 | --- |
| 3 | TE(3) | | | | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 | 1.000E-01 | 3 | --- |
| 3 | TIV(1) | | | | | | | |

| | | | | | | | | |
|----------------------------------|---|--|---|------------|---|-----------|------------------|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
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| Summary : DCGL to Dose for Cs137 | | | | | | | File: Cs-137.RAD | |

| | | Site-Specific Parameter Summary (continued) | | | | |
|---|---|--|------|-----------|---|-------------------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 Parameter | | | | | | |
| Menu | 3 | Parameter | 3 | Input | 3 | Default |
| input) | 3 | Name | | | 3 | (If different from user |
| AA AAAAAAAAAAAAAAAAAAAAA | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 |
| 3 DMC | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 |
| 3 EVSN | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 |
| 3 REVS | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 |
| 3 AVFG4 | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 |
| 3 AVFG5 | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 |
| 3 CO2F | | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 |
| 3 STOR_T(1) | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(2) | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(3) | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 |
| 3 STOR_T(4) | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(5) | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 |
| 3 STOR_T(6) | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(7) | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 STOR_T(8) | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 |
| 3 STOR_T(9) | | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 |
| 3 FLOOR1 | | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 |
| 3 DENSFL | | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 |
| 3 TPCV | | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 |
| 3 TPFL | | | | | | |

| | | | | | |
|------|----------|--|----------|------------|-----|
| R021 | PH2OCV | Volumetric water content of the cover material | not used | 5.000E-02 | --- |
| R021 | PH2OFL | Volumetric water content of the foundation | not used | 3.000E-02 | --- |
| R021 | | Diffusion coefficient for radon gas (m/sec): | | | |
| R021 | DIFCV | in cover material | not used | 2.000E-06 | --- |
| R021 | DIFFL | in foundation material | not used | 3.000E-07 | --- |
| R021 | DIFCZ | in contaminated zone soil | not used | 2.000E-06 | --- |
| R021 | HMIX | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- |
| R021 | REXG | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- |
| R021 | HRM | Height of the building (room) (m) | not used | 2.500E+00 | --- |
| R021 | FAI | Building interior area factor | not used | 0.000E+00 | --- |
| R021 | DMFL | Building depth below ground surface (m) | not used | -1.000E+00 | --- |
| R021 | EMANA(1) | Emanating power of Rn-222 gas | not used | 2.500E-01 | --- |
| R021 | EMANA(2) | Emanating power of Rn-220 gas | not used | 1.500E-01 | --- |
| TITL | NPTS | Number of graphical time points | 32 | --- | --- |
| TITL | LYMAX | Maximum number of integration points for dose | 17 | --- | --- |
| TITL | KYMAX | Maximum number of integration points for risk | 1 | --- | --- |

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 Summary : DCGL to Dose for Cs137 File: Cs-137.RAD

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 | active |
| 7 -- drinking water | active |
| 8 -- soil ingestion | active |
| 9 -- radon | suppressed |
| Find peak pathway doses | active |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Eu-152 | 2.210E-04 | 2.210E-04 | DCF2(1) |
| B-1 | Gd-152 | 2.430E-01 | 2.430E-01 | DCF2(3) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Eu-152 | 6.480E-06 | 6.480E-06 | DCF3(1) |
| D-1 | Gd-152 | 1.610E-04 | 1.610E-04 | DCF3(3) |
| D-34 | Food transfer factors: | | | |
| D-34 | Eu-152 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(1,1) |
| D-34 | Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF(1,2) |
| D-34 | Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(1,3) |
| D-34 | Gd-152 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(3,1) |
| D-34 | Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF(3,2) |
| D-34 | Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(3,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Eu-152 , fish | 5.000E+01 | 5.000E+01 | BIOFAC(1,1) |
| D-5 | Eu-152 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(1,2) |
| D-5 | Gd-152 , fish | 2.500E+01 | 2.500E+01 | BIOFAC(3,1) |
| D-5 | Gd-152 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(3,2) |

Site-Specific Parameter Summary

| Menu | Parameter | User Input | Default | Used by RESRAD |
|------|--|------------|-----------|----------------|
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| R012 | Initial principal radionuclide (pCi/g): Eu-152 | 1.206E+01 | 0.000E+00 | --- |
| R012 | Concentration in groundwater (pCi/L): Eu-152 | not used | 0.000E+00 | --- |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |

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Summary : DCGL to Dose for Eu152                      File: Eu-152.RAD
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| | | | | |
|-----------|-----------|-------|---------|--------------------------------|
| 0 | | | User | Used by RESRAD |
| Parameter | | | | |
| Menu | Parameter | Input | Default | (If different from user input) |
| Name | | | | |

| | | | | | |
|--|--------------|-----------|--------------|-----------|------------------|
| AA | | | | | |
| AAAAAAAAAAAAAAAAAA | | | | | |
| R015 ³ Unsat. zone 1, thickness (m) | ³ | 1.430E+00 | ³ | 4.000E+00 | ³ --- |
| ³ H(1) | | | | | |
| R015 ³ Unsat. zone 1, soil density (g/cm**3) | ³ | 1.860E+00 | ³ | 1.500E+00 | ³ --- |
| ³ DENSUZ(1) | | | | | |
| R015 ³ Unsat. zone 1, total porosity | ³ | 3.500E-01 | ³ | 4.000E-01 | ³ --- |
| ³ TPUZ(1) | | | | | |
| R015 ³ Unsat. zone 1, effective porosity | ³ | 2.500E-01 | ³ | 2.000E-01 | ³ --- |
| ³ EPUZ(1) | | | | | |
| R015 ³ Unsat. zone 1, field capacity | ³ | 1.000E-01 | ³ | 2.000E-01 | ³ --- |
| ³ FCUZ(1) | | | | | |
| R015 ³ Unsat. zone 1, soil-specific b parameter | ³ | 4.380E+00 | ³ | 5.300E+00 | ³ --- |
| ³ BUZ(1) | | | | | |

| | | | |
|--|------------------------|-------------------------|--------------------------------------|
| R015 ³ Unsat. zone 1, hydraulic conductivity (m/yr) | ³ 5.550E+02 | ³ 1.000E+01 | ³ --- |
| ³ HCUZ(1) | ³ | ³ | ³ |
| ³ | | | |
| R016 ³ Distribution coefficients for Eu-152 | ³ | ³ | ³ |
| ³ | | | |
| R016 ³ Contaminated zone (cm**3/g) | ³ 8.250E+02 | ³ -1.000E+00 | ³ --- |
| ³ DCNUCC(1) | ³ | ³ | ³ |
| R016 ³ Unsaturated zone 1 (cm**3/g) | ³ 8.250E+02 | ³ -1.000E+00 | ³ --- |
| ³ DCNUCU(1,1) | ³ | ³ | ³ |
| R016 ³ Saturated zone (cm**3/g) | ³ 8.250E+02 | ³ -1.000E+00 | ³ --- |
| ³ DCNUCS(1) | ³ | ³ | ³ |
| R016 ³ Leach rate (/yr) | ³ 0.000E+00 | ³ 0.000E+00 | ³ 9.464E-05 |
| ³ ALEACH(1) | ³ | ³ | ³ |
| R016 ³ Solubility constant | ³ 0.000E+00 | ³ 0.000E+00 | ³ not used |
| ³ SOLUBK(1) | ³ | ³ | ³ |
| ³ | | | |
| R016 ³ Distribution coefficients for daughter Gd-152 | ³ | ³ | ³ |
| ³ | | | |
| R016 ³ Contaminated zone (cm**3/g) | ³ 8.250E+02 | ³ -1.000E+00 | ³ --- |
| ³ DCNUCC(3) | ³ | ³ | ³ |
| R016 ³ Unsaturated zone 1 (cm**3/g) | ³ 8.250E+02 | ³ -1.000E+00 | ³ --- |
| ³ DCNUCU(3,1) | ³ | ³ | ³ |
| R016 ³ Saturated zone (cm**3/g) | ³ 8.250E+02 | ³ -1.000E+00 | ³ --- |
| ³ DCNUCS(3) | ³ | ³ | ³ |
| R016 ³ Leach rate (/yr) | ³ 0.000E+00 | ³ 0.000E+00 | ³ 9.464E-05 |
| ³ ALEACH(3) | ³ | ³ | ³ |
| R016 ³ Solubility constant | ³ 0.000E+00 | ³ 0.000E+00 | ³ not used |
| ³ SOLUBK(3) | ³ | ³ | ³ |
| ³ | | | |
| R017 ³ Inhalation rate (m**3/yr) | ³ 8.400E+03 | ³ 8.400E+03 | ³ --- |
| ³ INHALR | ³ | ³ | ³ |
| R017 ³ Mass loading for inhalation (g/m**3) | ³ 2.330E-05 | ³ 1.000E-04 | ³ --- |
| ³ MLINH | ³ | ³ | ³ |
| R017 ³ Exposure duration | ³ 3.000E+01 | ³ 3.000E+01 | ³ --- |
| ³ ED | ³ | ³ | ³ |
| R017 ³ Shielding factor, inhalation | ³ 5.500E-01 | ³ 4.000E-01 | ³ --- |
| ³ SHF3 | ³ | ³ | ³ |
| R017 ³ Shielding factor, external gamma | ³ 2.725E-01 | ³ 7.000E-01 | ³ --- |
| ³ SHF1 | ³ | ³ | ³ |
| R017 ³ Fraction of time spent indoors | ³ 6.571E-01 | ³ 5.000E-01 | ³ --- |
| ³ FIND | ³ | ³ | ³ |
| R017 ³ Fraction of time spent outdoors (on site) | ³ 1.181E-01 | ³ 2.500E-01 | ³ --- |
| ³ FOTD | ³ | ³ | ³ |
| R017 ³ Shape factor flag, external gamma | ³ 1.000E+00 | ³ 1.000E+00 | ³ >0 shows circular AREA. |
| ³ FS | ³ | ³ | ³ |
| R017 ³ Radii of shape factor array (used if FS = -1): | ³ | ³ | ³ |
| ³ | | | |
| R017 ³ Outer annular radius (m), ring 1: | ³ not used | ³ 5.000E+01 | ³ --- |
| ³ RAD_SHAPE(1) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 2: | ³ not used | ³ 7.071E+01 | ³ --- |
| ³ RAD_SHAPE(2) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 3: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(3) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 4: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(4) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 5: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(5) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 6: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(6) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 7: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(7) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 8: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(8) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 9: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(9) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 10: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(10) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 11: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(11) | ³ | ³ | ³ |
| R017 ³ Outer annular radius (m), ring 12: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(12) | ³ | ³ | ³ |
| ³ | | | |

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Summary : DCGL to Dose for Eu152 File: Eu-152.RAD

Site-Specific Parameter Summary (continued)

| 0 | ³ | ³ | ³ | ³ | ³ | ³ | ³ | ³ | ³ |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------------|
| | Parameter | | User | | Input | | Default | | Used by RESRAD |
| 3 | Menu | 3 | Parameter | 3 | Input | 3 | Default | 3 | (If different from user |

input) 3 Name

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AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA
R017 3 Fractions of annular areas within AREA: 3 3 3
3
R017 3 Ring 1 3 not used 3 1.000E+00 3 ---
3 FRACA( 1)
R017 3 Ring 2 3 not used 3 2.732E-01 3 ---
3 FRACA( 2)
R017 3 Ring 3 3 not used 3 0.000E+00 3 ---
3 FRACA( 3)
R017 3 Ring 4 3 not used 3 0.000E+00 3 ---
3 FRACA( 4)
R017 3 Ring 5 3 not used 3 0.000E+00 3 ---
3 FRACA( 5)
R017 3 Ring 6 3 not used 3 0.000E+00 3 ---
3 FRACA( 6)
R017 3 Ring 7 3 not used 3 0.000E+00 3 ---
3 FRACA( 7)
R017 3 Ring 8 3 not used 3 0.000E+00 3 ---
3 FRACA( 8)
R017 3 Ring 9 3 not used 3 0.000E+00 3 ---
3 FRACA( 9)
R017 3 Ring 10 3 not used 3 0.000E+00 3 ---
3 FRACA(10)
R017 3 Ring 11 3 not used 3 0.000E+00 3 ---
3 FRACA(11)
R017 3 Ring 12 3 not used 3 0.000E+00 3 ---
3 FRACA(12)
3 3 3
3
R018 3 Fruits, vegetables and grain consumption (kg/yr) 3 1.120E+02 3 1.600E+02 3 ---
3 DIET(1)
R018 3 Leafy vegetable consumption (kg/yr) 3 2.140E+01 3 1.400E+01 3 ---
3 DIET(2)
R018 3 Milk consumption (L/yr) 3 2.330E+02 3 9.200E+01 3 ---
3 DIET(3)
R018 3 Meat and poultry consumption (kg/yr) 3 6.510E+01 3 6.300E+01 3 ---
3 DIET(4)
R018 3 Fish consumption (kg/yr) 3 2.060E+01 3 5.400E+00 3 ---
3 DIET(5)
R018 3 Other seafood consumption (kg/yr) 3 9.000E-01 3 9.000E-01 3 ---
3 DIET(6)
R018 3 Soil ingestion rate (g/yr) 3 1.826E+01 3 3.650E+01 3 ---
3 SOIL
R018 3 Drinking water intake (L/yr) 3 4.785E+02 3 5.100E+02 3 ---
3 DWI
R018 3 Contamination fraction of drinking water 3 1.000E+00 3 1.000E+00 3 ---
3 FDW
R018 3 Contamination fraction of household water 3 not used 3 1.000E+00 3 ---
3 FHHW
R018 3 Contamination fraction of livestock water 3 1.000E+00 3 1.000E+00 3 ---
3 FLW
R018 3 Contamination fraction of irrigation water 3 1.000E+00 3 1.000E+00 3 ---
3 FIRW
R018 3 Contamination fraction of aquatic food 3 1.000E+00 3 5.000E-01 3 ---
3 FR9
R018 3 Contamination fraction of plant food 3 1.000E+00 3-1 3 ---
3 FPLANT
R018 3 Contamination fraction of meat 3 1.000E+00 3-1 3 ---
3 FMEAT
R018 3 Contamination fraction of milk 3 1.000E+00 3-1 3 ---
3 FMILK
3 3 3
3
R019 3 Livestock fodder intake for meat (kg/day) 3 2.710E+01 3 6.800E+01 3 ---
3 LFI5
R019 3 Livestock fodder intake for milk (kg/day) 3 6.320E+01 3 5.500E+01 3 ---
3 LFI6
R019 3 Livestock water intake for meat (L/day) 3 5.060E+01 3 5.000E+01 3 ---
3 LWI5
R019 3 Livestock water intake for milk (L/day) 3 6.000E+01 3 1.600E+02 3 ---
3 LWI6
R019 3 Livestock soil intake (kg/day) 3 5.000E-01 3 5.000E-01 3 ---
3 LSI
R019 3 Mass loading for foliar deposition (g/m**3) 3 4.000E-04 3 1.000E-04 3 ---
3 MLFD
R019 3 Depth of soil mixing layer (m) 3 2.300E-01 3 1.500E-01 3 ---
3 DM
R019 3 Depth of roots (m) 3 2.150E+00 3 9.000E-01 3 ---
3 DROOT
R019 3 Drinking water fraction from ground water 3 1.000E+00 3 1.000E+00 3 ---

```

| | | | | | | | |
|------|---|---|-----------|---|-----------|---|-----|
| 3 | FGWDW | | | | | | |
| R019 | Household water fraction from ground water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWHH | | | | | | |
| R019 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWLW | | | | | | |
| R019 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FGWIR | | | | | | |
| 3 | | | | | | | |
| R19B | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 | 7.000E-01 | 3 | --- |
| 3 | YV(1) | | | | | | |
| R19B | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 | 1.500E+00 | 3 | --- |
| 3 | YV(2) | | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 | 1.100E+00 | 3 | --- |
| 3 | YV(3) | | | | | | |
| R19B | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 | 1.700E-01 | 3 | --- |
| 3 | TE(1) | | | | | | |
| R19B | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | TE(2) | | | | | | |
| R19B | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 | 8.000E-02 | 3 | --- |
| 3 | TE(3) | | | | | | |
| R19B | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 | 1.000E-01 | 3 | --- |
| 3 | TIV(1) | | | | | | |

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Summary : DCGL to Dose for Eu152 File: Eu-152.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|-----------|---|---------|-------------------------|---|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <p> AA AA R19B 3 Translocation Factor for Leafy 3 1.000E+00 3 1.000E+00 3 --- 3 TIV(2) R19B 3 Translocation Factor for Fodder 3 1.000E+00 3 1.000E+00 3 --- 3 TIV(3) R19B 3 Dry Foliar Interception Fraction for Non-Leafy 3 3.500E-01 3 2.500E-01 3 --- 3 RDRY(1) R19B 3 Dry Foliar Interception Fraction for Leafy 3 3.500E-01 3 2.500E-01 3 --- 3 RDRY(2) R19B 3 Dry Foliar Interception Fraction for Fodder 3 3.500E-01 3 2.500E-01 3 --- 3 RDRY(3) R19B 3 Wet Foliar Interception Fraction for Non-Leafy 3 3.500E-01 3 2.500E-01 3 --- 3 RWET(1) R19B 3 Wet Foliar Interception Fraction for Leafy 3 5.800E-01 3 2.500E-01 3 --- 3 RWET(2) R19B 3 Wet Foliar Interception Fraction for Fodder 3 3.500E-01 3 2.500E-01 3 --- 3 RWET(3) R19B 3 Weathering Removal Constant for Vegetation 3 3.300E+01 3 2.000E+01 3 --- 3 WLAM 3 C14 3 C-12 concentration in water (g/cm**3) 3 not used 3 2.000E-05 3 --- 3 C12WTR C14 3 C-12 concentration in contaminated soil (g/g) 3 not used 3 3.000E-02 3 --- 3 C12CZ C14 3 Fraction of vegetation carbon from soil 3 not used 3 2.000E-02 3 --- 3 CSOIL C14 3 Fraction of vegetation carbon from air 3 not used 3 9.800E-01 3 --- 3 CAIR C14 3 C-14 evasion layer thickness in soil (m) 3 not used 3 3.000E-01 3 --- 3 DMC C14 3 C-14 evasion flux rate from soil (1/sec) 3 not used 3 7.000E-07 3 --- 3 EVSN C14 3 C-12 evasion flux rate from soil (1/sec) 3 not used 3 1.000E-10 3 --- 3 REVSN C14 3 Fraction of grain in beef cattle feed 3 not used 3 8.000E-01 3 --- 3 AVFG4 C14 3 Fraction of grain in milk cow feed 3 not used 3 2.000E-01 3 --- 3 AVFG5 C14 3 DCF correction factor for gaseous forms of C14 3 not used 3 8.894E+01 3 --- 3 CO2F 3 3 STOR 3 Storage times of contaminated foodstuffs (days): 3 3 3 STOR 3 Fruits, non-leafy vegetables, and grain 3 1.400E+01 3 1.400E+01 3 --- 3 STOR_T(1) STOR 3 Leafy vegetables 3 1.000E+00 3 1.000E+00 3 --- 3 STOR_T(2) STOR 3 Milk 3 1.000E+00 3 1.000E+00 3 --- </p> | | | | | | |

| | | |
|-------------------------|--------------|------------|
| 6 -- aquatic foods | ³ | active |
| 7 -- drinking water | ³ | active |
| 8 -- soil ingestion | ³ | active |
| 9 -- radon | ³ | suppressed |
| Find peak pathway doses | ³ | active |

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Eu-154 | 2.860E-04 | 2.860E-04 | DCF2(1) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Eu-154 | 9.550E-06 | 9.550E-06 | DCF3(1) |
| D-34 | Food transfer factors: | | | |
| D-34 | Eu-154 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(1,1) |
| D-34 | Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF(1,2) |
| D-34 | Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(1,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Eu-154 , fish | 5.000E+01 | 5.000E+01 | BIOFAC(1,1) |
| D-5 | Eu-154 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(1,2) |

Site-Specific Parameter Summary

| Parameter Menu input) | Name | Input | Default | (If different from user |
|-----------------------|--|-----------|-----------|-------------------------|
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T(2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T(3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T(4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T(5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T(6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T(7) | | | | |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T(8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(10) | | | | |
| | | | | |
| R012 | Initial principal radionuclide (pCi/g): Eu-154 | 1.113E+01 | 0.000E+00 | --- |
| S1(1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Eu-154 | not used | 0.000E+00 | --- |
| W1(1) | | | | |
| | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: EU-154.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|-----------|---|---------|-------------------------|---|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <pre> AA AAAAAAAAAAAAAAAAAAAA R015 3 Unsat. zone 1, thickness (m) 3 1.430E+00 3 4.000E+00 3 --- 3 H(1) R015 3 Unsat. zone 1, soil density (g/cm**3) 3 1.860E+00 3 1.500E+00 3 --- 3 DENSUZ(1) R015 3 Unsat. zone 1, total porosity 3 3.500E-01 3 4.000E-01 3 --- 3 TPUZ(1) R015 3 Unsat. zone 1, effective porosity 3 2.500E-01 3 2.000E-01 3 --- 3 EPUZ(1) R015 3 Unsat. zone 1, field capacity 3 1.000E-01 3 2.000E-01 3 --- 3 FCUZ(1) R015 3 Unsat. zone 1, soil-specific b parameter 3 4.380E+00 3 5.300E+00 3 --- 3 BUZ(1) R015 3 Unsat. zone 1, hydraulic conductivity (m/yr) 3 5.550E+02 3 1.000E+01 3 --- 3 HCUZ(1) 3 R016 3 Distribution coefficients for Eu-154 3 3 3 3 R016 3 Contaminated zone (cm**3/g) 3 8.250E+02 3 -1.000E+00 3 --- 3 DCNUCC(1) R016 3 Unsaturated zone 1 (cm**3/g) 3 8.250E+02 3 -1.000E+00 3 --- </pre> | | | | | | |

| | | | |
|-----------------|--|----------------------------|-------------------------|
| 3 DCNUCU(1,1) | | | |
| R016 3 | Saturated zone (cm**3/g) | 3 8.250E+02 3 -1.000E+00 3 | --- |
| 3 DCNUCS(1) | | | |
| R016 3 | Leach rate (/yr) | 3 0.000E+00 3 0.000E+00 3 | 9.464E-05 |
| 3 ALEACH(1) | | | |
| R016 3 | Solubility constant | 3 0.000E+00 3 0.000E+00 3 | not used |
| 3 SOLUBK(1) | | | |
| 3 | | | |
| R017 3 | Inhalation rate (m**3/yr) | 3 8.400E+03 3 8.400E+03 3 | --- |
| 3 INHALR | | | |
| R017 3 | Mass loading for inhalation (g/m**3) | 3 2.330E-05 3 1.000E-04 3 | --- |
| 3 MLINH | | | |
| R017 3 | Exposure duration | 3 3.000E+01 3 3.000E+01 3 | --- |
| 3 ED | | | |
| R017 3 | Shielding factor, inhalation | 3 5.500E-01 3 4.000E-01 3 | --- |
| 3 SHF3 | | | |
| R017 3 | Shielding factor, external gamma | 3 2.725E-01 3 7.000E-01 3 | --- |
| 3 SHF1 | | | |
| R017 3 | Fraction of time spent indoors | 3 6.571E-01 3 5.000E-01 3 | --- |
| 3 FIND | | | |
| R017 3 | Fraction of time spent outdoors (on site) | 3 1.181E-01 3 2.500E-01 3 | --- |
| 3 FOTD | | | |
| R017 3 | Shape factor flag, external gamma | 3 1.000E+00 3 1.000E+00 3 | >0 shows circular AREA. |
| 3 FS | | | |
| R017 3 | Radii of shape factor array (used if FS = -1): | 3 3 3 | |
| 3 | | | |
| R017 3 | Outer annular radius (m), ring 1: | 3 not used 3 5.000E+01 3 | --- |
| 3 RAD_SHAPE(1) | | | |
| R017 3 | Outer annular radius (m), ring 2: | 3 not used 3 7.071E+01 3 | --- |
| 3 RAD_SHAPE(2) | | | |
| R017 3 | Outer annular radius (m), ring 3: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(3) | | | |
| R017 3 | Outer annular radius (m), ring 4: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(4) | | | |
| R017 3 | Outer annular radius (m), ring 5: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(5) | | | |
| R017 3 | Outer annular radius (m), ring 6: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(6) | | | |
| R017 3 | Outer annular radius (m), ring 7: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(7) | | | |
| R017 3 | Outer annular radius (m), ring 8: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(8) | | | |
| R017 3 | Outer annular radius (m), ring 9: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(9) | | | |
| R017 3 | Outer annular radius (m), ring 10: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(10) | | | |
| R017 3 | Outer annular radius (m), ring 11: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(11) | | | |
| R017 3 | Outer annular radius (m), ring 12: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(12) | | | |
| 3 | | | |
| R017 3 | Fractions of annular areas within AREA: | 3 3 3 | |
| 3 | | | |
| R017 3 | Ring 1 | 3 not used 3 1.000E+00 3 | --- |
| 3 FRACA(1) | | | |
| R017 3 | Ring 2 | 3 not used 3 2.732E-01 3 | --- |
| 3 FRACA(2) | | | |
| R017 3 | Ring 3 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(3) | | | |
| R017 3 | Ring 4 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(4) | | | |
| R017 3 | Ring 5 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(5) | | | |
| R017 3 | Ring 6 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(6) | | | |
| R017 3 | Ring 7 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(7) | | | |
| R017 3 | Ring 8 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(8) | | | |
| R017 3 | Ring 9 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(9) | | | |
| R017 3 | Ring 10 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(10) | | | |
| R017 3 | Ring 11 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(11) | | | |
| R017 3 | Ring 12 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(12) | | | |
| 3 | | | |

| | | Site-Specific | Parameter Summary (continued) | | |
|---|--|---------------|-------------------------------|-----------|---|
| Menu Parameter input) Name | | Parameter | User Input | Default | Used by RESRAD (If different from user |
| AAA | | | | | |
| R018 | Fruits, vegetables and grain consumption (kg/yr) | | 1.120E+02 | 1.600E+02 | --- |
| DIET(1) | | | | | |
| R018 | Leafy vegetable consumption (kg/yr) | | 2.140E+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) | | 2.060E+01 | 5.400E+00 | --- |
| DIET(5) | | | | | |
| R018 | Other seafood consumption (kg/yr) | | 9.000E-01 | 9.000E-01 | --- |
| DIET(6) | | | | | |
| R018 | Soil ingestion rate (g/yr) | | 1.826E+01 | 3.650E+01 | --- |
| SOIL | | | | | |
| R018 | Drinking water intake (L/yr) | | 4.785E+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 | --- |
| FIW | | | | | |
| R018 | Contamination fraction of aquatic food | | 1.000E+00 | 5.000E-01 | --- |
| FR9 | | | | | |
| R018 | Contamination fraction of plant food | | 1.000E+00 | -1 | --- |
| FPLANT | | | | | |
| R018 | Contamination fraction of meat | | 1.000E+00 | -1 | --- |
| FMEAT | | | | | |
| R018 | Contamination fraction of milk | | 1.000E+00 | -1 | --- |
| FMILK | | | | | |
| | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | | 2.710E+01 | 6.800E+01 | --- |
| LFI5 | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | | 6.320E+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) | | 5.000E-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) | | 2.150E+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) | | 2.889E+00 | 1.500E+00 | --- |
| YV(2) | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | | 1.887E+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) | | | | | |
| R19B | Translocation Factor for Non-Leafy | | 1.000E-01 | 1.000E-01 | --- |
| TIV(1) | | | | | |

| | | | | | | | | |
|---|---------|--|---|------------------|-------|-----------|---|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(2) | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(3) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(1) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(2) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(3) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(1) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(2) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(3) | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 | WLAM | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 | C12WTR | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 | C12CZ | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 | CSOIL | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 | CAIR | | | | | | | |
| 1RESRAD, Version 6.21 T« Limit = 0.5 year | | | | 04/21/2003 | 21:15 | Page | 6 | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | File: EU-154.RAD | | | | |

Dose Conversion Factor (and Related) Parameter Summary
 File: FGR 13 Morbidity

| 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|---|---|--|---|------------------|---|-----------|---|---------------|---|
| Menu | 3 | Parameter | 3 | Current | 3 | Default | 3 | Parameter | 3 |
| | 3 | | 3 | Value | 3 | | 3 | Name | 3 |
| AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 |
| B-1 | 3 | Dose conversion factors for inhalation, mrem/pCi: | 3 | | 3 | | 3 | | 3 |
| B-1 | 3 | Eu-155 | 3 | 4.140E-05 | 3 | 4.140E-05 | 3 | DCF2 (1) | 3 |
| D-1 | 3 | Dose conversion factors for ingestion, mrem/pCi: | 3 | | 3 | | 3 | | 3 |
| D-1 | 3 | Eu-155 | 3 | 1.530E-06 | 3 | 1.530E-06 | 3 | DCF3 (1) | 3 |
| D-34 | 3 | Food transfer factors: | 3 | | 3 | | 3 | | 3 |
| D-34 | 3 | Eu-155 , plant/soil concentration ratio, dimensionless | 3 | 2.500E-03 | 3 | 2.500E-03 | 3 | RTF (1,1) | 3 |
| D-34 | 3 | Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3 | 2.000E-03 | 3 | 2.000E-03 | 3 | RTF (1,2) | 3 |
| D-34 | 3 | Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3 | 2.000E-05 | 3 | 2.000E-05 | 3 | RTF (1,3) | 3 |
| D-5 | 3 | Bioaccumulation factors, fresh water, L/kg: | 3 | | 3 | | 3 | | 3 |
| D-5 | 3 | Eu-155 , fish | 3 | 5.000E+01 | 3 | 5.000E+01 | 3 | BIOFAC (1,1) | 3 |
| D-5 | 3 | Eu-155 , crustacea and mollusks | 3 | 1.000E+03 | 3 | 1.000E+03 | 3 | BIOFAC (1,2) | 3 |
| 1RESRAD, Version 6.21 | 3 | T< Limit = 0.5 year | 3 | 04/21/2003 | 3 | 21:23 | 3 | Page 3 | 3 |
| Summary : Yankee Rowe Sensitivity Analysis=soil | 3 | | 3 | File: EU-155.RAD | 3 | | 3 | | 3 |

Site-Specific Parameter Summary

| 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|-----------|---|--|---|-----------|---|-----------|---|-------------------------|---|
| | 3 | User | 3 | | 3 | | 3 | Used by RESRAD | 3 |
| Menu | 3 | Parameter | 3 | Input | 3 | Default | 3 | (If different from user | 3 |
| input) | 3 | Name | 3 | | 3 | | 3 | | 3 |
| AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 |
| AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 | AAAAA | 3 |
| R011 | 3 | Area of contaminated zone (m**2) | 3 | 1.302E+04 | 3 | 1.000E+04 | 3 | --- | 3 |
| 3 AREA | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Thickness of contaminated zone (m) | 3 | 1.575E+00 | 3 | 2.000E+00 | 3 | --- | 3 |
| 3 THICK0 | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Length parallel to aquifer flow (m) | 3 | 1.290E+02 | 3 | 1.000E+02 | 3 | --- | 3 |
| 3 LCZPAQ | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Basic radiation dose limit (mrem/yr) | 3 | 2.500E+01 | 3 | 2.500E+01 | 3 | --- | 3 |
| 3 BRDL | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Time since placement of material (yr) | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 TI | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- | 3 |
| 3 T (2) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 3.000E+00 | 3 | 3.000E+00 | 3 | --- | 3 |
| 3 T (3) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+01 | 3 | 1.000E+01 | 3 | --- | 3 |
| 3 T (4) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 3.000E+01 | 3 | 3.000E+01 | 3 | --- | 3 |
| 3 T (5) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+02 | 3 | 1.000E+02 | 3 | --- | 3 |
| 3 T (6) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 3.000E+02 | 3 | 3.000E+02 | 3 | --- | 3 |
| 3 T (7) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | 1.000E+03 | 3 | 1.000E+03 | 3 | --- | 3 |
| 3 T (8) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | not used | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 T (9) | 3 | | 3 | | 3 | | 3 | | 3 |
| R011 | 3 | Times for calculations (yr) | 3 | not used | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 T(10) | 3 | | 3 | | 3 | | 3 | | 3 |
| R012 | 3 | Initial principal radionuclide (pCi/g): Eu-155 | 3 | 4.670E+02 | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 S1 (1) | 3 | | 3 | | 3 | | 3 | | 3 |
| R012 | 3 | Concentration in groundwater (pCi/L): Eu-155 | 3 | not used | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 W1 (1) | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Cover depth (m) | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | --- | 3 |
| 3 COVER0 | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Density of cover material (g/cm**3) | 3 | not used | 3 | 1.500E+00 | 3 | --- | 3 |
| 3 DENSCV | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Cover depth erosion rate (m/yr) | 3 | not used | 3 | 1.000E-03 | 3 | --- | 3 |
| 3 VCV | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Density of contaminated zone (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | 3 | --- | 3 |
| 3 DENSCZ | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Contaminated zone erosion rate (m/yr) | 3 | 8.500E-04 | 3 | 1.000E-03 | 3 | --- | 3 |
| 3 VCV | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Contaminated zone total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | 3 | --- | 3 |
| 3 TPCZ | 3 | | 3 | | 3 | | 3 | | 3 |
| R013 | 3 | Contaminated zone field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | 3 | --- | 3 |

| | | | | | | | | |
|------|---|---|-----------|---|-----------|---|--|-----|
| 3 | FCCZ | | | | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | 3 | | --- |
| 3 | HCCZ | | | | | | | |
| R013 | Contaminated zone b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BCZ | | | | | | | |
| R013 | Average annual wind speed (m/sec) | 3 | 2.030E+00 | 3 | 2.000E+00 | 3 | | --- |
| 3 | WIND | | | | | | | |
| R013 | Humidity in air (g/m**3) | 3 | not used | 3 | 8.000E+00 | 3 | | --- |
| 3 | HUMID | | | | | | | |
| R013 | Evapotranspiration coefficient | 3 | 7.500E-01 | 3 | 5.000E-01 | 3 | | --- |
| 3 | EVAPTR | | | | | | | |
| R013 | Precipitation (m/yr) | 3 | 1.200E+00 | 3 | 1.000E+00 | 3 | | --- |
| 3 | PRECIP | | | | | | | |
| R013 | Irrigation (m/yr) | 3 | 4.350E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RI | | | | | | | |
| R013 | Irrigation mode | 3 | overhead | 3 | overhead | 3 | | --- |
| 3 | IDITCH | | | | | | | |
| R013 | Runoff coefficient | 3 | 6.000E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | RUNOFF | | | | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 3 | 7.770E+05 | 3 | 1.000E+06 | 3 | | --- |
| 3 | WAREA | | | | | | | |
| R013 | Accuracy for water/soil computations | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | EPS | | | | | | | |
| 3 | | | | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 3 | 2.120E+00 | 3 | 1.500E+00 | 3 | | --- |
| 3 | DENSAQ | | | | | | | |
| R014 | Saturated zone total porosity | 3 | 3.000E-01 | 3 | 4.000E-01 | 3 | | --- |
| 3 | TPSZ | | | | | | | |
| R014 | Saturated zone effective porosity | 3 | 2.100E-01 | 3 | 2.000E-01 | 3 | | --- |
| 3 | EPSZ | | | | | | | |
| R014 | Saturated zone field capacity | 3 | 9.000E-02 | 3 | 2.000E-01 | 3 | | --- |
| 3 | FCSZ | | | | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 3 | 1.000E-01 | 3 | 1.000E+02 | 3 | | --- |
| 3 | HCSZ | | | | | | | |
| R014 | Saturated zone hydraulic gradient | 3 | 1.000E-01 | 3 | 2.000E-02 | 3 | | --- |
| 3 | HGWT | | | | | | | |
| R014 | Saturated zone b parameter | 3 | 4.900E+00 | 3 | 5.300E+00 | 3 | | --- |
| 3 | BSZ | | | | | | | |
| R014 | Water table drop rate (m/yr) | 3 | 1.000E-03 | 3 | 1.000E-03 | 3 | | --- |
| 3 | VWT | | | | | | | |
| R014 | Well pump intake depth (m below water table) | 3 | 1.451E+01 | 3 | 1.000E+01 | 3 | | --- |
| 3 | DWIBWT | | | | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | 3 | ND | 3 | ND | 3 | | --- |
| 3 | MODEL | | | | | | | |
| R014 | Well pumping rate (m**3/yr) | 3 | 1.323E+03 | 3 | 2.500E+02 | 3 | | --- |
| 3 | UW | | | | | | | |
| 3 | | | | | | | | |
| R015 | Number of unsaturated zone strata | 3 | 1 | 3 | 1 | 3 | | --- |
| 3 | NS | | | | | | | |

1RESRAD, Version 6.21 T< Limit = 0.5 year 04/21/2003 21:23 Page 4
Summary : Yankee Rowe Sensitivity Analysis=soil File: EU-155.RAD

| | | Site-Specific Parameter Summary (continued) | | | | |
|--|--|---|-----------|-------------------------|------------|----------------|
| 0 | 3 | 3 | User | 3 | 3 | Used by RESRAD |
| 3 | Parameter | | | | | |
| Menu | Parameter | Input | Default | (If different from user | | |
| input) | Name | | | | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | | | |
| R015 | Unsat. zone 1, thickness (m) | 3 | 1.430E+00 | 3 | 4.000E+00 | --- |
| 3 | H(1) | | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 3 | 1.860E+00 | 3 | 1.500E+00 | --- |
| 3 | DENSUZ(1) | | | | | |
| R015 | Unsat. zone 1, total porosity | 3 | 3.500E-01 | 3 | 4.000E-01 | --- |
| 3 | TPUZ(1) | | | | | |
| R015 | Unsat. zone 1, effective porosity | 3 | 2.500E-01 | 3 | 2.000E-01 | --- |
| 3 | EPUZ(1) | | | | | |
| R015 | Unsat. zone 1, field capacity | 3 | 1.000E-01 | 3 | 2.000E-01 | --- |
| 3 | FCUZ(1) | | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 3 | 4.380E+00 | 3 | 5.300E+00 | --- |
| 3 | BUZ(1) | | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 3 | 5.550E+02 | 3 | 1.000E+01 | --- |
| 3 | HCUZ(1) | | | | | |
| 3 | | | | | | |
| R016 | Distribution coefficients for Eu-155 | 3 | | 3 | | |
| 3 | | | | | | |
| R016 | Contaminated zone (cm**3/g) | 3 | 8.250E+02 | 3 | -1.000E+00 | --- |
| 3 | DCNUCC(1) | | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 3 | 8.250E+02 | 3 | -1.000E+00 | --- |

| | | | |
|-----------------|--|----------------------------|-------------------------|
| 3 DCNUCU(1,1) | | | |
| R016 3 | Saturated zone (cm**3/g) | 3 8.250E+02 3 -1.000E+00 3 | --- |
| 3 DCNUCS(1) | | | |
| R016 3 | Leach rate (/yr) | 3 0.000E+00 3 0.000E+00 3 | 9.464E-05 |
| 3 ALEACH(1) | | | |
| R016 3 | Solubility constant | 3 0.000E+00 3 0.000E+00 3 | not used |
| 3 SOLUBK(1) | | | |
| 3 | | | |
| R017 3 | Inhalation rate (m**3/yr) | 3 8.400E+03 3 8.400E+03 3 | --- |
| 3 INHALR | | | |
| R017 3 | Mass loading for inhalation (g/m**3) | 3 2.330E-05 3 1.000E-04 3 | --- |
| 3 MLINH | | | |
| R017 3 | Exposure duration | 3 3.000E+01 3 3.000E+01 3 | --- |
| 3 ED | | | |
| R017 3 | Shielding factor, inhalation | 3 5.500E-01 3 4.000E-01 3 | --- |
| 3 SHF3 | | | |
| R017 3 | Shielding factor, external gamma | 3 2.725E-01 3 7.000E-01 3 | --- |
| 3 SHF1 | | | |
| R017 3 | Fraction of time spent indoors | 3 6.571E-01 3 5.000E-01 3 | --- |
| 3 FIND | | | |
| R017 3 | Fraction of time spent outdoors (on site) | 3 1.181E-01 3 2.500E-01 3 | --- |
| 3 FOTD | | | |
| R017 3 | Shape factor flag, external gamma | 3 1.000E+00 3 1.000E+00 3 | >0 shows circular AREA. |
| 3 FS | | | |
| R017 3 | Radii of shape factor array (used if FS = -1): | 3 3 3 | |
| 3 | | | |
| R017 3 | Outer annular radius (m), ring 1: | 3 not used 3 5.000E+01 3 | --- |
| 3 RAD_SHAPE(1) | | | |
| R017 3 | Outer annular radius (m), ring 2: | 3 not used 3 7.071E+01 3 | --- |
| 3 RAD_SHAPE(2) | | | |
| R017 3 | Outer annular radius (m), ring 3: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(3) | | | |
| R017 3 | Outer annular radius (m), ring 4: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(4) | | | |
| R017 3 | Outer annular radius (m), ring 5: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(5) | | | |
| R017 3 | Outer annular radius (m), ring 6: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(6) | | | |
| R017 3 | Outer annular radius (m), ring 7: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(7) | | | |
| R017 3 | Outer annular radius (m), ring 8: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(8) | | | |
| R017 3 | Outer annular radius (m), ring 9: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(9) | | | |
| R017 3 | Outer annular radius (m), ring 10: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(10) | | | |
| R017 3 | Outer annular radius (m), ring 11: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(11) | | | |
| R017 3 | Outer annular radius (m), ring 12: | 3 not used 3 0.000E+00 3 | --- |
| 3 RAD_SHAPE(12) | | | |
| 3 | | | |
| R017 3 | Fractions of annular areas within AREA: | 3 3 3 | |
| 3 | | | |
| R017 3 | Ring 1 | 3 not used 3 1.000E+00 3 | --- |
| 3 FRACA(1) | | | |
| R017 3 | Ring 2 | 3 not used 3 2.732E-01 3 | --- |
| 3 FRACA(2) | | | |
| R017 3 | Ring 3 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(3) | | | |
| R017 3 | Ring 4 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(4) | | | |
| R017 3 | Ring 5 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(5) | | | |
| R017 3 | Ring 6 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(6) | | | |
| R017 3 | Ring 7 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(7) | | | |
| R017 3 | Ring 8 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(8) | | | |
| R017 3 | Ring 9 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(9) | | | |
| R017 3 | Ring 10 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(10) | | | |
| R017 3 | Ring 11 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(11) | | | |
| R017 3 | Ring 12 | 3 not used 3 0.000E+00 3 | --- |
| 3 FRACA(12) | | | |
| 3 | | | |

| Site-Specific | | Parameter Summary (continued) | | | Used by RESRAD |
|---|-----------|--|-------|-----------|-------------------------|
| 0 | 3 | 3 | User | 3 | |
| 3 | Parameter | Parameter | Input | Default | (If different from user |
| Menu | 3 | | | | input) |
| input) | 3 | Name | | | |
| AAA | | | | | |
| AAAAAAAAAAAAAAAAAAAAA | | | | | |
| R018 | 3 | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 1.600E+02 3 --- |
| 3 | DIET(1) | | | | |
| R018 | 3 | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 1.400E+01 3 --- |
| 3 | DIET(2) | | | | |
| R018 | 3 | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 9.200E+01 3 --- |
| 3 | DIET(3) | | | | |
| R018 | 3 | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 6.300E+01 3 --- |
| 3 | DIET(4) | | | | |
| R018 | 3 | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 5.400E+00 3 --- |
| 3 | DIET(5) | | | | |
| R018 | 3 | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 9.000E-01 3 --- |
| 3 | DIET(6) | | | | |
| R018 | 3 | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 3.650E+01 3 --- |
| 3 | SOIL | | | | |
| R018 | 3 | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 5.100E+02 3 --- |
| 3 | DWI | | | | |
| R018 | 3 | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FDW | | | | |
| R018 | 3 | Contamination fraction of household water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FHHW | | | | |
| R018 | 3 | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FLW | | | | |
| R018 | 3 | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FIRW | | | | |
| R018 | 3 | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 5.000E-01 3 --- |
| 3 | FR9 | | | | |
| R018 | 3 | Contamination fraction of plant food | 3 | 1.000E+00 | 3-1 3 --- |
| 3 | FPLANT | | | | |
| R018 | 3 | Contamination fraction of meat | 3 | 1.000E+00 | 3-1 3 --- |
| 3 | FMEAT | | | | |
| R018 | 3 | Contamination fraction of milk | 3 | 1.000E+00 | 3-1 3 --- |
| 3 | FMILK | | | | |
| 3 | | | 3 | | 3 |
| 3 | | | | | |
| R019 | 3 | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 6.800E+01 3 --- |
| 3 | LFI5 | | | | |
| R019 | 3 | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 5.500E+01 3 --- |
| 3 | LFI6 | | | | |
| R019 | 3 | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 5.000E+01 3 --- |
| 3 | LWI5 | | | | |
| R019 | 3 | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 1.600E+02 3 --- |
| 3 | LWI6 | | | | |
| R019 | 3 | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 5.000E-01 3 --- |
| 3 | LSI | | | | |
| R019 | 3 | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 1.000E-04 3 --- |
| 3 | MLFD | | | | |
| R019 | 3 | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 1.500E-01 3 --- |
| 3 | DM | | | | |
| R019 | 3 | Depth of roots (m) | 3 | 2.150E+00 | 3 9.000E-01 3 --- |
| 3 | DROOT | | | | |
| R019 | 3 | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWDW | | | | |
| R019 | 3 | Household water fraction from ground water | 3 | not used | 3 1.000E+00 3 --- |
| 3 | FGWHH | | | | |
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWLW | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 1.000E+00 3 --- |
| 3 | FGWIR | | | | |
| 3 | | | 3 | | 3 |
| 3 | | | | | |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 7.000E-01 3 --- |
| 3 | YV(1) | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 1.500E+00 3 --- |
| 3 | YV(2) | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 1.100E+00 3 --- |
| 3 | YV(3) | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 1.700E-01 3 --- |
| 3 | TE(1) | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 2.500E-01 3 --- |
| 3 | TE(2) | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 8.000E-02 3 --- |
| 3 | TE(3) | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 1.000E-01 3 --- |
| 3 | TIV(1) | | | | |

| | | | | | | | | |
|---|---------|--|---|------------------|---|-----------|---|-----|
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(2) | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | TIV(3) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(1) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(2) | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RDRY(3) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(1) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(2) | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | RWET(3) | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 | WLAM | | | | | | | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 | C12WTR | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 | C12CZ | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 | CSOIL | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 | CAIR | | | | | | | |
| 1RESRAD, Version 6.21 T« Limit = 0.5 year 04/21/2003 21:23 Page 6 | | | | | | | | |
| Summary : Yankee Rowe Sensitivity Analysis=soil | | | | File: EU-155.RAD | | | | |

Dose Conversion Factor (and Related) Parameter Summary
 File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|---|--|---------------|-----------|----------------|
| B-1 Dose conversion factors for inhalation, mrem/pCi: | | | | |
| B-1 | Pb-210+D | 2.320E-02 | 2.320E-02 | DCF2 (1) |
| B-1 | Pu-238 | 3.920E-01 | 3.920E-01 | DCF2 (2) |
| B-1 | Ra-226+D | 8.600E-03 | 8.600E-03 | DCF2 (3) |
| B-1 | Th-230 | 3.260E-01 | 3.260E-01 | DCF2 (4) |
| B-1 | U-234 | 1.320E-01 | 1.320E-01 | DCF2 (5) |
| D-1 Dose conversion factors for ingestion, mrem/pCi: | | | | |
| D-1 | Pb-210+D | 7.270E-03 | 7.270E-03 | DCF3 (1) |
| D-1 | Pu-238 | 3.200E-03 | 3.200E-03 | DCF3 (2) |
| D-1 | Ra-226+D | 1.330E-03 | 1.330E-03 | DCF3 (3) |
| D-1 | Th-230 | 5.480E-04 | 5.480E-04 | DCF3 (4) |
| D-1 | U-234 | 2.830E-04 | 2.830E-04 | DCF3 (5) |
| D-34 Food transfer factors: | | | | |
| D-34 | Pb-210+D , plant/soil concentration ratio, dimensionless | 1.000E-02 | 1.000E-02 | RTF (1,1) |
| D-34 | Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-04 | 8.000E-04 | RTF (1,2) |
| D-34 | Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3.000E-04 | 3.000E-04 | RTF (1,3) |
| D-34 | Pu-238 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF (2,1) |
| D-34 | Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF (2,2) |
| D-34 | Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-06 | 1.000E-06 | RTF (2,3) |
| D-34 | Ra-226+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF (3,1) |
| D-34 | Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF (3,2) |
| D-34 | Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF (3,3) |
| D-34 | Th-230 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF (4,1) |
| D-34 | Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF (4,2) |
| D-34 | Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF (4,3) |
| D-34 | U-234 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF (5,1) |
| D-34 | U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.400E-04 | 3.400E-04 | RTF (5,2) |
| D-34 | U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 6.000E-04 | 6.000E-04 | RTF (5,3) |
| D-5 Bioaccumulation factors, fresh water, L/kg: | | | | |
| D-5 | Pb-210+D , fish | 3.000E+02 | 3.000E+02 | BIOFAC (1,1) |
| D-5 | Pb-210+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC (1,2) |
| D-5 | Pu-238 , fish | 3.000E+01 | 3.000E+01 | BIOFAC (2,1) |
| D-5 | Pu-238 , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC (2,2) |
| D-5 | Ra-226+D , fish | 5.000E+01 | 5.000E+01 | BIOFAC (3,1) |
| D-5 | Ra-226+D , crustacea and mollusks | 2.500E+02 | 2.500E+02 | BIOFAC (3,2) |
| D-5 | Th-230 , fish | 1.000E+02 | 1.000E+02 | BIOFAC (4,1) |
| D-5 | Th-230 , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC (4,2) |
| D-5 | U-234 , fish | 1.000E+01 | 1.000E+01 | BIOFAC (5,1) |
| D-5 | U-234 , crustacea and mollusks | 6.000E+01 | 6.000E+01 | BIOFAC (5,2) |

Site-Specific Parameter Summary

| Menu | Parameter | User | Default | Used by RESRAD |
|--|-----------|-----------|-----------|----------------|
| input) Name | | | | |
| R011 Area of contaminated zone (m**2) | | | | |
| R011 | AREA | 1.302E+04 | 1.000E+04 | --- |
| R011 Thickness of contaminated zone (m) | | | | |
| R011 | THICK0 | 1.575E+00 | 2.000E+00 | --- |
| R011 Length parallel to aquifer flow (m) | | | | |
| R011 | LCZPAQ | 1.290E+02 | 1.000E+02 | --- |
| R011 Basic radiation dose limit (mrem/yr) | | | | |
| R011 | BRDL | 2.500E+01 | 2.500E+01 | --- |
| R011 Time since placement of material (yr) | | | | |
| R011 | TI | 0.000E+00 | 0.000E+00 | --- |
| R011 Times for calculations (yr) | | | | |
| R011 | T (2) | 1.000E+00 | 1.000E+00 | --- |
| R011 Times for calculations (yr) | | | | |
| R011 | | 3.000E+00 | 3.000E+00 | --- |

| | | | | |
|---|------------------------|------------------------|--------------|-----|
| ³ T(3) | | | | |
| R011 ³ Times for calculations (yr) | ³ 1.000E+01 | ³ 1.000E+01 | ³ | --- |
| ³ T(4) | | | | |
| R011 ³ Times for calculations (yr) | ³ 3.000E+01 | ³ 3.000E+01 | ³ | --- |
| ³ T(5) | | | | |
| R011 ³ Times for calculations (yr) | ³ 1.000E+02 | ³ 1.000E+02 | ³ | --- |
| ³ T(6) | | | | |
| R011 ³ Times for calculations (yr) | ³ 3.000E+02 | ³ 3.000E+02 | ³ | --- |
| ³ T(7) | | | | |
| R011 ³ Times for calculations (yr) | ³ 1.000E+03 | ³ 1.000E+03 | ³ | --- |
| ³ T(8) | | | | |
| R011 ³ Times for calculations (yr) | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ T(9) | | | | |
| R011 ³ Times for calculations (yr) | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ T(10) | | | | |
| ³ | ³ | ³ | ³ | |
| ³ | | | | |
| R012 ³ Initial principal radionuclide (pCi/g): Pu-238 | ³ 5.166E+01 | ³ 0.000E+00 | ³ | --- |
| ³ S1(2) | | | | |
| R012 ³ Concentration in groundwater (pCi/L): Pu-238 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ W1(2) | ³ | ³ | ³ | |
| ³ | | | | |
| R013 ³ Cover depth (m) | ³ 0.000E+00 | ³ 0.000E+00 | ³ | --- |
| ³ COVER0 | | | | |
| R013 ³ Density of cover material (g/cm**3) | ³ not used | ³ 1.500E+00 | ³ | --- |
| ³ DENS CV | | | | |
| R013 ³ Cover depth erosion rate (m/yr) | ³ not used | ³ 1.000E-03 | ³ | --- |
| ³ VCV | | | | |
| R013 ³ Density of contaminated zone (g/cm**3) | ³ 1.860E+00 | ³ 1.500E+00 | ³ | --- |
| ³ DENS CZ | | | | |
| R013 ³ Contaminated zone erosion rate (m/yr) | ³ 8.500E-04 | ³ 1.000E-03 | ³ | --- |
| ³ VCZ | | | | |
| R013 ³ Contaminated zone total porosity | ³ 3.500E-01 | ³ 4.000E-01 | ³ | --- |
| ³ TPCZ | | | | |
| R013 ³ Contaminated zone field capacity | ³ 1.000E-01 | ³ 2.000E-01 | ³ | --- |
| ³ FCCZ | | | | |
| R013 ³ Contaminated zone hydraulic conductivity (m/yr) | ³ 5.550E+02 | ³ 1.000E+01 | ³ | --- |
| ³ HCCZ | | | | |
| R013 ³ Contaminated zone b parameter | ³ 4.380E+00 | ³ 5.300E+00 | ³ | --- |
| ³ BCZ | | | | |
| R013 ³ Average annual wind speed (m/sec) | ³ 2.030E+00 | ³ 2.000E+00 | ³ | --- |
| ³ WIND | | | | |
| R013 ³ Humidity in air (g/m**3) | ³ not used | ³ 8.000E+00 | ³ | --- |
| ³ HUMID | | | | |
| R013 ³ Evapotranspiration coefficient | ³ 7.500E-01 | ³ 5.000E-01 | ³ | --- |
| ³ EVAPTR | | | | |
| R013 ³ Precipitation (m/yr) | ³ 1.200E+00 | ³ 1.000E+00 | ³ | --- |
| ³ PRECIP | | | | |
| R013 ³ Irrigation (m/yr) | ³ 4.350E-01 | ³ 2.000E-01 | ³ | --- |
| ³ RI | | | | |
| R013 ³ Irrigation mode | ³ overhead | ³ overhead | ³ | --- |
| ³ IDITCH | | | | |
| R013 ³ Runoff coefficient | ³ 6.000E-01 | ³ 2.000E-01 | ³ | --- |
| ³ RUNOFF | | | | |
| R013 ³ Watershed area for nearby stream or pond (m**2) | ³ 7.770E+05 | ³ 1.000E+06 | ³ | --- |
| ³ WAREA | | | | |
| R013 ³ Accuracy for water/soil computations | ³ 1.000E-03 | ³ 1.000E-03 | ³ | --- |
| ³ EPS | ³ | ³ | ³ | |
| ³ | | | | |
| R014 ³ Density of saturated zone (g/cm**3) | ³ 2.120E+00 | ³ 1.500E+00 | ³ | --- |
| ³ DENSAQ | | | | |
| R014 ³ Saturated zone total porosity | ³ 3.000E-01 | ³ 4.000E-01 | ³ | --- |
| ³ TPSZ | | | | |
| R014 ³ Saturated zone effective porosity | ³ 2.100E-01 | ³ 2.000E-01 | ³ | --- |
| ³ EPSZ | | | | |
| R014 ³ Saturated zone field capacity | ³ 9.000E-02 | ³ 2.000E-01 | ³ | --- |
| ³ FCSZ | | | | |
| R014 ³ Saturated zone hydraulic conductivity (m/yr) | ³ 1.000E-01 | ³ 1.000E+02 | ³ | --- |
| ³ HCSZ | | | | |
| R014 ³ Saturated zone hydraulic gradient | ³ 1.000E-01 | ³ 2.000E-02 | ³ | --- |
| ³ HGWT | | | | |
| R014 ³ Saturated zone b parameter | ³ 4.900E+00 | ³ 5.300E+00 | ³ | --- |
| ³ BSZ | | | | |
| R014 ³ Water table drop rate (m/yr) | ³ 1.000E-03 | ³ 1.000E-03 | ³ | --- |
| ³ VWT | | | | |
| R014 ³ Well pump intake depth (m below water table) | ³ 1.451E+01 | ³ 1.000E+01 | ³ | --- |
| ³ DWIBWT | | | | |
| R014 ³ Model: Nondispersion (ND) or Mass-Balance (MB) | ³ ND | ³ ND | ³ | --- |
| ³ MODEL | | | | |
| R014 ³ Well pumping rate (m**3/yr) | ³ 1.323E+03 | ³ 2.500E+02 | ³ | --- |
| ³ UW | | | | |

```

3
R015 3 Number of unsaturated zone strata 3 1 3 1 3 ---
3 NS
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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-238.RAD

Site-Specific Parameter Summary (continued)
0 3 User 3 3 Used by RESRAD
3 Parameter
Menu 3 Parameter 3 Input 3 Default 3 (If different from user
input) 3 Name

AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
R015 3 Unsat. zone 1, thickness (m) 3 1.430E+00 3 4.000E+00 3 ---
3 H(1)
R015 3 Unsat. zone 1, soil density (g/cm**3) 3 1.860E+00 3 1.500E+00 3 ---
3 DENSUZ(1)
R015 3 Unsat. zone 1, total porosity 3 3.500E-01 3 4.000E-01 3 ---
3 TPUZ(1)
R015 3 Unsat. zone 1, effective porosity 3 2.500E-01 3 2.000E-01 3 ---
3 EPUZ(1)
R015 3 Unsat. zone 1, field capacity 3 1.000E-01 3 2.000E-01 3 ---
3 FCUZ(1)
R015 3 Unsat. zone 1, soil-specific b parameter 3 4.380E+00 3 5.300E+00 3 ---
3 BUZ(1)
R015 3 Unsat. zone 1, hydraulic conductivity (m/yr) 3 5.550E+02 3 1.000E+01 3 ---
3 HCUZ(1)
3
R016 3 Distribution coefficients for Pu-238 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 9.530E+02 3 2.000E+03 3 ---
3 DCNUCC( 2)
R016 3 Unsaturated zone 1 (cm**3/g) 3 9.530E+02 3 2.000E+03 3 ---
3 DCNUCU( 2,1)
R016 3 Saturated zone (cm**3/g) 3 9.530E+02 3 2.000E+03 3 ---
3 DCNUCS( 2)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 8.193E-05
3 ALEACH( 2)
R016 3 Solubility constant 3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 2)
3
R016 3 Distribution coefficients for daughter Pb-210 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 2.392E+03 3 1.000E+02 3 ---
3 DCNUCC( 1)
R016 3 Unsaturated zone 1 (cm**3/g) 3 2.392E+03 3 1.000E+02 3 ---
3 DCNUCU( 1,1)
R016 3 Saturated zone (cm**3/g) 3 2.392E+03 3 1.000E+02 3 ---
3 DCNUCS( 1)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 3.264E-05
3 ALEACH( 1)
R016 3 Solubility constant 3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 1)
3
R016 3 Distribution coefficients for daughter Ra-226 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 3.533E+03 3 7.000E+01 3 ---
3 DCNUCC( 3)
R016 3 Unsaturated zone 1 (cm**3/g) 3 3.533E+03 3 7.000E+01 3 ---
3 DCNUCU( 3,1)
R016 3 Saturated zone (cm**3/g) 3 3.533E+03 3 7.000E+01 3 ---
3 DCNUCS( 3)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 2.210E-05
3 ALEACH( 3)
R016 3 Solubility constant 3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 3)
3
R016 3 Distribution coefficients for daughter Th-230 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 5.884E+03 3 6.000E+04 3 ---
3 DCNUCC( 4)
R016 3 Unsaturated zone 1 (cm**3/g) 3 5.884E+03 3 6.000E+04 3 ---
3 DCNUCU( 4,1)
R016 3 Saturated zone (cm**3/g) 3 5.884E+03 3 6.000E+04 3 ---
3 DCNUCS( 4)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 1.327E-05
3 ALEACH( 4)

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| | | | | | | | |
|-------------------|--|---|-----------|---|-----------|---|-------------------------|
| R016 ³ | Solubility constant | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | not used |
| 3 | SOLUBK(4) | 3 | | 3 | | 3 | |
| 3 | | | | | | | |
| R016 ³ | Distribution coefficients for daughter U-234 | 3 | | 3 | | 3 | |
| 3 | | | | | | | |
| R016 ³ | Contaminated zone (cm**3/g) | 3 | 1.260E+02 | 3 | 5.000E+01 | 3 | --- |
| 3 | DCNUCC(5) | 3 | | 3 | | 3 | |
| R016 ³ | Unsaturated zone 1 (cm**3/g) | 3 | 1.260E+02 | 3 | 5.000E+01 | 3 | --- |
| 3 | DCNUCU(5,1) | 3 | | 3 | | 3 | |
| R016 ³ | Saturated zone (cm**3/g) | 3 | 1.260E+02 | 3 | 5.000E+01 | 3 | --- |
| 3 | DCNUCS(5) | 3 | | 3 | | 3 | |
| R016 ³ | Leach rate (/yr) | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | 6.192E-04 |
| 3 | ALEACH(5) | 3 | | 3 | | 3 | |
| R016 ³ | Solubility constant | 3 | 0.000E+00 | 3 | 0.000E+00 | 3 | not used |
| 3 | SOLUBK(5) | 3 | | 3 | | 3 | |
| 3 | | | | | | | |
| R017 ³ | Inhalation rate (m**3/yr) | 3 | 8.400E+03 | 3 | 8.400E+03 | 3 | --- |
| 3 | INHALR | 3 | | 3 | | 3 | |
| R017 ³ | Mass loading for inhalation (g/m**3) | 3 | 2.330E-05 | 3 | 1.000E-04 | 3 | --- |
| 3 | MLINH | 3 | | 3 | | 3 | |
| R017 ³ | Exposure duration | 3 | 3.000E+01 | 3 | 3.000E+01 | 3 | --- |
| 3 | ED | 3 | | 3 | | 3 | |
| R017 ³ | Shielding factor, inhalation | 3 | 5.500E-01 | 3 | 4.000E-01 | 3 | --- |
| 3 | SHF3 | 3 | | 3 | | 3 | |
| R017 ³ | Shielding factor, external gamma | 3 | 2.725E-01 | 3 | 7.000E-01 | 3 | --- |
| 3 | SHF1 | 3 | | 3 | | 3 | |
| R017 ³ | Fraction of time spent indoors | 3 | 6.571E-01 | 3 | 5.000E-01 | 3 | --- |
| 3 | FIND | 3 | | 3 | | 3 | |
| R017 ³ | Fraction of time spent outdoors (on site) | 3 | 1.181E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 | FOTD | 3 | | 3 | | 3 | |
| R017 ³ | Shape factor flag, external gamma | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | >0 shows circular AREA. |
| 3 | FS | 3 | | 3 | | 3 | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-238.RAD

| | | Site-Specific Parameter Summary (continued) | | | |
|---|--|---|----------|-------------------------|----------------|
| 0 | 3 | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | | | |
| Menu | Parameter | Input | Default | (If different from user | |
| input) | Name | | | | |
| <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 1.2em; margin-bottom: 5px;"></div> | | | | | |
| R017 ³ | Radii of shape factor array (used if FS = -1): | 3 | | 3 | |
| 3 | | | | | |
| R017 ³ | Outer annular radius (m), ring 1: | 3 | not used | 3 | 5.000E+01 |
| 3 | RAD_SHAPE(1) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 2: | 3 | not used | 3 | 7.071E+01 |
| 3 | RAD_SHAPE(2) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 3: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(3) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 4: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(4) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 5: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(5) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 6: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(6) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 7: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(7) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 8: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(8) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 9: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(9) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 10: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(10) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 11: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(11) | 3 | | 3 | |
| R017 ³ | Outer annular radius (m), ring 12: | 3 | not used | 3 | 0.000E+00 |
| 3 | RAD_SHAPE(12) | 3 | | 3 | |
| 3 | | | | | |
| R017 ³ | Fractions of annular areas within AREA: | 3 | | 3 | |
| 3 | | | | | |
| R017 ³ | Ring 1 | 3 | not used | 3 | 1.000E+00 |
| 3 | FRACA(1) | 3 | | 3 | |
| R017 ³ | Ring 2 | 3 | not used | 3 | 2.732E-01 |
| 3 | FRACA(2) | 3 | | 3 | |
| R017 ³ | Ring 3 | 3 | not used | 3 | 0.000E+00 |
| 3 | FRACA(3) | 3 | | 3 | |
| R017 ³ | Ring 4 | 3 | not used | 3 | 0.000E+00 |
| 3 | FRACA(4) | 3 | | 3 | |

| | | | | | |
|------------------------|--|------------------------|------------------------|--------------|-----|
| R017 ³ | Ring 5 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(5) | | | | | |
| R017 ³ | Ring 6 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(6) | | | | | |
| R017 ³ | Ring 7 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(7) | | | | | |
| R017 ³ | Ring 8 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(8) | | | | | |
| R017 ³ | Ring 9 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(9) | | | | | |
| R017 ³ | Ring 10 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(10) | | | | | |
| R017 ³ | Ring 11 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(11) | | | | | |
| R017 ³ | Ring 12 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ FRACA(12) | | | | | |
| ³ | | ³ | ³ | ³ | |
| ³ | | | | | |
| R018 ³ | Fruits, vegetables and grain consumption (kg/yr) | ³ 1.120E+02 | ³ 1.600E+02 | ³ | --- |
| ³ DIET(1) | | | | | |
| R018 ³ | Leafy vegetable consumption (kg/yr) | ³ 2.140E+01 | ³ 1.400E+01 | ³ | --- |
| ³ DIET(2) | | | | | |
| R018 ³ | Milk consumption (L/yr) | ³ 2.330E+02 | ³ 9.200E+01 | ³ | --- |
| ³ DIET(3) | | | | | |
| R018 ³ | Meat and poultry consumption (kg/yr) | ³ 6.510E+01 | ³ 6.300E+01 | ³ | --- |
| ³ DIET(4) | | | | | |
| R018 ³ | Fish consumption (kg/yr) | ³ 2.060E+01 | ³ 5.400E+00 | ³ | --- |
| ³ DIET(5) | | | | | |
| R018 ³ | Other seafood consumption (kg/yr) | ³ 9.000E-01 | ³ 9.000E-01 | ³ | --- |
| ³ DIET(6) | | | | | |
| R018 ³ | Soil ingestion rate (g/yr) | ³ 1.826E+01 | ³ 3.650E+01 | ³ | --- |
| ³ SOIL | | | | | |
| R018 ³ | Drinking water intake (L/yr) | ³ 4.785E+02 | ³ 5.100E+02 | ³ | --- |
| ³ DWI | | | | | |
| R018 ³ | Contamination fraction of drinking water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FDW | | | | | |
| R018 ³ | Contamination fraction of household water | ³ not used | ³ 1.000E+00 | ³ | --- |
| ³ FHHW | | | | | |
| R018 ³ | Contamination fraction of livestock water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FLW | | | | | |
| R018 ³ | Contamination fraction of irrigation water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FIRW | | | | | |
| R018 ³ | Contamination fraction of aquatic food | ³ 1.000E+00 | ³ 5.000E-01 | ³ | --- |
| ³ FR9 | | | | | |
| R018 ³ | Contamination fraction of plant food | ³ 1.000E+00 | ³ -1 | ³ | --- |
| ³ FPLANT | | | | | |
| R018 ³ | Contamination fraction of meat | ³ 1.000E+00 | ³ -1 | ³ | --- |
| ³ FMEAT | | | | | |
| R018 ³ | Contamination fraction of milk | ³ 1.000E+00 | ³ -1 | ³ | --- |
| ³ FMILK | | | | | |
| ³ | | ³ | ³ | ³ | |
| ³ | | | | | |
| R019 ³ | Livestock fodder intake for meat (kg/day) | ³ 2.710E+01 | ³ 6.800E+01 | ³ | --- |
| ³ LFI5 | | | | | |
| R019 ³ | Livestock fodder intake for milk (kg/day) | ³ 6.320E+01 | ³ 5.500E+01 | ³ | --- |
| ³ LFI6 | | | | | |
| R019 ³ | Livestock water intake for meat (L/day) | ³ 5.060E+01 | ³ 5.000E+01 | ³ | --- |
| ³ LWI5 | | | | | |
| R019 ³ | Livestock water intake for milk (L/day) | ³ 6.000E+01 | ³ 1.600E+02 | ³ | --- |
| ³ LWI6 | | | | | |
| R019 ³ | Livestock soil intake (kg/day) | ³ 5.000E-01 | ³ 5.000E-01 | ³ | --- |
| ³ LSI | | | | | |
| R019 ³ | Mass loading for foliar deposition (g/m**3) | ³ 4.000E-04 | ³ 1.000E-04 | ³ | --- |
| ³ MLFD | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-238.RAD

| Site-Specific Parameter Summary (continued) | | | | |
|--|--|------------------------|------------------------|-----------------------------|
| ³ | ³ Parameter | ³ User | ³ Default | ³ Used by RESRAD |
| Menu | Parameter | Input | Default | (If different from user |
| input) | Name | | | |
| AA | | | | |
| AAAAAAAAAAAAAAAAAAAA | | | | |
| R019 ³ | Depth of soil mixing layer (m) | ³ 2.300E-01 | ³ 1.500E-01 | --- |
| ³ DM | | | | |
| R019 ³ | Depth of roots (m) | ³ 2.150E+00 | ³ 9.000E-01 | --- |
| ³ DROOT | | | | |
| R019 ³ | Drinking water fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | --- |
| ³ FGWDW | | | | |
| R019 ³ | Household water fraction from ground water | ³ not used | ³ 1.000E+00 | --- |
| ³ FGWHH | | | | |

| | | | | | | | |
|------------------------|--|--------------|-----------|--------------|-----------|--------------|-----|
| R019 ³ | Livestock water fraction from ground water | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ FGWLW | | | | | | | |
| R019 ³ | Irrigation fraction from ground water | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ FGWIR | | | | | | | |
| ³ | | ³ | | ³ | | ³ | |
| R19B ³ | Wet weight crop yield for Non-Leafy (kg/m**2) | ³ | 1.750E+00 | ³ | 7.000E-01 | ³ | --- |
| ³ YV(1) | | | | | | | |
| R19B ³ | Wet weight crop yield for Leafy (kg/m**2) | ³ | 2.889E+00 | ³ | 1.500E+00 | ³ | --- |
| ³ YV(2) | | | | | | | |
| R19B ³ | Wet weight crop yield for Fodder (kg/m**2) | ³ | 1.887E+00 | ³ | 1.100E+00 | ³ | --- |
| ³ YV(3) | | | | | | | |
| R19B ³ | Growing Season for Non-Leafy (years) | ³ | 2.460E-01 | ³ | 1.700E-01 | ³ | --- |
| ³ TE(1) | | | | | | | |
| R19B ³ | Growing Season for Leafy (years) | ³ | 1.230E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ TE(2) | | | | | | | |
| R19B ³ | Growing Season for Fodder (years) | ³ | 8.200E-02 | ³ | 8.000E-02 | ³ | --- |
| ³ TE(3) | | | | | | | |
| R19B ³ | Translocation Factor for Non-Leafy | ³ | 1.000E-01 | ³ | 1.000E-01 | ³ | --- |
| ³ TIV(1) | | | | | | | |
| R19B ³ | Translocation Factor for Leafy | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ TIV(2) | | | | | | | |
| R19B ³ | Translocation Factor for Fodder | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ TIV(3) | | | | | | | |
| R19B ³ | Dry Foliar Interception Fraction for Non-Leafy | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ RDRY(1) | | | | | | | |
| R19B ³ | Dry Foliar Interception Fraction for Leafy | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ RDRY(2) | | | | | | | |
| R19B ³ | Dry Foliar Interception Fraction for Fodder | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ RDRY(3) | | | | | | | |
| R19B ³ | Wet Foliar Interception Fraction for Non-Leafy | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ RWET(1) | | | | | | | |
| R19B ³ | Wet Foliar Interception Fraction for Leafy | ³ | 5.800E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ RWET(2) | | | | | | | |
| R19B ³ | Wet Foliar Interception Fraction for Fodder | ³ | 3.500E-01 | ³ | 2.500E-01 | ³ | --- |
| ³ RWET(3) | | | | | | | |
| R19B ³ | Weathering Removal Constant for Vegetation | ³ | 3.300E+01 | ³ | 2.000E+01 | ³ | --- |
| ³ WLAM | | ³ | | ³ | | ³ | |
| ³ | | | | | | | |
| C14 ³ | C-12 concentration in water (g/cm**3) | ³ | not used | ³ | 2.000E-05 | ³ | --- |
| ³ C12WTR | | | | | | | |
| C14 ³ | C-12 concentration in contaminated soil (g/g) | ³ | not used | ³ | 3.000E-02 | ³ | --- |
| ³ C12CZ | | | | | | | |
| C14 ³ | Fraction of vegetation carbon from soil | ³ | not used | ³ | 2.000E-02 | ³ | --- |
| ³ CSOIL | | | | | | | |
| C14 ³ | Fraction of vegetation carbon from air | ³ | not used | ³ | 9.800E-01 | ³ | --- |
| ³ CAIR | | | | | | | |
| C14 ³ | C-14 evasion layer thickness in soil (m) | ³ | not used | ³ | 3.000E-01 | ³ | --- |
| ³ DMC | | | | | | | |
| C14 ³ | C-14 evasion flux rate from soil (1/sec) | ³ | not used | ³ | 7.000E-07 | ³ | --- |
| ³ EVSN | | | | | | | |
| C14 ³ | C-12 evasion flux rate from soil (1/sec) | ³ | not used | ³ | 1.000E-10 | ³ | --- |
| ³ REVSN | | | | | | | |
| C14 ³ | Fraction of grain in beef cattle feed | ³ | not used | ³ | 8.000E-01 | ³ | --- |
| ³ AVFG4 | | | | | | | |
| C14 ³ | Fraction of grain in milk cow feed | ³ | not used | ³ | 2.000E-01 | ³ | --- |
| ³ AVFG5 | | | | | | | |
| C14 ³ | DCF correction factor for gaseous forms of C14 | ³ | not used | ³ | 8.894E+01 | ³ | --- |
| ³ CO2F | | ³ | | ³ | | ³ | |
| ³ | | | | | | | |
| STOR ³ | Storage times of contaminated foodstuffs (days): | ³ | | ³ | | ³ | |
| ³ | | | | | | | |
| STOR ³ | Fruits, non-leafy vegetables, and grain | ³ | 1.400E+01 | ³ | 1.400E+01 | ³ | --- |
| ³ STOR_T(1) | | | | | | | |
| STOR ³ | Leafy vegetables | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ STOR_T(2) | | | | | | | |
| STOR ³ | Milk | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ STOR_T(3) | | | | | | | |
| STOR ³ | Meat and poultry | ³ | 2.000E+01 | ³ | 2.000E+01 | ³ | --- |
| ³ STOR_T(4) | | | | | | | |
| STOR ³ | Fish | ³ | 7.000E+00 | ³ | 7.000E+00 | ³ | --- |
| ³ STOR_T(5) | | | | | | | |
| STOR ³ | Crustacea and mollusks | ³ | 7.000E+00 | ³ | 7.000E+00 | ³ | --- |
| ³ STOR_T(6) | | | | | | | |
| STOR ³ | Well water | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ STOR_T(7) | | | | | | | |
| STOR ³ | Surface water | ³ | 1.000E+00 | ³ | 1.000E+00 | ³ | --- |
| ³ STOR_T(8) | | | | | | | |
| STOR ³ | Livestock fodder | ³ | 4.500E+01 | ³ | 4.500E+01 | ³ | --- |
| ³ STOR_T(9) | | ³ | | ³ | | ³ | |

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  Summary : Yankee Rowe Sensitivity Analysis=soil      File: YR Pu-238.RAD
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| | | | |
|-----------|------|-------|-------------------------|
| 0 | | User | Used by RESRAD |
| Parameter | Menu | Input | Default |
| (input) | Name | | (If different from user |

| | | | | |
|--------|--|----------|-----------|-----|
| R021 | Volumetric water content of the foundation | not used | 3.000E-02 | --- |
| PH20FL | | | | |
| R021 | Diffusion coefficient for radon gas (m/sec): | | | |

| | | | | |
|------|-------------------------------------|-----------------------|------------------------|------------------|
| R021 | ³ in foundation material | ³ not used | ³ 3.000E-07 | ³ --- |
|------|-------------------------------------|-----------------------|------------------------|------------------|

| | | | | |
|------|---------------------------|----------|-----------|-----|
| R021 | in contaminated zone soil | not used | 2.000E-06 | --- |
|------|---------------------------|----------|-----------|-----|

| | | | | |
|------|--|----------|-----------|-----|
| R021 | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- |
|------|--|----------|-----------|-----|

| | | | | |
|-------------------|---|----------|-----------|-----|
| R021 | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- |
| ³ PEYC | | | | |

| | | | | | |
|------------------|-------------------------------|-----|----------|-----------|-----|
| K021 | height of the building (100m) | (m) | not used | 2.500E+00 | --- |
| ³ HBM | | | | | |

| | | | | | | | | |
|------|---|-------------------------------|---|----------|---|-----------|---|-----|
| R021 | 3 | Building interior area factor | 3 | not used | 3 | 0.000E+00 | 3 | --- |
|------|---|-------------------------------|---|----------|---|-----------|---|-----|

³ FAI

| | | | | | | | | |
|------|---|---|---|----------|---|------------|---|-----|
| R021 | 3 | Building depth below ground surface (m) | 3 | not used | 3 | -1.000E+00 | 3 | --- |
|------|---|---|---|----------|---|------------|---|-----|

³ DMFL

| | | | | |
|------|--|-----------------------|------------------------|------------------|
| R021 | ³ Emanating power of Rn-222 gas | ³ not used | ³ 2.500E-01 | ³ --- |
|------|--|-----------------------|------------------------|------------------|

³ EMANA(1)
 P001-3, Emerald Lake, 100005, P000, 100005, 3, 100005, 100005, 3, 1, 50000, 01, 3

| | | | | | | | | |
|-------------|---|-------------------------------|---|----------|---|-----------|---|-----|
| R021 | 3 | Emanating power of Rn-220 gas | 3 | not used | 3 | 1.500E-01 | 3 | --- |
| 3 EMANA (2) | | | | | | | | |

| | | | | |
|-----------|--|---|---|---|
| EMANA (2) | | | | |
| 3 | | 3 | 3 | 3 |

| | | | | | | | | |
|------|---|---------------------------------|---|----|---|-----|---|-----|
| TITL | 3 | Number of graphical time points | 3 | 32 | 3 | --- | 3 | --- |
|------|---|---------------------------------|---|----|---|-----|---|-----|

³ NPTS

| | | | | | | | | |
|------|---|---|---|----|---|-----|---|-----|
| TITL | 3 | Maximum number of integration points for dose | 3 | 17 | 3 | --- | 3 | --- |
|------|---|---|---|----|---|-----|---|-----|

3 LYMAX

| | | | | | | | | |
|------|---|---|---|---|---|-----|---|-----|
| TITL | 3 | Maximum number of integration points for risk | 3 | 1 | 3 | --- | 3 | --- |
|------|---|---|---|---|---|-----|---|-----|

³ KYMAX

[illegible][illegible]

| Pathway | ³ | User Selection |
|---|--------------|----------------|
| <div>AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA⁹AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA</div> | | |

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

Dose Conversion Factor (and Related) Parameter Summary
 File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Ac-227+D | 6.720E+00 | 6.720E+00 | DCF2(1) |
| B-1 | Pa-231 | 1.280E+00 | 1.280E+00 | DCF2(2) |
| B-1 | Pu-239 | 4.290E-01 | 4.290E-01 | DCF2(3) |
| B-1 | U-235+D | 1.230E-01 | 1.230E-01 | DCF2(4) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Ac-227+D | 1.480E-02 | 1.480E-02 | DCF3(1) |
| D-1 | Pa-231 | 1.060E-02 | 1.060E-02 | DCF3(2) |
| D-1 | Pu-239 | 3.540E-03 | 3.540E-03 | DCF3(3) |
| D-1 | U-235+D | 2.670E-04 | 2.670E-04 | DCF3(4) |
| D-34 | Food transfer factors: | | | |
| D-34 | Ac-227+D , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(1,1) |
| D-34 | Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(1,2) |
| D-34 | Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(1,3) |
| D-34 | Pa-231 , plant/soil concentration ratio, dimensionless | 1.000E-02 | 1.000E-02 | RTF(2,1) |
| D-34 | Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.000E-03 | 5.000E-03 | RTF(2,2) |
| D-34 | Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF(2,3) |
| D-34 | Pu-239 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF(3,1) |
| D-34 | Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF(3,2) |
| D-34 | Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-06 | 1.000E-06 | RTF(3,3) |
| D-34 | U-235+D , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(4,1) |
| D-34 | U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.400E-04 | 3.400E-04 | RTF(4,2) |
| D-34 | U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 6.000E-04 | 6.000E-04 | RTF(4,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Ac-227+D , fish | 1.500E+01 | 1.500E+01 | BIOFAC(1,1) |
| D-5 | Ac-227+D , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(1,2) |
| D-5 | Pa-231 , fish | 1.000E+01 | 1.000E+01 | BIOFAC(2,1) |
| D-5 | Pa-231 , crustacea and mollusks | 1.100E+02 | 1.100E+02 | BIOFAC(2,2) |
| D-5 | Pu-239 , fish | 3.000E+01 | 3.000E+01 | BIOFAC(3,1) |
| D-5 | Pu-239 , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC(3,2) |
| D-5 | U-235+D , fish | 1.000E+01 | 1.000E+01 | BIOFAC(4,1) |
| D-5 | U-235+D , crustacea and mollusks | 6.000E+01 | 6.000E+01 | BIOFAC(4,2) |

Site-Specific Parameter Summary

| Menu | Parameter | User Input | Default | Used by RESRAD |
|--------|---------------------------------------|------------|--------------------------------|----------------|
| input) | Name | | (If different from user input) | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T(2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T(3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T(4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T(5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T(6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T(7) | | | | |

| | | | | |
|--------|---|-----------|-----------|-----|
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T(8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(10) | | | | |
| | | | | |
| R012 | Initial principal radionuclide (pCi/g): Pu-239 | 4.591E+01 | 0.000E+00 | --- |
| S1(3) | | | | |
| R012 | Concentration in groundwater (pCi/L): Pu-239 | not used | 0.000E+00 | --- |
| W1(3) | | | | |
| | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |
| FCCZ | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 5.550E+02 | 1.000E+01 | --- |
| HCCZ | | | | |
| R013 | Contaminated zone b parameter | 4.380E+00 | 5.300E+00 | --- |
| BCZ | | | | |
| R013 | Average annual wind speed (m/sec) | 2.030E+00 | 2.000E+00 | --- |
| WIND | | | | |
| R013 | Humidity in air (g/m**3) | not used | 8.000E+00 | --- |
| HUMID | | | | |
| R013 | Evapotranspiration coefficient | 7.500E-01 | 5.000E-01 | --- |
| EVAPTR | | | | |
| R013 | Precipitation (m/yr) | 1.200E+00 | 1.000E+00 | --- |
| PRECIP | | | | |
| R013 | Irrigation (m/yr) | 4.350E-01 | 2.000E-01 | --- |
| RI | | | | |
| R013 | Irrigation mode | overhead | overhead | --- |
| IDITCH | | | | |
| R013 | Runoff coefficient | 6.000E-01 | 2.000E-01 | --- |
| RUNOFF | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 7.770E+05 | 1.000E+06 | --- |
| WAREA | | | | |
| R013 | Accuracy for water/soil computations | 1.000E-03 | 1.000E-03 | --- |
| EPS | | | | |
| | | | | |
| R014 | Density of saturated zone (g/cm**3) | 2.120E+00 | 1.500E+00 | --- |
| DENSAQ | | | | |
| R014 | Saturated zone total porosity | 3.000E-01 | 4.000E-01 | --- |
| TPSZ | | | | |
| R014 | Saturated zone effective porosity | 2.100E-01 | 2.000E-01 | --- |
| EPSZ | | | | |
| R014 | Saturated zone field capacity | 9.000E-02 | 2.000E-01 | --- |
| FCSZ | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 1.000E-01 | 1.000E+02 | --- |
| HCSZ | | | | |
| R014 | Saturated zone hydraulic gradient | 1.000E-01 | 2.000E-02 | --- |
| HGWT | | | | |
| R014 | Saturated zone b parameter | 4.900E+00 | 5.300E+00 | --- |
| BSZ | | | | |
| R014 | Water table drop rate (m/yr) | 1.000E-03 | 1.000E-03 | --- |
| VWT | | | | |
| R014 | Well pump intake depth (m below water table) | 1.451E+01 | 1.000E+01 | --- |
| DWIBWT | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | ND | ND | --- |
| MODEL | | | | |
| R014 | Well pumping rate (m**3/yr) | 1.323E+03 | 2.500E+02 | --- |
| UW | | | | |
| | | | | |
| R015 | Number of unsaturated zone strata | 1 | 1 | --- |
| NS | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-239.RAD

Site-Specific Parameter Summary (continued)

0 User Used by RESRAD

| Parameter Menu input) | Name | Parameter | Input | Default | (If different from user |
|---|---|--------------|-----------|-----------|-------------------------|
| AAA | | | | | |
| R015 | Unsat. zone 1, thickness (m) | H(1) | 1.430E+00 | 4.000E+00 | --- |
| R015 | Unsat. zone 1, soil density (g/cm**3) | DENSUZ(1) | 1.860E+00 | 1.500E+00 | --- |
| R015 | Unsat. zone 1, total porosity | TPUZ(1) | 3.500E-01 | 4.000E-01 | --- |
| R015 | Unsat. zone 1, effective porosity | EPUZ(1) | 2.500E-01 | 2.000E-01 | --- |
| R015 | Unsat. zone 1, field capacity | FCUZ(1) | 1.000E-01 | 2.000E-01 | --- |
| R015 | Unsat. zone 1, soil-specific b parameter | BUZ(1) | 4.380E+00 | 5.300E+00 | --- |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | HCUZ(1) | 5.550E+02 | 1.000E+01 | --- |
| | | | | | |
| R016 | Distribution coefficients for Pu-239 | | | | |
| | | | | | |
| R016 | Contaminated zone (cm**3/g) | DCNUCC(3) | 9.530E+02 | 2.000E+03 | --- |
| R016 | Unsaturated zone 1 (cm**3/g) | DCNUCU(3,1) | 9.530E+02 | 2.000E+03 | --- |
| R016 | Saturated zone (cm**3/g) | DCNUCS(3) | 9.530E+02 | 2.000E+03 | --- |
| R016 | Leach rate (/yr) | ALEACH(3) | 0.000E+00 | 0.000E+00 | 8.193E-05 |
| R016 | Solubility constant | SOLUBK(3) | 0.000E+00 | 0.000E+00 | not used |
| | | | | | |
| R016 | Distribution coefficients for daughter Ac-227 | | | | |
| | | | | | |
| R016 | Contaminated zone (cm**3/g) | DCNUCC(1) | 8.250E+02 | 2.000E+01 | --- |
| R016 | Unsaturated zone 1 (cm**3/g) | DCNUCU(1,1) | 8.250E+02 | 2.000E+01 | --- |
| R016 | Saturated zone (cm**3/g) | DCNUCS(1) | 8.250E+02 | 2.000E+01 | --- |
| R016 | Leach rate (/yr) | ALEACH(1) | 0.000E+00 | 0.000E+00 | 9.464E-05 |
| R016 | Solubility constant | SOLUBK(1) | 0.000E+00 | 0.000E+00 | not used |
| | | | | | |
| R016 | Distribution coefficients for daughter Pa-231 | | | | |
| | | | | | |
| R016 | Contaminated zone (cm**3/g) | DCNUCC(2) | 3.800E+02 | 5.000E+01 | --- |
| R016 | Unsaturated zone 1 (cm**3/g) | DCNUCU(2,1) | 3.800E+02 | 5.000E+01 | --- |
| R016 | Saturated zone (cm**3/g) | DCNUCS(2) | 3.800E+02 | 5.000E+01 | --- |
| R016 | Leach rate (/yr) | ALEACH(2) | 0.000E+00 | 0.000E+00 | 2.054E-04 |
| R016 | Solubility constant | SOLUBK(2) | 0.000E+00 | 0.000E+00 | not used |
| | | | | | |
| R016 | Distribution coefficients for daughter U-235 | | | | |
| | | | | | |
| R016 | Contaminated zone (cm**3/g) | DCNUCC(4) | 1.260E+02 | 5.000E+01 | --- |
| R016 | Unsaturated zone 1 (cm**3/g) | DCNUCU(4,1) | 1.260E+02 | 5.000E+01 | --- |
| R016 | Saturated zone (cm**3/g) | DCNUCS(4) | 1.260E+02 | 5.000E+01 | --- |
| R016 | Leach rate (/yr) | ALEACH(4) | 0.000E+00 | 0.000E+00 | 6.192E-04 |
| R016 | Solubility constant | SOLUBK(4) | 0.000E+00 | 0.000E+00 | not used |
| | | | | | |
| R017 | Inhalation rate (m**3/yr) | INHALR | 8.400E+03 | 8.400E+03 | --- |
| R017 | Mass loading for inhalation (g/m**3) | MLINH | 2.330E-05 | 1.000E-04 | --- |
| R017 | Exposure duration | | 3.000E+01 | 3.000E+01 | --- |

```

3 ED
R017 3 Shielding factor, inhalation          3 5.500E-01 3 4.000E-01 3      ---
3 SHF3
R017 3 Shielding factor, external gamma      3 2.725E-01 3 7.000E-01 3      ---
3 SHF1
R017 3 Fraction of time spent indoors        3 6.571E-01 3 5.000E-01 3      ---
3 FIND
R017 3 Fraction of time spent outdoors (on site) 3 1.181E-01 3 2.500E-01 3      ---
3 FOTD
R017 3 Shape factor flag, external gamma     3 1.000E+00 3 1.000E+00 3      >0 shows circular AREA.
3 FS
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Summary : Yankee Rowe Sensitivity Analysis=soil      File: YR_Pu-239.RAD

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                                Site-Specific Parameter Summary (continued)
0      3      User      3      3      Used by RESRAD
3 Parameter
Menu 3      Parameter      3      Input      3      Default      3      (If different from user
input) 3      Name
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
R017 3 Radii of shape factor array (used if FS = -1):      3      3      3
3
R017 3 Outer annular radius (m), ring 1:      3 not used 3 5.000E+01 3      ---
3 RAD_SHAPE( 1)
R017 3 Outer annular radius (m), ring 2:      3 not used 3 7.071E+01 3      ---
3 RAD_SHAPE( 2)
R017 3 Outer annular radius (m), ring 3:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 3)
R017 3 Outer annular radius (m), ring 4:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 4)
R017 3 Outer annular radius (m), ring 5:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 5)
R017 3 Outer annular radius (m), ring 6:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 6)
R017 3 Outer annular radius (m), ring 7:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 7)
R017 3 Outer annular radius (m), ring 8:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 8)
R017 3 Outer annular radius (m), ring 9:      3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE( 9)
R017 3 Outer annular radius (m), ring 10:     3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE(10)
R017 3 Outer annular radius (m), ring 11:     3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE(11)
R017 3 Outer annular radius (m), ring 12:     3 not used 3 0.000E+00 3      ---
3 RAD_SHAPE(12)
3
3
R017 3 Fractions of annular areas within AREA:      3      3      3
3
R017 3 Ring 1      3 not used 3 1.000E+00 3      ---
3 FRACA( 1)
R017 3 Ring 2      3 not used 3 2.732E-01 3      ---
3 FRACA( 2)
R017 3 Ring 3      3 not used 3 0.000E+00 3      ---
3 FRACA( 3)
R017 3 Ring 4      3 not used 3 0.000E+00 3      ---
3 FRACA( 4)
R017 3 Ring 5      3 not used 3 0.000E+00 3      ---
3 FRACA( 5)
R017 3 Ring 6      3 not used 3 0.000E+00 3      ---
3 FRACA( 6)
R017 3 Ring 7      3 not used 3 0.000E+00 3      ---
3 FRACA( 7)
R017 3 Ring 8      3 not used 3 0.000E+00 3      ---
3 FRACA( 8)
R017 3 Ring 9      3 not used 3 0.000E+00 3      ---
3 FRACA( 9)
R017 3 Ring 10     3 not used 3 0.000E+00 3      ---
3 FRACA(10)
R017 3 Ring 11     3 not used 3 0.000E+00 3      ---
3 FRACA(11)
R017 3 Ring 12     3 not used 3 0.000E+00 3      ---
3 FRACA(12)
3
3
R018 3 Fruits, vegetables and grain consumption (kg/yr) 3 1.120E+02 3 1.600E+02 3      ---
3 DIET(1)
R018 3 Leafy vegetable consumption (kg/yr)      3 2.140E+01 3 1.400E+01 3      ---
3 DIET(2)
R018 3 Milk consumption (L/yr)                  3 2.330E+02 3 9.200E+01 3      ---

```


| | | | | | |
|---|------------------------|------------------------|--------------|--|-----|
| ³ DIET(3) | | | | | |
| R018 ³ Meat and poultry consumption (kg/yr) | ³ 6.510E+01 | ³ 6.300E+01 | ³ | | --- |
| ³ DIET(4) | | | | | |
| R018 ³ Fish consumption (kg/yr) | ³ 2.060E+01 | ³ 5.400E+00 | ³ | | --- |
| ³ DIET(5) | | | | | |
| R018 ³ Other seafood consumption (kg/yr) | ³ 9.000E-01 | ³ 9.000E-01 | ³ | | --- |
| ³ DIET(6) | | | | | |
| R018 ³ Soil ingestion rate (g/yr) | ³ 1.826E+01 | ³ 3.650E+01 | ³ | | --- |
| ³ SOIL | | | | | |
| R018 ³ Drinking water intake (L/yr) | ³ 4.785E+02 | ³ 5.100E+02 | ³ | | --- |
| ³ DWI | | | | | |
| R018 ³ Contamination fraction of drinking water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | | --- |
| ³ FDW | | | | | |
| R018 ³ Contamination fraction of household water | ³ not used | ³ 1.000E+00 | ³ | | --- |
| ³ FHHW | | | | | |
| R018 ³ Contamination fraction of livestock water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | | --- |
| ³ FLW | | | | | |
| R018 ³ Contamination fraction of irrigation water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | | --- |
| ³ FIRW | | | | | |
| R018 ³ Contamination fraction of aquatic food | ³ 1.000E+00 | ³ 5.000E-01 | ³ | | --- |
| ³ FR9 | | | | | |
| R018 ³ Contamination fraction of plant food | ³ 1.000E+00 | ³ -1 | ³ | | --- |
| ³ FPLANT | | | | | |
| R018 ³ Contamination fraction of meat | ³ 1.000E+00 | ³ -1 | ³ | | --- |
| ³ FMEAT | | | | | |
| R018 ³ Contamination fraction of milk | ³ 1.000E+00 | ³ -1 | ³ | | --- |
| ³ FMILK | | | | | |
| ³ | | | | | |
| R019 ³ Livestock fodder intake for meat (kg/day) | ³ 2.710E+01 | ³ 6.800E+01 | ³ | | --- |
| ³ LFI5 | | | | | |
| R019 ³ Livestock fodder intake for milk (kg/day) | ³ 6.320E+01 | ³ 5.500E+01 | ³ | | --- |
| ³ LFI6 | | | | | |
| R019 ³ Livestock water intake for meat (L/day) | ³ 5.060E+01 | ³ 5.000E+01 | ³ | | --- |
| ³ LWI5 | | | | | |
| R019 ³ Livestock water intake for milk (L/day) | ³ 6.000E+01 | ³ 1.600E+02 | ³ | | --- |
| ³ LWI6 | | | | | |
| R019 ³ Livestock soil intake (kg/day) | ³ 5.000E-01 | ³ 5.000E-01 | ³ | | --- |
| ³ LSI | | | | | |
| R019 ³ Mass loading for foliar deposition (g/m**3) | ³ 4.000E-04 | ³ 1.000E-04 | ³ | | --- |
| ³ MLFD | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-239.RAD

| | | Site-Specific Parameter Summary (continued) | | | |
|------------------------|--------------|---|----------------------|--------------------------------------|----------------|
| 0 | ³ | ³ User | ³ | ³ | Used by RESRAD |
| ³ Parameter | | | | | |
| Menu ³ | Parameter | ³ Input | ³ Default | ³ (If different from user | |
| input) ³ | Name | | | | |

| | | | | | |
|--|---|------------------------|------------------------|--------------|-----|
| AA | | | | | |
| AAAAAAAAAAAAAAAAAAAAAAAA | | | | | |
| R019 ³ | Depth of soil mixing layer (m) | ³ 2.300E-01 | ³ 1.500E-01 | ³ | --- |
| ³ DM | | | | | |
| R019 ³ | Depth of roots (m) | ³ 2.150E+00 | ³ 9.000E-01 | ³ | --- |
| ³ DROOT | | | | | |
| R019 ³ | Drinking water fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FGWDW | | | | | |
| R019 ³ | Household water fraction from ground water | ³ not used | ³ 1.000E+00 | ³ | --- |
| ³ FGWHH | | | | | |
| R019 ³ | Livestock water fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FGWLW | | | | | |
| R019 ³ | Irrigation fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FGWIR | | | | | |
| ³ | | | | | |
| R19B ³ | Wet weight crop yield for Non-Leafy (kg/m**2) | ³ 1.750E+00 | ³ 7.000E-01 | ³ | --- |
| ³ YV(1) | | | | | |
| R19B ³ | Wet weight crop yield for Leafy (kg/m**2) | ³ 2.889E+00 | ³ 1.500E+00 | ³ | --- |
| ³ YV(2) | | | | | |
| R19B ³ | Wet weight crop yield for Fodder (kg/m**2) | ³ 1.887E+00 | ³ 1.100E+00 | ³ | --- |
| ³ YV(3) | | | | | |
| R19B ³ | Growing Season for Non-Leafy (years) | ³ 2.460E-01 | ³ 1.700E-01 | ³ | --- |
| ³ TE(1) | | | | | |
| R19B ³ | Growing Season for Leafy (years) | ³ 1.230E-01 | ³ 2.500E-01 | ³ | --- |
| ³ TE(2) | | | | | |
| R19B ³ | Growing Season for Fodder (years) | ³ 8.200E-02 | ³ 8.000E-02 | ³ | --- |
| ³ TE(3) | | | | | |
| R19B ³ | Translocation Factor for Non-Leafy | ³ 1.000E-01 | ³ 1.000E-01 | ³ | --- |
| ³ TIV(1) | | | | | |
| R19B ³ | Translocation Factor for Leafy | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ TIV(2) | | | | | |
| R19B ³ | Translocation Factor for Fodder | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |

```

3 TIV(3)
R19B 3 Dry Foliar Interception Fraction for Non-Leafy 3 3.500E-01 3 2.500E-01 3 ---
3 RDRY(1)
R19B 3 Dry Foliar Interception Fraction for Leafy 3 3.500E-01 3 2.500E-01 3 ---
3 RDRY(2)
R19B 3 Dry Foliar Interception Fraction for Fodder 3 3.500E-01 3 2.500E-01 3 ---
3 RDRY(3)
R19B 3 Wet Foliar Interception Fraction for Non-Leafy 3 3.500E-01 3 2.500E-01 3 ---
3 RWET(1)
R19B 3 Wet Foliar Interception Fraction for Leafy 3 5.800E-01 3 2.500E-01 3 ---
3 RWET(2)
R19B 3 Wet Foliar Interception Fraction for Fodder 3 3.500E-01 3 2.500E-01 3 ---
3 RWET(3)
R19B 3 Weathering Removal Constant for Vegetation 3 3.300E+01 3 2.000E+01 3 ---
3 WLAM
3
3
C14 3 C-12 concentration in water (g/cm**3) 3 not used 3 2.000E-05 3 ---
3 C12WTR
C14 3 C-12 concentration in contaminated soil (g/g) 3 not used 3 3.000E-02 3 ---
3 C12CZ
C14 3 Fraction of vegetation carbon from soil 3 not used 3 2.000E-02 3 ---
3 CSOIL
C14 3 Fraction of vegetation carbon from air 3 not used 3 9.800E-01 3 ---
3 CAIR
C14 3 C-14 evasion layer thickness in soil (m) 3 not used 3 3.000E-01 3 ---
3 DMC
C14 3 C-14 evasion flux rate from soil (1/sec) 3 not used 3 7.000E-07 3 ---
3 EVSN
C14 3 C-12 evasion flux rate from soil (1/sec) 3 not used 3 1.000E-10 3 ---
3 REVS
C14 3 Fraction of grain in beef cattle feed 3 not used 3 8.000E-01 3 ---
3 AVFG4
C14 3 Fraction of grain in milk cow feed 3 not used 3 2.000E-01 3 ---
3 AVFG5
C14 3 DCF correction factor for gaseous forms of C14 3 not used 3 8.894E+01 3 ---
3 CO2F
3
3
STOR 3 Storage times of contaminated foodstuffs (days): 3 3 3
3
STOR 3 Fruits, non-leafy vegetables, and grain 3 1.400E+01 3 1.400E+01 3 ---
3 STOR_T(1)
STOR 3 Leafy vegetables 3 1.000E+00 3 1.000E+00 3 ---
3 STOR_T(2)
STOR 3 Milk 3 1.000E+00 3 1.000E+00 3 ---
3 STOR_T(3)
STOR 3 Meat and poultry 3 2.000E+01 3 2.000E+01 3 ---
3 STOR_T(4)
STOR 3 Fish 3 7.000E+00 3 7.000E+00 3 ---
3 STOR_T(5)
STOR 3 Crustacea and mollusks 3 7.000E+00 3 7.000E+00 3 ---
3 STOR_T(6)
STOR 3 Well water 3 1.000E+00 3 1.000E+00 3 ---
3 STOR_T(7)
STOR 3 Surface water 3 1.000E+00 3 1.000E+00 3 ---
3 STOR_T(8)
STOR 3 Livestock fodder 3 4.500E+01 3 4.500E+01 3 ---
3 STOR_T(9)
3
3
R021 3 Thickness of building foundation (m) 3 not used 3 1.500E-01 3 ---
3 FLOOR1
R021 3 Bulk density of building foundation (g/cm**3) 3 not used 3 2.400E+00 3 ---
3 DENSFL
R021 3 Total porosity of the cover material 3 not used 3 4.000E-01 3 ---
3 TPCV
R021 3 Total porosity of the building foundation 3 not used 3 1.000E-01 3 ---
3 TPFL
R021 3 Volumetric water content of the cover material 3 not used 3 5.000E-02 3 ---
3 PH2OCV
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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-239.RAD

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0 3 Site-Specific Parameter Summary (continued)
3 Parameter 3 User 3 Used by RESRAD
Menu 3 Parameter 3 Input 3 Default 3 (If different from user
input) 3 Name

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AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
R021 3 Volumetric water content of the foundation 3 not used 3 3.000E-02 3 ---

```


Dose Conversion Factor (and Related) Parameter Summary
 File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Am-241 | 4.440E-01 | 4.440E-01 | DCF2 (1) |
| B-1 | Np-237+D | 5.400E-01 | 5.400E-01 | DCF2 (2) |
| B-1 | Pu-241+D | 8.250E-03 | 8.250E-03 | DCF2 (3) |
| B-1 | Th-229+D | 2.160E+00 | 2.160E+00 | DCF2 (5) |
| B-1 | U-233 | 1.350E-01 | 1.350E-01 | DCF2 (6) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Am-241 | 3.640E-03 | 3.640E-03 | DCF3 (1) |
| D-1 | Np-237+D | 4.440E-03 | 4.440E-03 | DCF3 (2) |
| D-1 | Pu-241+D | 6.850E-05 | 6.850E-05 | DCF3 (3) |
| D-1 | Th-229+D | 4.030E-03 | 4.030E-03 | DCF3 (5) |
| D-1 | U-233 | 2.890E-04 | 2.890E-04 | DCF3 (6) |
| D-34 | Food transfer factors: | | | |
| D-34 | Am-241 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF (1,1) |
| D-34 | Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.000E-05 | 5.000E-05 | RTF (1,2) |
| D-34 | Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-06 | 2.000E-06 | RTF (1,3) |
| D-34 | Np-237+D , plant/soil concentration ratio, dimensionless | 2.000E-02 | 2.000E-02 | RTF (2,1) |
| D-34 | Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF (2,2) |
| D-34 | Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF (2,3) |
| D-34 | Pu-241+D , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF (3,1) |
| D-34 | Pu-241+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF (3,2) |
| D-34 | Pu-241+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-06 | 1.000E-06 | RTF (3,3) |
| D-34 | Th-229+D , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF (5,1) |
| D-34 | Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF (5,2) |
| D-34 | Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF (5,3) |
| D-34 | U-233 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF (6,1) |
| D-34 | U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.400E-04 | 3.400E-04 | RTF (6,2) |
| D-34 | U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 6.000E-04 | 6.000E-04 | RTF (6,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Am-241 , fish | 3.000E+01 | 3.000E+01 | BIOFAC (1,1) |
| D-5 | Am-241 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC (1,2) |
| D-5 | Np-237+D , fish | 3.000E+01 | 3.000E+01 | BIOFAC (2,1) |
| D-5 | Np-237+D , crustacea and mollusks | 4.000E+02 | 4.000E+02 | BIOFAC (2,2) |
| D-5 | Pu-241+D , fish | 3.000E+01 | 3.000E+01 | BIOFAC (3,1) |
| D-5 | Pu-241+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC (3,2) |
| D-5 | Th-229+D , fish | 1.000E+02 | 1.000E+02 | BIOFAC (5,1) |
| D-5 | Th-229+D , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC (5,2) |
| D-5 | U-233 , fish | 1.000E+01 | 1.000E+01 | BIOFAC (6,1) |
| D-5 | U-233 , crustacea and mollusks | 6.000E+01 | 6.000E+01 | BIOFAC (6,2) |

Site-Specific Parameter Summary

| Menu | Parameter | User | Default | Used by RESRAD |
|--------|---------------------------------------|-----------|-----------|-------------------------|
| input) | Name | Input | Default | (If different from user |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T (2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |

| | | | | |
|---|------------------------|------------------------|--------------|-----|
| ³ T(3) | | | | |
| R011 ³ Times for calculations (yr) | ³ 1.000E+01 | ³ 1.000E+01 | ³ | --- |
| ³ T(4) | | | | |
| R011 ³ Times for calculations (yr) | ³ 3.000E+01 | ³ 3.000E+01 | ³ | --- |
| ³ T(5) | | | | |
| R011 ³ Times for calculations (yr) | ³ 1.000E+02 | ³ 1.000E+02 | ³ | --- |
| ³ T(6) | | | | |
| R011 ³ Times for calculations (yr) | ³ 3.000E+02 | ³ 3.000E+02 | ³ | --- |
| ³ T(7) | | | | |
| R011 ³ Times for calculations (yr) | ³ 1.000E+03 | ³ 1.000E+03 | ³ | --- |
| ³ T(8) | | | | |
| R011 ³ Times for calculations (yr) | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ T(9) | | | | |
| R011 ³ Times for calculations (yr) | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ T(10) | | | | |
| ³ | ³ | ³ | ³ | |
| ³ | | | | |
| R012 ³ Initial principal radionuclide (pCi/g): Pu-241 | ³ 1.581E+03 | ³ 0.000E+00 | ³ | --- |
| ³ S1(3) | | | | |
| R012 ³ Concentration in groundwater (pCi/L): Pu-241 | ³ not used | ³ 0.000E+00 | ³ | --- |
| ³ W1(3) | ³ | ³ | ³ | |
| ³ | | | | |
| R013 ³ Cover depth (m) | ³ 0.000E+00 | ³ 0.000E+00 | ³ | --- |
| ³ COVER0 | | | | |
| R013 ³ Density of cover material (g/cm**3) | ³ not used | ³ 1.500E+00 | ³ | --- |
| ³ DENSVCV | | | | |
| R013 ³ Cover depth erosion rate (m/yr) | ³ not used | ³ 1.000E-03 | ³ | --- |
| ³ VCV | | | | |
| R013 ³ Density of contaminated zone (g/cm**3) | ³ 1.860E+00 | ³ 1.500E+00 | ³ | --- |
| ³ DENSVCZ | | | | |
| R013 ³ Contaminated zone erosion rate (m/yr) | ³ 8.500E-04 | ³ 1.000E-03 | ³ | --- |
| ³ VCZ | | | | |
| R013 ³ Contaminated zone total porosity | ³ 3.500E-01 | ³ 4.000E-01 | ³ | --- |
| ³ TPCZ | | | | |
| R013 ³ Contaminated zone field capacity | ³ 1.000E-01 | ³ 2.000E-01 | ³ | --- |
| ³ FCCZ | | | | |
| R013 ³ Contaminated zone hydraulic conductivity (m/yr) | ³ 5.550E+02 | ³ 1.000E+01 | ³ | --- |
| ³ HCCZ | | | | |
| R013 ³ Contaminated zone b parameter | ³ 4.380E+00 | ³ 5.300E+00 | ³ | --- |
| ³ BCZ | | | | |
| R013 ³ Average annual wind speed (m/sec) | ³ 2.030E+00 | ³ 2.000E+00 | ³ | --- |
| ³ WIND | | | | |
| R013 ³ Humidity in air (g/m**3) | ³ not used | ³ 8.000E+00 | ³ | --- |
| ³ HUMID | | | | |
| R013 ³ Evapotranspiration coefficient | ³ 7.500E-01 | ³ 5.000E-01 | ³ | --- |
| ³ EVAPTR | | | | |
| R013 ³ Precipitation (m/yr) | ³ 1.200E+00 | ³ 1.000E+00 | ³ | --- |
| ³ PRECIP | | | | |
| R013 ³ Irrigation (m/yr) | ³ 4.350E-01 | ³ 2.000E-01 | ³ | --- |
| ³ RI | | | | |
| R013 ³ Irrigation mode | ³ overhead | ³ overhead | ³ | --- |
| ³ IDITCH | | | | |
| R013 ³ Runoff coefficient | ³ 6.000E-01 | ³ 2.000E-01 | ³ | --- |
| ³ RUNOFF | | | | |
| R013 ³ Watershed area for nearby stream or pond (m**2) | ³ 7.770E+05 | ³ 1.000E+06 | ³ | --- |
| ³ WAREA | | | | |
| R013 ³ Accuracy for water/soil computations | ³ 1.000E-03 | ³ 1.000E-03 | ³ | --- |
| ³ EPS | ³ | ³ | ³ | |
| ³ | | | | |
| R014 ³ Density of saturated zone (g/cm**3) | ³ 2.120E+00 | ³ 1.500E+00 | ³ | --- |
| ³ DENSAQ | | | | |
| R014 ³ Saturated zone total porosity | ³ 3.000E-01 | ³ 4.000E-01 | ³ | --- |
| ³ TPSZ | | | | |
| R014 ³ Saturated zone effective porosity | ³ 2.100E-01 | ³ 2.000E-01 | ³ | --- |
| ³ EPSZ | | | | |
| R014 ³ Saturated zone field capacity | ³ 9.000E-02 | ³ 2.000E-01 | ³ | --- |
| ³ FCSZ | | | | |
| R014 ³ Saturated zone hydraulic conductivity (m/yr) | ³ 1.000E-01 | ³ 1.000E+02 | ³ | --- |
| ³ HCSZ | | | | |
| R014 ³ Saturated zone hydraulic gradient | ³ 1.000E-01 | ³ 2.000E-02 | ³ | --- |
| ³ HGWT | | | | |
| R014 ³ Saturated zone b parameter | ³ 4.900E+00 | ³ 5.300E+00 | ³ | --- |
| ³ BSZ | | | | |
| R014 ³ Water table drop rate (m/yr) | ³ 1.000E-03 | ³ 1.000E-03 | ³ | --- |
| ³ VWT | | | | |
| R014 ³ Well pump intake depth (m below water table) | ³ 1.451E+01 | ³ 1.000E+01 | ³ | --- |
| ³ DWIBWT | | | | |
| R014 ³ Model: Nondispersion (ND) or Mass-Balance (MB) | ³ ND | ³ ND | ³ | --- |
| ³ MODEL | | | | |
| R014 ³ Well pumping rate (m**3/yr) | ³ 1.323E+03 | ³ 2.500E+02 | ³ | --- |
| ³ UW | | | | |

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3
R015 3 Number of unsaturated zone strata 3 1 3 1 3 ---
3 NS
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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-241.RAD

Site-Specific Parameter Summary (continued)
0 3 User 3 3 Used by RESRAD
3 Parameter
Menu 3 Parameter 3 Input 3 Default 3 (If different from user
input) 3 Name

AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
R015 3 Unsat. zone 1, thickness (m) 3 1.430E+00 3 4.000E+00 3 ---
3 H(1)
R015 3 Unsat. zone 1, soil density (g/cm**3) 3 1.860E+00 3 1.500E+00 3 ---
3 DENSUZ(1)
R015 3 Unsat. zone 1, total porosity 3 3.500E-01 3 4.000E-01 3 ---
3 TPUZ(1)
R015 3 Unsat. zone 1, effective porosity 3 2.500E-01 3 2.000E-01 3 ---
3 EPUZ(1)
R015 3 Unsat. zone 1, field capacity 3 1.000E-01 3 2.000E-01 3 ---
3 FCUZ(1)
R015 3 Unsat. zone 1, soil-specific b parameter 3 4.380E+00 3 5.300E+00 3 ---
3 BUZ(1)
R015 3 Unsat. zone 1, hydraulic conductivity (m/yr) 3 5.550E+02 3 1.000E+01 3 ---
3 HCUZ(1)
3
R016 3 Distribution coefficients for Pu-241 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 9.530E+02 3 2.000E+03 3 ---
3 DCNUCC( 3)
R016 3 Unsaturated zone 1 (cm**3/g) 3 9.530E+02 3 2.000E+03 3 ---
3 DCNUCU( 3,1)
R016 3 Saturated zone (cm**3/g) 3 9.530E+02 3 2.000E+03 3 ---
3 DCNUCS( 3)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 8.193E-05
3 ALEACH( 3)
R016 3 Solubility constant 3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 3)
3
R016 3 Distribution coefficients for daughter Am-241 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 1.445E+03 3 2.000E+01 3 ---
3 DCNUCC( 1)
R016 3 Unsaturated zone 1 (cm**3/g) 3 1.445E+03 3 2.000E+01 3 ---
3 DCNUCU( 1,1)
R016 3 Saturated zone (cm**3/g) 3 1.445E+03 3 2.000E+01 3 ---
3 DCNUCS( 1)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 5.403E-05
3 ALEACH( 1)
R016 3 Solubility constant 3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 1)
3
R016 3 Distribution coefficients for daughter Np-237 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 1.700E+01 3 -1.000E+00 3 ---
3 DCNUCC( 2)
R016 3 Unsaturated zone 1 (cm**3/g) 3 1.700E+01 3 -1.000E+00 3 ---
3 DCNUCU( 2,1)
R016 3 Saturated zone (cm**3/g) 3 1.700E+01 3 -1.000E+00 3 ---
3 DCNUCS( 2)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 4.567E-03
3 ALEACH( 2)
R016 3 Solubility constant 3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 2)
3
R016 3 Distribution coefficients for daughter Th-229 3 3 3
3
R016 3 Contaminated zone (cm**3/g) 3 5.884E+03 3 6.000E+04 3 ---
3 DCNUCC( 5)
R016 3 Unsaturated zone 1 (cm**3/g) 3 5.884E+03 3 6.000E+04 3 ---
3 DCNUCU( 5,1)
R016 3 Saturated zone (cm**3/g) 3 5.884E+03 3 6.000E+04 3 ---
3 DCNUCS( 5)
R016 3 Leach rate (/yr) 3 0.000E+00 3 0.000E+00 3 1.327E-05
3 ALEACH( 5)

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| | | | | |
|----------------|--|-----------|-----------|-------------------------|
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used |
| 3 SOLUBK(5) | | | | |
| 3 | | | | |
| R016 | Distribution coefficients for daughter U-233 | | | |
| 3 | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.260E+02 | 5.000E+01 | --- |
| 3 DCNUCC(6) | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.260E+02 | 5.000E+01 | --- |
| 3 DCNUCU(6,1) | | | | |
| R016 | Saturated zone (cm**3/g) | 1.260E+02 | 5.000E+01 | --- |
| 3 DCNUCS(6) | | | | |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 6.192E-04 |
| 3 ALEACH(6) | | | | |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used |
| 3 SOLUBK(6) | | | | |
| 3 | | | | |
| R017 | Inhalation rate (m**3/yr) | 8.400E+03 | 8.400E+03 | --- |
| 3 INHALR | | | | |
| R017 | Mass loading for inhalation (g/m**3) | 2.330E-05 | 1.000E-04 | --- |
| 3 MLINH | | | | |
| R017 | Exposure duration | 3.000E+01 | 3.000E+01 | --- |
| 3 ED | | | | |
| R017 | Shielding factor, inhalation | 5.500E-01 | 4.000E-01 | --- |
| 3 SHF3 | | | | |
| R017 | Shielding factor, external gamma | 2.725E-01 | 7.000E-01 | --- |
| 3 SHF1 | | | | |
| R017 | Fraction of time spent indoors | 6.571E-01 | 5.000E-01 | --- |
| 3 FIND | | | | |
| R017 | Fraction of time spent outdoors (on site) | 1.181E-01 | 2.500E-01 | --- |
| 3 FOTD | | | | |
| R017 | Shape factor flag, external gamma | 1.000E+00 | 1.000E+00 | >0 shows circular AREA. |
| 3 FS | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-241.RAD

| Site-Specific Parameter Summary (continued) | | | | |
|---|-------|---------|-------------------------|----------------|
| 0 | 3 | 3 | 3 | Used by RESRAD |
| Parameter | User | Default | (If different from user | |
| Menu | Input | Default | (If different from user | |
| input) 3 Name | | | | |

AA

AAAAAAAAAAAAAAAAAAAAAAAA

| | | | | |
|-----------------|--|----------|-----------|-----|
| R017 | Radii of shape factor array (used if FS = -1): | | | |
| 3 | | | | |
| R017 | Outer annular radius (m), ring 1: | not used | 5.000E+01 | --- |
| 3 RAD_SHAPE(1) | | | | |
| R017 | Outer annular radius (m), ring 2: | not used | 7.071E+01 | --- |
| 3 RAD_SHAPE(2) | | | | |
| R017 | Outer annular radius (m), ring 3: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(3) | | | | |
| R017 | Outer annular radius (m), ring 4: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(4) | | | | |
| R017 | Outer annular radius (m), ring 5: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(5) | | | | |
| R017 | Outer annular radius (m), ring 6: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(6) | | | | |
| R017 | Outer annular radius (m), ring 7: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(7) | | | | |
| R017 | Outer annular radius (m), ring 8: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(8) | | | | |
| R017 | Outer annular radius (m), ring 9: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(9) | | | | |
| R017 | Outer annular radius (m), ring 10: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(10) | | | | |
| R017 | Outer annular radius (m), ring 11: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(11) | | | | |
| R017 | Outer annular radius (m), ring 12: | not used | 0.000E+00 | --- |
| 3 RAD_SHAPE(12) | | | | |
| 3 | | | | |
| R017 | Fractions of annular areas within AREA: | | | |
| 3 | | | | |
| R017 | Ring 1 | not used | 1.000E+00 | --- |
| 3 FRACA(1) | | | | |
| R017 | Ring 2 | not used | 2.732E-01 | --- |
| 3 FRACA(2) | | | | |
| R017 | Ring 3 | not used | 0.000E+00 | --- |
| 3 FRACA(3) | | | | |
| R017 | Ring 4 | not used | 0.000E+00 | --- |
| 3 FRACA(4) | | | | |

| | | | | | | | |
|-------------------|--|---|-----------|---|-----------|---|-----|
| R017 ³ | Ring 5 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(5) | | | | | | |
| R017 ³ | Ring 6 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(6) | | | | | | |
| R017 ³ | Ring 7 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(7) | | | | | | |
| R017 ³ | Ring 8 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(8) | | | | | | |
| R017 ³ | Ring 9 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(9) | | | | | | |
| R017 ³ | Ring 10 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(10) | | | | | | |
| R017 ³ | Ring 11 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(11) | | | | | | |
| R017 ³ | Ring 12 | 3 | not used | 3 | 0.000E+00 | 3 | --- |
| 3 | FRACA(12) | | | | | | |
| 3 | | | | | | | |
| R018 ³ | Fruits, vegetables and grain consumption (kg/yr) | 3 | 1.120E+02 | 3 | 1.600E+02 | 3 | --- |
| 3 | DIET(1) | | | | | | |
| R018 ³ | Leafy vegetable consumption (kg/yr) | 3 | 2.140E+01 | 3 | 1.400E+01 | 3 | --- |
| 3 | DIET(2) | | | | | | |
| R018 ³ | Milk consumption (L/yr) | 3 | 2.330E+02 | 3 | 9.200E+01 | 3 | --- |
| 3 | DIET(3) | | | | | | |
| R018 ³ | Meat and poultry consumption (kg/yr) | 3 | 6.510E+01 | 3 | 6.300E+01 | 3 | --- |
| 3 | DIET(4) | | | | | | |
| R018 ³ | Fish consumption (kg/yr) | 3 | 2.060E+01 | 3 | 5.400E+00 | 3 | --- |
| 3 | DIET(5) | | | | | | |
| R018 ³ | Other seafood consumption (kg/yr) | 3 | 9.000E-01 | 3 | 9.000E-01 | 3 | --- |
| 3 | DIET(6) | | | | | | |
| R018 ³ | Soil ingestion rate (g/yr) | 3 | 1.826E+01 | 3 | 3.650E+01 | 3 | --- |
| 3 | SOIL | | | | | | |
| R018 ³ | Drinking water intake (L/yr) | 3 | 4.785E+02 | 3 | 5.100E+02 | 3 | --- |
| 3 | DWI | | | | | | |
| R018 ³ | Contamination fraction of drinking water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FDW | | | | | | |
| R018 ³ | Contamination fraction of household water | 3 | not used | 3 | 1.000E+00 | 3 | --- |
| 3 | FHHW | | | | | | |
| R018 ³ | Contamination fraction of livestock water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FLW | | | | | | |
| R018 ³ | Contamination fraction of irrigation water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 | FIRW | | | | | | |
| R018 ³ | Contamination fraction of aquatic food | 3 | 1.000E+00 | 3 | 5.000E-01 | 3 | --- |
| 3 | FR9 | | | | | | |
| R018 ³ | Contamination fraction of plant food | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FPLANT | | | | | | |
| R018 ³ | Contamination fraction of meat | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMEAT | | | | | | |
| R018 ³ | Contamination fraction of milk | 3 | 1.000E+00 | 3 | -1 | 3 | --- |
| 3 | FMILK | | | | | | |
| 3 | | | | | | | |
| R019 ³ | Livestock fodder intake for meat (kg/day) | 3 | 2.710E+01 | 3 | 6.800E+01 | 3 | --- |
| 3 | LFI5 | | | | | | |
| R019 ³ | Livestock fodder intake for milk (kg/day) | 3 | 6.320E+01 | 3 | 5.500E+01 | 3 | --- |
| 3 | LFI6 | | | | | | |
| R019 ³ | Livestock water intake for meat (L/day) | 3 | 5.060E+01 | 3 | 5.000E+01 | 3 | --- |
| 3 | LWI5 | | | | | | |
| R019 ³ | Livestock water intake for milk (L/day) | 3 | 6.000E+01 | 3 | 1.600E+02 | 3 | --- |
| 3 | LWI6 | | | | | | |
| R019 ³ | Livestock soil intake (kg/day) | 3 | 5.000E-01 | 3 | 5.000E-01 | 3 | --- |
| 3 | LSI | | | | | | |
| R019 ³ | Mass loading for foliar deposition (g/m**3) | 3 | 4.000E-04 | 3 | 1.000E-04 | 3 | --- |
| 3 | MLFD | | | | | | |

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-241.RAD

| | | Site-Specific Parameter Summary (continued) | | | |
|-------------------|--|---|-----------|-------------------------|----------------|
| 0 | 3 | 3 | User | 3 | Used by RESRAD |
| 3 | Parameter | | | | |
| Menu | Parameter | Input | Default | (If different from user | |
| input) | Name | | | | |
| AAAA | AAAA | AAAA | AAAA | AAAA | AAAA |
| AAAA | AAAA | AAAA | AAAA | AAAA | AAAA |
| R019 ³ | Depth of soil mixing layer (m) | 3 | 2.300E-01 | 3 | 1.500E-01 |
| 3 | DM | | | | |
| R019 ³ | Depth of roots (m) | 3 | 2.150E+00 | 3 | 9.000E-01 |
| 3 | DROOT | | | | |
| R019 ³ | Drinking water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 |
| 3 | FGWDW | | | | |
| R019 ³ | Household water fraction from ground water | 3 | not used | 3 | 1.000E+00 |
| 3 | FGWHH | | | | |

| | | | | | | | | |
|-------------|---|--|---|-----------|---|-----------|---|-----|
| R019 | 3 | Livestock water fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 FGWLW | | | | | | | | |
| R019 | 3 | Irrigation fraction from ground water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 FGWIR | | | | | | | | |
| 3 | | | 3 | | 3 | | 3 | |
| R19B | 3 | Wet weight crop yield for Non-Leafy (kg/m**2) | 3 | 1.750E+00 | 3 | 7.000E-01 | 3 | --- |
| 3 YV(1) | | | | | | | | |
| R19B | 3 | Wet weight crop yield for Leafy (kg/m**2) | 3 | 2.889E+00 | 3 | 1.500E+00 | 3 | --- |
| 3 YV(2) | | | | | | | | |
| R19B | 3 | Wet weight crop yield for Fodder (kg/m**2) | 3 | 1.887E+00 | 3 | 1.100E+00 | 3 | --- |
| 3 YV(3) | | | | | | | | |
| R19B | 3 | Growing Season for Non-Leafy (years) | 3 | 2.460E-01 | 3 | 1.700E-01 | 3 | --- |
| 3 TE(1) | | | | | | | | |
| R19B | 3 | Growing Season for Leafy (years) | 3 | 1.230E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 TE(2) | | | | | | | | |
| R19B | 3 | Growing Season for Fodder (years) | 3 | 8.200E-02 | 3 | 8.000E-02 | 3 | --- |
| 3 TE(3) | | | | | | | | |
| R19B | 3 | Translocation Factor for Non-Leafy | 3 | 1.000E-01 | 3 | 1.000E-01 | 3 | --- |
| 3 TIV(1) | | | | | | | | |
| R19B | 3 | Translocation Factor for Leafy | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(2) | | | | | | | | |
| R19B | 3 | Translocation Factor for Fodder | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 TIV(3) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(1) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(2) | | | | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RDRY(3) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(1) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(2) | | | | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 | 3 | --- |
| 3 RWET(3) | | | | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 WLAM | | | 3 | | 3 | | 3 | |
| 3 | | | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 | 3 | --- |
| 3 C12WTR | | | | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 | 3 | --- |
| 3 C12CZ | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 | 3 | --- |
| 3 CSOIL | | | | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 | 3 | --- |
| 3 CAIR | | | | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 | 3 | --- |
| 3 DMC | | | | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 | 3 | --- |
| 3 EVSN | | | | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 | 3 | --- |
| 3 REVSN | | | | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 | 3 | --- |
| 3 AVFG4 | | | | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 | 3 | --- |
| 3 AVFG5 | | | | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 | 3 | --- |
| 3 CO2F | | | 3 | | 3 | | 3 | |
| 3 | | | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | | 3 | |
| 3 | | | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 | 3 | --- |
| 3 STOR_T(1) | | | | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 STOR_T(2) | | | | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 STOR_T(3) | | | | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 | 3 | --- |
| 3 STOR_T(4) | | | | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 | 3 | --- |
| 3 STOR_T(5) | | | | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 | 3 | --- |
| 3 STOR_T(6) | | | | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 STOR_T(7) | | | | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 | 3 | --- |
| 3 STOR_T(8) | | | | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 | 3 | --- |
| 3 STOR_T(9) | | | 3 | | 3 | | 3 | |

```

3
R021 3 Thickness of building foundation (m)          3 not used 3 1.500E-01 3      ---
3 FLOOR1
R021 3 Bulk density of building foundation (g/cm**3) 3 not used 3 2.400E+00 3      ---
3 DENSFL
R021 3 Total porosity of the cover material          3 not used 3 4.000E-01 3      ---
3 TPCV
R021 3 Total porosity of the building foundation     3 not used 3 1.000E-01 3      ---
3 TPFL
R021 3 Volumetric water content of the cover material 3 not used 3 5.000E-02 3      ---
3 PH2OCV

```

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Summary : Yankee Rowe Sensitivity Analysis=soil File: YR_Pu-241.RAD

```

                                Site-Specific Parameter Summary (continued)
0      3      User      3      3      Used by RESRAD
3 Parameter
Menu 3      Parameter      3      Input      3      Default      3      (If different from user
input) 3      Name

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R021 3 Volumetric water content of the foundation     3 not used 3 3.000E-02 3      ---
3 PH2OFL
R021 3 Diffusion coefficient for radon gas (m/sec):    3      3      3
3
R021 3 in cover material                             3 not used 3 2.000E-06 3      ---
3 DIFCV
R021 3 in foundation material                         3 not used 3 3.000E-07 3      ---
3 DIFFL
R021 3 in contaminated zone soil                     3 not used 3 2.000E-06 3      ---
3 DIFCZ
R021 3 Radon vertical dimension of mixing (m)         3 not used 3 2.000E+00 3      ---
3 HMXIX
R021 3 Average building air exchange rate (1/hr)     3 not used 3 5.000E-01 3      ---
3 REXG
R021 3 Height of the building (room) (m)              3 not used 3 2.500E+00 3      ---
3 HRM
R021 3 Building interior area factor                  3 not used 3 0.000E+00 3      ---
3 FAI
R021 3 Building depth below ground surface (m)        3 not used 3 -1.000E+00 3      ---
3 DMFL
R021 3 Emanating power of Rn-222 gas                  3 not used 3 2.500E-01 3      ---
3 EMANA(1)
R021 3 Emanating power of Rn-220 gas                  3 not used 3 1.500E-01 3      ---
3 EMANA(2)
3      3      3
3
TITL 3 Number of graphical time points                3      32      3      ---      3      ---
3 NPTS
TITL 3 Maximum number of integration points for dose  3      17      3      ---      3      ---
3 LYMAX
TITL 3 Maximum number of integration points for risk  3      1      3      ---      3      ---
3 KYMAX

```

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iiiiiiiiiiiiiiiiiii

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Summary of Pathway Selections

```

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

```

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|--|---------------|-----------|----------------|
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Am-241 | 4.440E-01 | 4.440E-01 | DCF2(1) |
| B-1 | Np-237+D | 5.400E-01 | 5.400E-01 | DCF2(2) |
| B-1 | Th-229+D | 2.160E+00 | 2.160E+00 | DCF2(3) |
| B-1 | U-233 | 1.350E-01 | 1.350E-01 | DCF2(4) |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Am-241 | 3.640E-03 | 3.640E-03 | DCF3(1) |
| D-1 | Np-237+D | 4.440E-03 | 4.440E-03 | DCF3(2) |
| D-1 | Th-229+D | 4.030E-03 | 4.030E-03 | DCF3(3) |
| D-1 | U-233 | 2.890E-04 | 2.890E-04 | DCF3(4) |
| D-34 | Food transfer factors: | | | |
| D-34 | Am-241 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF(1,1) |
| D-34 | Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.000E-05 | 5.000E-05 | RTF(1,2) |
| D-34 | Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-06 | 2.000E-06 | RTF(1,3) |
| D-34 | Np-237+D , plant/soil concentration ratio, dimensionless | 2.000E-02 | 2.000E-02 | RTF(2,1) |
| D-34 | Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF(2,2) |
| D-34 | Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF(2,3) |
| D-34 | Th-229+D , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF(3,1) |
| D-34 | Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF(3,2) |
| D-34 | Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF(3,3) |
| D-34 | U-233 , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(4,1) |
| D-34 | U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.400E-04 | 3.400E-04 | RTF(4,2) |
| D-34 | U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 6.000E-04 | 6.000E-04 | RTF(4,3) |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Am-241 , fish | 3.000E+01 | 3.000E+01 | BIOFAC(1,1) |
| D-5 | Am-241 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(1,2) |
| D-5 | Np-237+D , fish | 3.000E+01 | 3.000E+01 | BIOFAC(2,1) |
| D-5 | Np-237+D , crustacea and mollusks | 4.000E+02 | 4.000E+02 | BIOFAC(2,2) |
| D-5 | Th-229+D , fish | 1.000E+02 | 1.000E+02 | BIOFAC(3,1) |
| D-5 | Th-229+D , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC(3,2) |
| D-5 | U-233 , fish | 1.000E+01 | 1.000E+01 | BIOFAC(4,1) |
| D-5 | U-233 , crustacea and mollusks | 6.000E+01 | 6.000E+01 | BIOFAC(4,2) |

Site-Specific Parameter Summary

| Menu | Parameter | User Input | Default | Used by RESRAD |
|--------|---------------------------------------|------------|--------------------------------|----------------|
| | Parameter Name | | (If different from user input) | |
| R011 | Area of contaminated zone (m**2) | 1.302E+04 | 1.000E+04 | --- |
| AREA | | | | |
| R011 | Thickness of contaminated zone (m) | 1.575E+00 | 2.000E+00 | --- |
| THICK0 | | | | |
| R011 | Length parallel to aquifer flow (m) | 1.290E+02 | 1.000E+02 | --- |
| LCZPAQ | | | | |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 2.500E+01 | --- |
| BRDL | | | | |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- |
| TI | | | | |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- |
| T(2) | | | | |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- |
| T(3) | | | | |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- |
| T(4) | | | | |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- |
| T(5) | | | | |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- |
| T(6) | | | | |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- |
| T(7) | | | | |

| | | | | |
|--------|---|-----------|-----------|-----|
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- |
| T(8) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(9) | | | | |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- |
| T(10) | | | | |
| | | | | |
| R012 | Initial principal radionuclide (pCi/g): Am-241 | 4.435E+01 | 0.000E+00 | --- |
| S1(1) | | | | |
| R012 | Concentration in groundwater (pCi/L): Am-241 | not used | 0.000E+00 | --- |
| W1(1) | | | | |
| | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- |
| COVER0 | | | | |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- |
| DENSCV | | | | |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- |
| VCV | | | | |
| R013 | Density of contaminated zone (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSCZ | | | | |
| R013 | Contaminated zone erosion rate (m/yr) | 8.500E-04 | 1.000E-03 | --- |
| VCZ | | | | |
| R013 | Contaminated zone total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPCZ | | | | |
| R013 | Contaminated zone field capacity | 1.000E-01 | 2.000E-01 | --- |
| FCCZ | | | | |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 5.550E+02 | 1.000E+01 | --- |
| HCCZ | | | | |
| R013 | Contaminated zone b parameter | 4.380E+00 | 5.300E+00 | --- |
| BCZ | | | | |
| R013 | Average annual wind speed (m/sec) | 2.030E+00 | 2.000E+00 | --- |
| WIND | | | | |
| R013 | Humidity in air (g/m**3) | not used | 8.000E+00 | --- |
| HUMID | | | | |
| R013 | Evapotranspiration coefficient | 7.500E-01 | 5.000E-01 | --- |
| EVAPTR | | | | |
| R013 | Precipitation (m/yr) | 1.200E+00 | 1.000E+00 | --- |
| PRECIP | | | | |
| R013 | Irrigation (m/yr) | 4.350E-01 | 2.000E-01 | --- |
| RI | | | | |
| R013 | Irrigation mode | overhead | overhead | --- |
| IDITCH | | | | |
| R013 | Runoff coefficient | 6.000E-01 | 2.000E-01 | --- |
| RUNOFF | | | | |
| R013 | Watershed area for nearby stream or pond (m**2) | 7.770E+05 | 1.000E+06 | --- |
| WAREA | | | | |
| R013 | Accuracy for water/soil computations | 1.000E-03 | 1.000E-03 | --- |
| EPS | | | | |
| | | | | |
| R014 | Density of saturated zone (g/cm**3) | 2.120E+00 | 1.500E+00 | --- |
| DENSAQ | | | | |
| R014 | Saturated zone total porosity | 3.000E-01 | 4.000E-01 | --- |
| TPSZ | | | | |
| R014 | Saturated zone effective porosity | 2.100E-01 | 2.000E-01 | --- |
| EPSZ | | | | |
| R014 | Saturated zone field capacity | 9.000E-02 | 2.000E-01 | --- |
| FCSZ | | | | |
| R014 | Saturated zone hydraulic conductivity (m/yr) | 1.000E-01 | 1.000E+02 | --- |
| HCSZ | | | | |
| R014 | Saturated zone hydraulic gradient | 1.000E-01 | 2.000E-02 | --- |
| HGWT | | | | |
| R014 | Saturated zone b parameter | 4.900E+00 | 5.300E+00 | --- |
| BSZ | | | | |
| R014 | Water table drop rate (m/yr) | 1.000E-03 | 1.000E-03 | --- |
| VWT | | | | |
| R014 | Well pump intake depth (m below water table) | 1.451E+01 | 1.000E+01 | --- |
| DWIBWT | | | | |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | ND | ND | --- |
| MODEL | | | | |
| R014 | Well pumping rate (m**3/yr) | 1.323E+03 | 2.500E+02 | --- |
| UW | | | | |
| | | | | |
| R015 | Number of unsaturated zone strata | 1 | 1 | --- |
| NS | | | | |

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Site-Specific Parameter Summary (continued)
User

Used by RESRAD

| Menu input) | Parameter Name | Input | Default | (If different from user |
|--|---|-----------|------------|-------------------------|
| AA | | | | |
| R015 | Unsat. zone 1, thickness (m) | 1.430E+00 | 4.000E+00 | --- |
| H(1) | | | | |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 1.860E+00 | 1.500E+00 | --- |
| DENSUZ(1) | | | | |
| R015 | Unsat. zone 1, total porosity | 3.500E-01 | 4.000E-01 | --- |
| TPUZ(1) | | | | |
| R015 | Unsat. zone 1, effective porosity | 2.500E-01 | 2.000E-01 | --- |
| EPUZ(1) | | | | |
| R015 | Unsat. zone 1, field capacity | 1.000E-01 | 2.000E-01 | --- |
| FCUZ(1) | | | | |
| R015 | Unsat. zone 1, soil-specific b parameter | 4.380E+00 | 5.300E+00 | --- |
| BUZ(1) | | | | |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 5.550E+02 | 1.000E+01 | --- |
| HCUZ(1) | | | | |
| | | | | |
| R016 | Distribution coefficients for Am-241 | | | |
| | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.445E+03 | 2.000E+01 | --- |
| DCNUCC(1) | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.445E+03 | 2.000E+01 | --- |
| DCNUCU(1,1) | | | | |
| R016 | Saturated zone (cm**3/g) | 1.445E+03 | 2.000E+01 | --- |
| DCNUCS(1) | | | | |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 5.403E-05 |
| ALEACH(1) | | | | |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used |
| SOLUBK(1) | | | | |
| | | | | |
| R016 | Distribution coefficients for daughter Np-237 | | | |
| | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.700E+01 | -1.000E+00 | --- |
| DCNUCC(2) | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.700E+01 | -1.000E+00 | --- |
| DCNUCU(2,1) | | | | |
| R016 | Saturated zone (cm**3/g) | 1.700E+01 | -1.000E+00 | --- |
| DCNUCS(2) | | | | |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 4.567E-03 |
| ALEACH(2) | | | | |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used |
| SOLUBK(2) | | | | |
| | | | | |
| R016 | Distribution coefficients for daughter Th-229 | | | |
| | | | | |
| R016 | Contaminated zone (cm**3/g) | 5.884E+03 | 6.000E+04 | --- |
| DCNUCC(3) | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 5.884E+03 | 6.000E+04 | --- |
| DCNUCU(3,1) | | | | |
| R016 | Saturated zone (cm**3/g) | 5.884E+03 | 6.000E+04 | --- |
| DCNUCS(3) | | | | |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 1.327E-05 |
| ALEACH(3) | | | | |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used |
| SOLUBK(3) | | | | |
| | | | | |
| R016 | Distribution coefficients for daughter U-233 | | | |
| | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.260E+02 | 5.000E+01 | --- |
| DCNUCC(4) | | | | |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.260E+02 | 5.000E+01 | --- |
| DCNUCU(4,1) | | | | |
| R016 | Saturated zone (cm**3/g) | 1.260E+02 | 5.000E+01 | --- |
| DCNUCS(4) | | | | |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 6.192E-04 |
| ALEACH(4) | | | | |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used |
| SOLUBK(4) | | | | |
| | | | | |
| R017 | Inhalation rate (m**3/yr) | 8.400E+03 | 8.400E+03 | --- |
| INHALR | | | | |
| R017 | Mass loading for inhalation (g/m**3) | 2.330E-05 | 1.000E-04 | --- |
| MLINH | | | | |
| R017 | Exposure duration | 3.000E+01 | 3.000E+01 | --- |

| | | | | | |
|---|------------------------|------------------------|--------------|--|-----|
| ³ DIET(3) | | | | | |
| R018 ³ Meat and poultry consumption (kg/yr) | ³ 6.510E+01 | ³ 6.300E+01 | ³ | | --- |
| ³ DIET(4) | | | | | |
| R018 ³ Fish consumption (kg/yr) | ³ 2.060E+01 | ³ 5.400E+00 | ³ | | --- |
| ³ DIET(5) | | | | | |
| R018 ³ Other seafood consumption (kg/yr) | ³ 9.000E-01 | ³ 9.000E-01 | ³ | | --- |
| ³ DIET(6) | | | | | |
| R018 ³ Soil ingestion rate (g/yr) | ³ 1.826E+01 | ³ 3.650E+01 | ³ | | --- |
| ³ SOIL | | | | | |
| R018 ³ Drinking water intake (L/yr) | ³ 4.785E+02 | ³ 5.100E+02 | ³ | | --- |
| ³ DWI | | | | | |
| R018 ³ Contamination fraction of drinking water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | | --- |
| ³ FDW | | | | | |
| R018 ³ Contamination fraction of household water | ³ not used | ³ 1.000E+00 | ³ | | --- |
| ³ FHHW | | | | | |
| R018 ³ Contamination fraction of livestock water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | | --- |
| ³ FLW | | | | | |
| R018 ³ Contamination fraction of irrigation water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | | --- |
| ³ FIRW | | | | | |
| R018 ³ Contamination fraction of aquatic food | ³ 1.000E+00 | ³ 5.000E-01 | ³ | | --- |
| ³ FR9 | | | | | |
| R018 ³ Contamination fraction of plant food | ³ 1.000E+00 | ³ -1 | ³ | | --- |
| ³ FPLANT | | | | | |
| R018 ³ Contamination fraction of meat | ³ 1.000E+00 | ³ -1 | ³ | | --- |
| ³ FMEAT | | | | | |
| R018 ³ Contamination fraction of milk | ³ 1.000E+00 | ³ -1 | ³ | | --- |
| ³ FMILK | | | | | |
| ³ | ³ | ³ | ³ | | |
| ³ | | | | | |
| R019 ³ Livestock fodder intake for meat (kg/day) | ³ 2.710E+01 | ³ 6.800E+01 | ³ | | --- |
| ³ LFI5 | | | | | |
| R019 ³ Livestock fodder intake for milk (kg/day) | ³ 6.320E+01 | ³ 5.500E+01 | ³ | | --- |
| ³ LFI6 | | | | | |
| R019 ³ Livestock water intake for meat (L/day) | ³ 5.060E+01 | ³ 5.000E+01 | ³ | | --- |
| ³ LWI5 | | | | | |
| R019 ³ Livestock water intake for milk (L/day) | ³ 6.000E+01 | ³ 1.600E+02 | ³ | | --- |
| ³ LWI6 | | | | | |
| R019 ³ Livestock soil intake (kg/day) | ³ 5.000E-01 | ³ 5.000E-01 | ³ | | --- |
| ³ LSI | | | | | |
| R019 ³ Mass loading for foliar deposition (g/m**3) | ³ 4.000E-04 | ³ 1.000E-04 | ³ | | --- |
| ³ MLFD | | | | | |

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| | | Site-Specific Parameter Summary (continued) | | | |
|--|---|---|------------------------|--------------------------------------|----------------|
| 0 | ³ | ³ User | ³ | ³ | Used by RESRAD |
| ³ Parameter | | | | | |
| Menu ³ | Parameter | ³ Input | ³ Default | ³ (If different from user | |
| input) ³ | Name | | | | |
| AA AAAAAAAAAAAAAAAAAAAAAA | | | | | |
| R019 ³ | Depth of soil mixing layer (m) | ³ 2.300E-01 | ³ 1.500E-01 | ³ | --- |
| ³ DM | | | | | |
| R019 ³ | Depth of roots (m) | ³ 2.150E+00 | ³ 9.000E-01 | ³ | --- |
| ³ DROOT | | | | | |
| R019 ³ | Drinking water fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FGWDW | | | | | |
| R019 ³ | Household water fraction from ground water | ³ not used | ³ 1.000E+00 | ³ | --- |
| ³ FGWHH | | | | | |
| R019 ³ | Livestock water fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FGWLW | | | | | |
| R019 ³ | Irrigation fraction from ground water | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ FGWIR | | ³ | ³ | ³ | |
| ³ | | | | | |
| R19B ³ | Wet weight crop yield for Non-Leafy (kg/m**2) | ³ 1.750E+00 | ³ 7.000E-01 | ³ | --- |
| ³ YV(1) | | | | | |
| R19B ³ | Wet weight crop yield for Leafy (kg/m**2) | ³ 2.889E+00 | ³ 1.500E+00 | ³ | --- |
| ³ YV(2) | | | | | |
| R19B ³ | Wet weight crop yield for Fodder (kg/m**2) | ³ 1.887E+00 | ³ 1.100E+00 | ³ | --- |
| ³ YV(3) | | | | | |
| R19B ³ | Growing Season for Non-Leafy (years) | ³ 2.460E-01 | ³ 1.700E-01 | ³ | --- |
| ³ TE(1) | | | | | |
| R19B ³ | Growing Season for Leafy (years) | ³ 1.230E-01 | ³ 2.500E-01 | ³ | --- |
| ³ TE(2) | | | | | |
| R19B ³ | Growing Season for Fodder (years) | ³ 8.200E-02 | ³ 8.000E-02 | ³ | --- |
| ³ TE(3) | | | | | |
| R19B ³ | Translocation Factor for Non-Leafy | ³ 1.000E-01 | ³ 1.000E-01 | ³ | --- |
| ³ TIV(1) | | | | | |
| R19B ³ | Translocation Factor for Leafy | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |
| ³ TIV(2) | | | | | |
| R19B ³ | Translocation Factor for Fodder | ³ 1.000E+00 | ³ 1.000E+00 | ³ | --- |

| | | | | | | |
|------|-----------|--|---|-----------|---|-----------------|
| 3 | TIV(3) | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 3 --- |
| 3 | RDRY(1) | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 3 --- |
| 3 | RDRY(2) | | | | | |
| R19B | 3 | Dry Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 3 --- |
| 3 | RDRY(3) | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Non-Leafy | 3 | 3.500E-01 | 3 | 2.500E-01 3 --- |
| 3 | RWET(1) | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Leafy | 3 | 5.800E-01 | 3 | 2.500E-01 3 --- |
| 3 | RWET(2) | | | | | |
| R19B | 3 | Wet Foliar Interception Fraction for Fodder | 3 | 3.500E-01 | 3 | 2.500E-01 3 --- |
| 3 | RWET(3) | | | | | |
| R19B | 3 | Weathering Removal Constant for Vegetation | 3 | 3.300E+01 | 3 | 2.000E+01 3 --- |
| 3 | WLAM | | | | | |
| 3 | | | | | | |
| C14 | 3 | C-12 concentration in water (g/cm**3) | 3 | not used | 3 | 2.000E-05 3 --- |
| 3 | C12WTR | | | | | |
| C14 | 3 | C-12 concentration in contaminated soil (g/g) | 3 | not used | 3 | 3.000E-02 3 --- |
| 3 | C12CZ | | | | | |
| C14 | 3 | Fraction of vegetation carbon from soil | 3 | not used | 3 | 2.000E-02 3 --- |
| 3 | CSOIL | | | | | |
| C14 | 3 | Fraction of vegetation carbon from air | 3 | not used | 3 | 9.800E-01 3 --- |
| 3 | CAIR | | | | | |
| C14 | 3 | C-14 evasion layer thickness in soil (m) | 3 | not used | 3 | 3.000E-01 3 --- |
| 3 | DMC | | | | | |
| C14 | 3 | C-14 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 7.000E-07 3 --- |
| 3 | EVSIN | | | | | |
| C14 | 3 | C-12 evasion flux rate from soil (1/sec) | 3 | not used | 3 | 1.000E-10 3 --- |
| 3 | REVSIN | | | | | |
| C14 | 3 | Fraction of grain in beef cattle feed | 3 | not used | 3 | 8.000E-01 3 --- |
| 3 | AVFG4 | | | | | |
| C14 | 3 | Fraction of grain in milk cow feed | 3 | not used | 3 | 2.000E-01 3 --- |
| 3 | AVFG5 | | | | | |
| C14 | 3 | DCF correction factor for gaseous forms of C14 | 3 | not used | 3 | 8.894E+01 3 --- |
| 3 | CO2F | | | | | |
| 3 | | | | | | |
| STOR | 3 | Storage times of contaminated foodstuffs (days): | 3 | | 3 | |
| 3 | | | | | | |
| STOR | 3 | Fruits, non-leafy vegetables, and grain | 3 | 1.400E+01 | 3 | 1.400E+01 3 --- |
| 3 | STOR_T(1) | | | | | |
| STOR | 3 | Leafy vegetables | 3 | 1.000E+00 | 3 | 1.000E+00 3 --- |
| 3 | STOR_T(2) | | | | | |
| STOR | 3 | Milk | 3 | 1.000E+00 | 3 | 1.000E+00 3 --- |
| 3 | STOR_T(3) | | | | | |
| STOR | 3 | Meat and poultry | 3 | 2.000E+01 | 3 | 2.000E+01 3 --- |
| 3 | STOR_T(4) | | | | | |
| STOR | 3 | Fish | 3 | 7.000E+00 | 3 | 7.000E+00 3 --- |
| 3 | STOR_T(5) | | | | | |
| STOR | 3 | Crustacea and mollusks | 3 | 7.000E+00 | 3 | 7.000E+00 3 --- |
| 3 | STOR_T(6) | | | | | |
| STOR | 3 | Well water | 3 | 1.000E+00 | 3 | 1.000E+00 3 --- |
| 3 | STOR_T(7) | | | | | |
| STOR | 3 | Surface water | 3 | 1.000E+00 | 3 | 1.000E+00 3 --- |
| 3 | STOR_T(8) | | | | | |
| STOR | 3 | Livestock fodder | 3 | 4.500E+01 | 3 | 4.500E+01 3 --- |
| 3 | STOR_T(9) | | | | | |
| 3 | | | | | | |
| R021 | 3 | Thickness of building foundation (m) | 3 | not used | 3 | 1.500E-01 3 --- |
| 3 | FLOOR1 | | | | | |
| R021 | 3 | Bulk density of building foundation (g/cm**3) | 3 | not used | 3 | 2.400E+00 3 --- |
| 3 | DENSFL | | | | | |
| R021 | 3 | Total porosity of the cover material | 3 | not used | 3 | 4.000E-01 3 --- |
| 3 | TPCV | | | | | |
| R021 | 3 | Total porosity of the building foundation | 3 | not used | 3 | 1.000E-01 3 --- |
| 3 | TPFL | | | | | |
| R021 | 3 | Volumetric water content of the cover material | 3 | not used | 3 | 5.000E-02 3 --- |
| 3 | PH2OCV | | | | | |

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| Site-Specific Parameter Summary (continued) | | | | |
|--|-----------|--|-------|----------------------------|
| 0 | 3 | 3 | 3 | Used by RESRAD |
| 3 | Parameter | Parameter | Input | Default |
| Menu | 3 | 3 | 3 | (If different from user |
| input) | 3 | Name | | |
| <div style="border: 1px solid black; height: 1.2em; width: 100%;"></div> | | | | |
| R021 | 3 | Volumetric water content of the foundation | 3 | not used 3 3.000E-02 3 --- |

| Menu | Parameter | Current Value | Default | Parameter Name |
|--|--|---------------|-----------|----------------|
| AA | | | | |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Ac-227+D | 6.720E+00 | 6.720E+00 | DCF2(1) |
| B-1 | Am-243+D | 4.400E-01 | 4.400E-01 | DCF2(2) |
| B-1 | Cm-243 | 3.070E-01 | 3.070E-01 | DCF2(3) |
| B-1 | Pa-231 | 1.280E+00 | 1.280E+00 | DCF2(5) |
| B-1 | Pu-239 | 4.290E-01 | 4.290E-01 | DCF2(6) |
| B-1 | U-235+D | 1.230E-01 | 1.230E-01 | DCF2(7) |
| | | | | |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Ac-227+D | 1.480E-02 | 1.480E-02 | DCF3(1) |
| D-1 | Am-243+D | 3.630E-03 | 3.630E-03 | DCF3(2) |
| D-1 | Cm-243 | 2.510E-03 | 2.510E-03 | DCF3(3) |
| D-1 | Pa-231 | 1.060E-02 | 1.060E-02 | DCF3(5) |
| D-1 | Pu-239 | 3.540E-03 | 3.540E-03 | DCF3(6) |
| D-1 | U-235+D | 2.670E-04 | 2.670E-04 | DCF3(7) |
| | | | | |
| D-34 | Food transfer factors: | | | |
| D-34 | Ac-227+D , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(1,1) |
| D-34 | Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(1,2) |
| D-34 | Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(1,3) |
| D-34 | | | | |
| D-34 | Am-243+D , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF(2,1) |
| D-34 | Am-243+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.000E-05 | 5.000E-05 | RTF(2,2) |
| D-34 | Am-243+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-06 | 2.000E-06 | RTF(2,3) |
| D-34 | | | | |
| D-34 | Cm-243 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF(3,1) |
| D-34 | Cm-243 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-05 | 2.000E-05 | RTF(3,2) |
| D-34 | Cm-243 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-06 | 2.000E-06 | RTF(3,3) |
| D-34 | | | | |
| D-34 | Pa-231 , plant/soil concentration ratio, dimensionless | 1.000E-02 | 1.000E-02 | RTF(5,1) |
| D-34 | Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 5.000E-03 | 5.000E-03 | RTF(5,2) |
| D-34 | Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF(5,3) |
| D-34 | | | | |
| D-34 | Pu-239 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF(6,1) |
| D-34 | Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF(6,2) |
| D-34 | Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-06 | 1.000E-06 | RTF(6,3) |
| D-34 | | | | |
| D-34 | U-235+D , plant/soil concentration ratio, dimensionless | 2.500E-03 | 2.500E-03 | RTF(7,1) |
| D-34 | U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.400E-04 | 3.400E-04 | RTF(7,2) |
| D-34 | U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 6.000E-04 | 6.000E-04 | RTF(7,3) |
| | | | | |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Ac-227+D , fish | 1.500E+01 | 1.500E+01 | BIOFAC(1,1) |
| D-5 | Ac-227+D , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(1,2) |
| D-5 | | | | |
| D-5 | Am-243+D , fish | 3.000E+01 | 3.000E+01 | BIOFAC(2,1) |
| D-5 | Am-243+D , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(2,2) |
| D-5 | | | | |
| D-5 | Cm-243 , fish | 3.000E+01 | 3.000E+01 | BIOFAC(3,1) |
| D-5 | Cm-243 , crustacea and mollusks | 1.000E+03 | 1.000E+03 | BIOFAC(3,2) |
| D-5 | | | | |

| Menu | Parameter | Current Value | Default | Parameter Name |
|------|---------------------------------|---------------|-----------|----------------|
| D-5 | Pa-231, fish | 1.000E+01 | 1.000E+01 | BIOFAC (5,1) |
| D-5 | Pa-231, crustacea and mollusks | 1.100E+02 | 1.100E+02 | BIOFAC (5,2) |
| D-5 | Pu-239, fish | 3.000E+01 | 3.000E+01 | BIOFAC (6,1) |
| D-5 | Pu-239, crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC (6,2) |
| D-5 | U-235+D, fish | 1.000E+01 | 1.000E+01 | BIOFAC (7,1) |
| D-5 | U-235+D, crustacea and mollusks | 6.000E+01 | 6.000E+01 | BIOFAC (7,2) |

| Site Specific Parameter Summary | | | | |
|---------------------------------|-----------|-------|---------|-------------------------|
| 0 | 3 | 3 | 3 | 3 |
| Parameter | | User | | Used by RESRAD |
| Menu | Parameter | Input | Default | (If different from user |

input) 3 Name

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AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA
R011 3 Area of contaminated zone (m**2) 3 1.302E+04 3 1.000E+04 3 ---
3 AREA
R011 3 Thickness of contaminated zone (m) 3 1.575E+00 3 2.000E+00 3 ---
3 THICK0
R011 3 Length parallel to aquifer flow (m) 3 1.290E+02 3 1.000E+02 3 ---
3 LCZPAQ
R011 3 Basic radiation dose limit (mrem/yr) 3 2.500E+01 3 2.500E+01 3 ---
3 BRDL
R011 3 Time since placement of material (yr) 3 0.000E+00 3 0.000E+00 3 ---
3 TI
R011 3 Times for calculations (yr) 3 1.000E+00 3 1.000E+00 3 ---
3 T( 2)
R011 3 Times for calculations (yr) 3 3.000E+00 3 3.000E+00 3 ---
3 T( 3)
R011 3 Times for calculations (yr) 3 1.000E+01 3 1.000E+01 3 ---
3 T( 4)
R011 3 Times for calculations (yr) 3 3.000E+01 3 3.000E+01 3 ---
3 T( 5)
R011 3 Times for calculations (yr) 3 1.000E+02 3 1.000E+02 3 ---
3 T( 6)
R011 3 Times for calculations (yr) 3 3.000E+02 3 3.000E+02 3 ---
3 T( 7)
R011 3 Times for calculations (yr) 3 1.000E+03 3 1.000E+03 3 ---
3 T( 8)
R011 3 Times for calculations (yr) 3 not used 3 0.000E+00 3 ---
3 T( 9)
R011 3 Times for calculations (yr) 3 not used 3 0.000E+00 3 ---
3 T(10)
3
R012 3 Initial principal radionuclide (pCi/g): Cm-243 3 4.551E+01 3 0.000E+00 3 ---
3 S1( 3)
R012 3 Concentration in groundwater (pCi/L): Cm-243 3 not used 3 0.000E+00 3 ---
3 W1( 3)
3
R013 3 Cover depth (m) 3 0.000E+00 3 0.000E+00 3 ---
3 COVER0
R013 3 Density of cover material (g/cm**3) 3 not used 3 1.500E+00 3 ---
3 DENSCV
R013 3 Cover depth erosion rate (m/yr) 3 not used 3 1.000E-03 3 ---
3 VCV
R013 3 Density of contaminated zone (g/cm**3) 3 1.860E+00 3 1.500E+00 3 ---
3 DENSCZ
R013 3 Contaminated zone erosion rate (m/yr) 3 8.500E-04 3 1.000E-03 3 ---
3 VCZ
R013 3 Contaminated zone total porosity 3 3.500E-01 3 4.000E-01 3 ---
3 TPCZ
R013 3 Contaminated zone field capacity 3 1.000E-01 3 2.000E-01 3 ---
3 FCCZ
R013 3 Contaminated zone hydraulic conductivity (m/yr) 3 5.550E+02 3 1.000E+01 3 ---
3 HCCZ
R013 3 Contaminated zone b parameter 3 4.380E+00 3 5.300E+00 3 ---
3 BCZ
R013 3 Average annual wind speed (m/sec) 3 2.030E+00 3 2.000E+00 3 ---
3 WIND
R013 3 Humidity in air (g/m**3) 3 not used 3 8.000E+00 3 ---
3 HUMID
R013 3 Evapotranspiration coefficient 3 7.500E-01 3 5.000E-01 3 ---
3 EVAPTR
R013 3 Precipitation (m/yr) 3 1.200E+00 3 1.000E+00 3 ---
3 PRECIP
R013 3 Irrigation (m/yr) 3 4.350E-01 3 2.000E-01 3 ---
3 RI
R013 3 Irrigation mode 3 overhead 3 overhead 3 ---
3 IDITCH
R013 3 Runoff coefficient 3 6.000E-01 3 2.000E-01 3 ---
3 RUNOFF
R013 3 Watershed area for nearby stream or pond (m**2) 3 7.770E+05 3 1.000E+06 3 ---
3 WAREA
R013 3 Accuracy for water/soil computations 3 1.000E-03 3 1.000E-03 3 ---
3 EPS
3
R014 3 Density of saturated zone (g/cm**3) 3 2.120E+00 3 1.500E+00 3 ---
3 DENSAQ
R014 3 Saturated zone total porosity 3 3.000E-01 3 4.000E-01 3 ---
3 TPSZ
R014 3 Saturated zone effective porosity 3 2.100E-01 3 2.000E-01 3 ---

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3 EPSZ
R014 3 Saturated zone field capacity          3 9.000E-02 3 2.000E-01 3 ---
3 FCSZ
R014 3 Saturated zone hydraulic conductivity (m/yr) 3 1.000E-01 3 1.000E+02 3 ---
3 HCSZ
R014 3 Saturated zone hydraulic gradient        3 1.000E-01 3 2.000E-02 3 ---
3 HGWT
R014 3 Saturated zone b parameter              3 4.900E+00 3 5.300E+00 3 ---
3 BSZ
R014 3 Water table drop rate (m/yr)            3 1.000E-03 3 1.000E-03 3 ---
3 VWT
R014 3 Well pump intake depth (m below water table) 3 1.451E+01 3 1.000E+01 3 ---
3 DWIBWT
R014 3 Model: Nondispersion (ND) or Mass-Balance (MB) 3 ND 3 ND 3 ---
3 MODEL
R014 3 Well pumping rate (m**3/yr)            3 1.323E+03 3 2.500E+02 3 ---
3 UW
3
3
R015 3 Number of unsaturated zone strata        3 1 3 1 3 ---
3 NS
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Summary : DCGL to Dose for Cm243                      File: Cm-243.RAD

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                                Site-Specific Parameter Summary (continued)
0      3      User      3      3      Used by RESRAD
3 Parameter
Menu 3      Parameter      3      Input      3      Default      3      (If different from user
input) 3      Name
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
R015 3 Unsat. zone 1, thickness (m)            3 1.430E+00 3 4.000E+00 3 ---
3 H(1)
R015 3 Unsat. zone 1, soil density (g/cm**3)   3 1.860E+00 3 1.500E+00 3 ---
3 DENSUZ(1)
R015 3 Unsat. zone 1, total porosity           3 3.500E-01 3 4.000E-01 3 ---
3 TPUZ(1)
R015 3 Unsat. zone 1, effective porosity        3 2.500E-01 3 2.000E-01 3 ---
3 EPUZ(1)
R015 3 Unsat. zone 1, field capacity            3 1.000E-01 3 2.000E-01 3 ---
3 FCUZ(1)
R015 3 Unsat. zone 1, soil-specific b parameter 3 4.380E+00 3 5.300E+00 3 ---
3 BUZ(1)
R015 3 Unsat. zone 1, hydraulic conductivity (m/yr) 3 5.550E+02 3 1.000E+01 3 ---
3 HCUZ(1)
3
3
R016 3 Distribution coefficients for Cm-243      3      3      3
3
R016 3 Contaminated zone (cm**3/g)             3 6.761E+03 3 -1.000E+00 3 ---
3 DCNUCC( 3)
R016 3 Unsaturated zone 1 (cm**3/g)            3 6.761E+03 3 -1.000E+00 3 ---
3 DCNUCU( 3,1)
R016 3 Saturated zone (cm**3/g)               3 6.761E+03 3 -1.000E+00 3 ---
3 DCNUCS( 3)
R016 3 Leach rate (/yr)                       3 0.000E+00 3 0.000E+00 3 1.155E-05
3 ALEACH( 3)
R016 3 Solubility constant                    3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 3)
3
3
R016 3 Distribution coefficients for daughter Ac-227 3      3      3
3
R016 3 Contaminated zone (cm**3/g)             3 8.250E+02 3 2.000E+01 3 ---
3 DCNUCC( 1)
R016 3 Unsaturated zone 1 (cm**3/g)            3 8.250E+02 3 2.000E+01 3 ---
3 DCNUCU( 1,1)
R016 3 Saturated zone (cm**3/g)               3 8.250E+02 3 2.000E+01 3 ---
3 DCNUCS( 1)
R016 3 Leach rate (/yr)                       3 0.000E+00 3 0.000E+00 3 9.464E-05
3 ALEACH( 1)
R016 3 Solubility constant                    3 0.000E+00 3 0.000E+00 3 not used
3 SOLUBK( 1)
3
3
R016 3 Distribution coefficients for daughter Am-243 3      3      3
3
R016 3 Contaminated zone (cm**3/g)             3 1.445E+03 3 2.000E+01 3 ---
3 DCNUCC( 2)
R016 3 Unsaturated zone 1 (cm**3/g)            3 1.445E+03 3 2.000E+01 3 ---
3 DCNUCU( 2,1)
R016 3 Saturated zone (cm**3/g)               3 1.445E+03 3 2.000E+01 3 ---

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| | | | |
|---------------------------|--|------------------------|---|
| ³ DCNUCS(2) | | | |
| R016 | ³ Leach rate (/yr) | ³ 0.000E+00 | ³ 0.000E+00 ³ 5.403E-05 |
| ³ ALEACH(2) | | | |
| R016 | ³ Solubility constant | ³ 0.000E+00 | ³ 0.000E+00 ³ not used |
| ³ SOLUBK(2) | | | |
| ³ | | | |
| R016 | ³ Distribution coefficients for daughter Pa-231 | ³ | ³ |
| ³ | | | |
| R016 | ³ Contaminated zone (cm**3/g) | ³ 3.800E+02 | ³ 5.000E+01 ³ --- |
| ³ DCNUCC(5) | | | |
| R016 | ³ Unsaturated zone 1 (cm**3/g) | ³ 3.800E+02 | ³ 5.000E+01 ³ --- |
| ³ DCNUCU(5,1) | | | |
| R016 | ³ Saturated zone (cm**3/g) | ³ 3.800E+02 | ³ 5.000E+01 ³ --- |
| ³ DCNUCS(5) | | | |
| R016 | ³ Leach rate (/yr) | ³ 0.000E+00 | ³ 0.000E+00 ³ 2.054E-04 |
| ³ ALEACH(5) | | | |
| R016 | ³ Solubility constant | ³ 0.000E+00 | ³ 0.000E+00 ³ not used |
| ³ SOLUBK(5) | | | |
| ³ | | | |
| R016 | ³ Distribution coefficients for daughter Pu-239 | ³ | ³ |
| ³ | | | |
| R016 | ³ Contaminated zone (cm**3/g) | ³ 9.530E+02 | ³ 2.000E+03 ³ --- |
| ³ DCNUCC(6) | | | |
| R016 | ³ Unsaturated zone 1 (cm**3/g) | ³ 9.530E+02 | ³ 2.000E+03 ³ --- |
| ³ DCNUCU(6,1) | | | |
| R016 | ³ Saturated zone (cm**3/g) | ³ 9.530E+02 | ³ 2.000E+03 ³ --- |
| ³ DCNUCS(6) | | | |
| R016 | ³ Leach rate (/yr) | ³ 0.000E+00 | ³ 0.000E+00 ³ 8.193E-05 |
| ³ ALEACH(6) | | | |
| R016 | ³ Solubility constant | ³ 0.000E+00 | ³ 0.000E+00 ³ not used |
| ³ SOLUBK(6) | | | |
| ³ | | | |
| R016 | ³ Distribution coefficients for daughter U-235 | ³ | ³ |
| ³ | | | |
| R016 | ³ Contaminated zone (cm**3/g) | ³ 1.260E+02 | ³ 5.000E+01 ³ --- |
| ³ DCNUCC(7) | | | |
| R016 | ³ Unsaturated zone 1 (cm**3/g) | ³ 1.260E+02 | ³ 5.000E+01 ³ --- |
| ³ DCNUCU(7,1) | | | |
| R016 | ³ Saturated zone (cm**3/g) | ³ 1.260E+02 | ³ 5.000E+01 ³ --- |
| ³ DCNUCS(7) | | | |
| R016 | ³ Leach rate (/yr) | ³ 0.000E+00 | ³ 0.000E+00 ³ 6.192E-04 |
| ³ ALEACH(7) | | | |
| R016 | ³ Solubility constant | ³ 0.000E+00 | ³ 0.000E+00 ³ not used |
| ³ SOLUBK(7) | | | |
| ³ | | | |
| R017 | ³ Inhalation rate (m**3/yr) | ³ 8.400E+03 | ³ 8.400E+03 ³ --- |
| ³ INHALR | | | |

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Summary : DCGL to Dose for Cm243 File: Cm-243.RAD

| Site-Specific Parameter Summary (continued) | | | |
|--|---|------------------------|---|
| 0 | ³ | ³ User | ³ Used by RESRAD |
| ³ Parameter | | | |
| Menu ³ | Parameter | Input ³ | Default ³ (If different from user |
| input) ³ | Name | | |
| AA | | | |
| AAAAAAAAAAAAAAAAAAAA | | | |
| R017 | ³ Mass loading for inhalation (g/m**3) | ³ 2.330E-05 | ³ 1.000E-04 ³ --- |
| ³ MLINH | | | |
| R017 | ³ Exposure duration | ³ 3.000E+01 | ³ 3.000E+01 ³ --- |
| ³ ED | | | |
| R017 | ³ Shielding factor, inhalation | ³ 5.500E-01 | ³ 4.000E-01 ³ --- |
| ³ SHF3 | | | |
| R017 | ³ Shielding factor, external gamma | ³ 2.725E-01 | ³ 7.000E-01 ³ --- |
| ³ SHF1 | | | |
| R017 | ³ Fraction of time spent indoors | ³ 6.571E-01 | ³ 5.000E-01 ³ --- |
| ³ FIND | | | |
| R017 | ³ Fraction of time spent outdoors (on site) | ³ 1.181E-01 | ³ 2.500E-01 ³ --- |
| ³ FOTD | | | |
| R017 | ³ Shape factor flag, external gamma | ³ 1.000E+00 | ³ 1.000E+00 ³ >0 shows circular AREA. |
| ³ FS | | | |
| R017 | ³ Radii of shape factor array (used if FS = -1): | ³ | ³ |
| ³ | | | |
| R017 | ³ Outer annular radius (m), ring 1: | ³ not used | ³ 5.000E+01 ³ --- |
| ³ RAD_SHAPE(1) | | | |
| R017 | ³ Outer annular radius (m), ring 2: | ³ not used | ³ 7.071E+01 ³ --- |
| ³ RAD_SHAPE(2) | | | |
| R017 | ³ Outer annular radius (m), ring 3: | ³ not used | ³ 0.000E+00 ³ --- |

| | | | |
|--|------------------------|------------------------|------------------|
| ³ RAD_SHAPE(3) | | | |
| R017 ³ Outer annular radius (m), ring 4: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(4) | | | |
| R017 ³ Outer annular radius (m), ring 5: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(5) | | | |
| R017 ³ Outer annular radius (m), ring 6: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(6) | | | |
| R017 ³ Outer annular radius (m), ring 7: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(7) | | | |
| R017 ³ Outer annular radius (m), ring 8: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(8) | | | |
| R017 ³ Outer annular radius (m), ring 9: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(9) | | | |
| R017 ³ Outer annular radius (m), ring 10: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(10) | | | |
| R017 ³ Outer annular radius (m), ring 11: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(11) | | | |
| R017 ³ Outer annular radius (m), ring 12: | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ RAD_SHAPE(12) | | | |
| ³ | ³ | ³ | |
| R017 ³ Fractions of annular areas within AREA: | ³ | ³ | ³ |
| ³ | | | |
| R017 ³ Ring 1 | ³ not used | ³ 1.000E+00 | ³ --- |
| ³ FRACA(1) | | | |
| R017 ³ Ring 2 | ³ not used | ³ 2.732E-01 | ³ --- |
| ³ FRACA(2) | | | |
| R017 ³ Ring 3 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(3) | | | |
| R017 ³ Ring 4 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(4) | | | |
| R017 ³ Ring 5 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(5) | | | |
| R017 ³ Ring 6 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(6) | | | |
| R017 ³ Ring 7 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(7) | | | |
| R017 ³ Ring 8 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(8) | | | |
| R017 ³ Ring 9 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(9) | | | |
| R017 ³ Ring 10 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(10) | | | |
| R017 ³ Ring 11 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(11) | | | |
| R017 ³ Ring 12 | ³ not used | ³ 0.000E+00 | ³ --- |
| ³ FRACA(12) | | | |
| ³ | ³ | ³ | |
| R018 ³ Fruits, vegetables and grain consumption (kg/yr) | ³ 1.120E+02 | ³ 1.600E+02 | ³ --- |
| ³ DIET(1) | | | |
| R018 ³ Leafy vegetable consumption (kg/yr) | ³ 2.140E+01 | ³ 1.400E+01 | ³ --- |
| ³ DIET(2) | | | |
| R018 ³ Milk consumption (L/yr) | ³ 2.330E+02 | ³ 9.200E+01 | ³ --- |
| ³ DIET(3) | | | |
| R018 ³ Meat and poultry consumption (kg/yr) | ³ 6.510E+01 | ³ 6.300E+01 | ³ --- |
| ³ DIET(4) | | | |
| R018 ³ Fish consumption (kg/yr) | ³ 2.060E+01 | ³ 5.400E+00 | ³ --- |
| ³ DIET(5) | | | |
| R018 ³ Other seafood consumption (kg/yr) | ³ 9.000E-01 | ³ 9.000E-01 | ³ --- |
| ³ DIET(6) | | | |
| R018 ³ Soil ingestion rate (g/yr) | ³ 1.826E+01 | ³ 3.650E+01 | ³ --- |
| ³ SOIL | | | |
| R018 ³ Drinking water intake (L/yr) | ³ 4.785E+02 | ³ 5.100E+02 | ³ --- |
| ³ DWI | | | |
| R018 ³ Contamination fraction of drinking water | ³ 1.000E+00 | ³ 1.000E+00 | ³ --- |
| ³ FDW | | | |
| R018 ³ Contamination fraction of household water | ³ not used | ³ 1.000E+00 | ³ --- |
| ³ FHHW | | | |
| R018 ³ Contamination fraction of livestock water | ³ 1.000E+00 | ³ 1.000E+00 | ³ --- |
| ³ FLW | | | |
| R018 ³ Contamination fraction of irrigation water | ³ 1.000E+00 | ³ 1.000E+00 | ³ --- |
| ³ FIRW | | | |
| R018 ³ Contamination fraction of aquatic food | ³ 1.000E+00 | ³ 5.000E-01 | ³ --- |
| ³ FR9 | | | |
| R018 ³ Contamination fraction of plant food | ³ 1.000E+00 | ³ -1 | ³ --- |
| ³ FPLANT | | | |
| R018 ³ Contamination fraction of meat | ³ 1.000E+00 | ³ -1 | ³ --- |
| ³ FMEAT | | | |
| R018 ³ Contamination fraction of milk | ³ 1.000E+00 | ³ -1 | ³ --- |
| ³ FMILK | | | |

| | | Site-Specific | Parameter Summary (continued) | | |
|---|--|---------------|-------------------------------|-----------|-------------------------|
| Parameter | | User | | | Used by RESRAD |
| Menu input) | Name | Parameter | Input | Default | (If different from user |
| AAA AAAAAAAAAAAAAAAAAAAA | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | | 2.710E+01 | 6.800E+01 | --- |
| LFI5 | | | | | |
| R019 | Livestock fodder intake for milk (kg/day) | | 6.320E+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) | | 5.000E-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) | | 2.150E+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) | | 2.889E+00 | 1.500E+00 | --- |
| YV(2) | | | | | |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | | 1.887E+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) | | | | | |
| 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) | | not used | 2.000E-05 | --- |
| C12WTR | | | | | |
| C14 | C-12 concentration in contaminated soil (g/g) | | not used | 3.000E-02 | --- |
| C12CZ | | | | | |
| C14 | Fraction of vegetation carbon from soil | | not used | 2.000E-02 | --- |
| CSOIL | | | | | |
| C14 | Fraction of vegetation carbon from air | | not used | 9.800E-01 | --- |
| CAIR | | | | | |
| C14 | C-14 evasion layer thickness in soil (m) | | not used | 3.000E-01 | --- |
| DMC | | | | | |
| C14 | C-14 evasion flux rate from soil (l/sec) | | not used | 7.000E-07 | --- |
| EVSN | | | | | |
| C14 | C-12 evasion flux rate from soil (l/sec) | | not used | 1.000E-10 | --- |
| REVSN | | | | | |

| Site-Specific Parameter Summary (continued) | | | | | |
|---|--|-----------|------------|------------|--|
| Menu input) | Name | Parameter | User Input | Default | (If different from user Used by RESRAD |
| | | | | | |
| | | | | | |
| 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 | --- |
| HMX | | | | | |
| 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 | | 32 | --- | --- |
| NPTS | | | | | |
| TITL | Maximum number of integration points for dose | | 17 | --- | --- |
| LYMAX | | | | | |
| TITL | Maximum number of integration points for risk | | 1 | --- | --- |
| KYMAX | | | | | |

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Summary of Pathway Selections

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