

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 1  
Parent Dose Report  
Title : RESRAD-OFFSITE Default Parameters  
File : AREA 4.5 HUNTER PU.ROF

## Table of Contents

### Part I: Mixture Sums and Single Radionuclide Guidelines

---

|  |    |
|--|----|
| Dose Conversion Factor (and Related) Parameter Summary ... | 2  |
| Site-Specific Parameter Summary .....                      | 5  |
| Summary of Pathway Selections .....                        | 35 |
| Contaminated Zone and Total Dose Summary .....             | 36 |
| Total Dose Components                                      |    |
| Time = 0.000E+00 .....                                     | 37 |
| Time = 1.000E+00 .....                                     | 38 |
| Time = 3.000E+00 .....                                     | 39 |
| Time = 6.000E+00 .....                                     | 40 |
| Time = 1.200E+01 .....                                     | 41 |
| Time = 3.000E+01 .....                                     | 42 |
| Time = 7.500E+01 .....                                     | 43 |
| Time = 1.750E+02 .....                                     | 44 |
| Time = 4.200E+02 .....                                     | 45 |
| Time = 9.700E+02 .....                                     | 46 |
| Dose/Source Ratios Summed Over All Pathways .....          | 47 |
| Single Radionuclide Soil Guidelines .....                  | 47 |
| Dose Per Nuclide Summed Over All Pathways .....            | 48 |
| Soil Concentration Per Nuclide .....                       | 48 |
| Run Time Information .....                                 | 49 |

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 2  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

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

Current Library: FGR 12

Default Library: FGR 12

| Menu | Parameter  | Current Value | Default   | Parameter Name |
|------|--|---------------|-----------|----------------|
| DCSF | DCF's for external ground radiation, (mrem/yr)/(pCi/g) |               |           |                |
| DCSF | Ac-227 (Source: FGR 12)                                | 4.951E-04     | 4.951E-04 | DCFEXT( 1)     |
| DCSF | Ba-137m (Source: FGR 12)                               | 3.606E+00     | 3.606E+00 | DCFEXT( 2)     |
| DCSF | Bi-211 (Source: FGR 12)                                | 2.559E-01     | 2.559E-01 | DCFEXT( 3)     |
| DCSF | Cs-137 (Source: FGR 12)                                | 7.510E-04     | 7.510E-04 | DCFEXT( 4)     |
| DCSF | Fr-223 (Source: FGR 12)                                | 1.980E-01     | 1.980E-01 | DCFEXT( 5)     |
| DCSF | Pa-231 (Source: FGR 12)                                | 1.906E-01     | 1.906E-01 | DCFEXT( 6)     |
| DCSF | Pb-211 (Source: FGR 12)                                | 3.064E-01     | 3.064E-01 | DCFEXT( 7)     |
| DCSF | Po-211 (Source: FGR 12)                                | 4.764E-02     | 4.764E-02 | DCFEXT( 8)     |
| DCSF | Po-215 (Source: FGR 12)                                | 1.016E-03     | 1.016E-03 | DCFEXT( 9)     |
| DCSF | Pu-239 (Source: FGR 12)                                | 2.952E-04     | 2.952E-04 | DCFEXT( 10)    |
| DCSF | Ra-223 (Source: FGR 12)                                | 6.034E-01     | 6.034E-01 | DCFEXT( 11)    |
| DCSF | Rn-219 (Source: FGR 12)                                | 3.083E-01     | 3.083E-01 | DCFEXT( 12)    |
| DCSF | Sr-90 (Source: FGR 12)                                 | 7.043E-04     | 7.043E-04 | DCFEXT( 13)    |
| DCSF | Th-227 (Source: FGR 12)                                | 5.212E-01     | 5.212E-01 | DCFEXT( 14)    |
| DCSF | Th-231 (Source: FGR 12)                                | 3.643E-02     | 3.643E-02 | DCFEXT( 15)    |
| DCSF | Tl-207 (Source: FGR 12)                                | 1.980E-02     | 1.980E-02 | DCFEXT( 16)    |
| DCSF | U-235 (Source: FGR 12)                                 | 7.211E-01     | 7.211E-01 | DCFEXT( 17)    |
| DCSF | Y-90 (Source: FGR 12)                                  | 2.391E-02     | 2.391E-02 | DCFEXT( 18)    |

Current Library: FGR 11

Default Library: FGR 11

| Menu | Parameter   | Current Value | Default   | Parameter Name |
|------|---|---------------|-----------|----------------|
| DCSF | Dose conversion factors for inhalation, mrem/pCi: |               |           |                |
| DCSF | Ac-227+D  | 6.724E+00     | 6.724E+00 | DCF2(1)        |
| DCSF | Cs-137+D  | 3.190E-05     | 3.190E-05 | DCF2(2)        |
| DCSF | Pa-231  | 1.280E+00     | 1.280E+00 | DCF2(3)        |
| DCSF | Pu-239  | 4.290E-01     | 4.290E-01 | DCF2(4)        |
| DCSF | Sr-90+D   | 1.308E-03     | 1.308E-03 | DCF2(5)        |
| DCSF | U-235+D   | 1.230E-01     | 1.230E-01 | DCF2(6)        |
| DCSF | Dose conversion factors for ingestion, mrem/pCi:  |               |           |                |
| DCSF | Ac-227+D  | 1.480E-02     | 1.480E-02 | DCF3(1)        |
| DCSF | Cs-137+D  | 5.000E-05     | 5.000E-05 | DCF3(2)        |
| DCSF | Pa-231  | 1.060E-02     | 1.060E-02 | DCF3(3)        |
| DCSF | Pu-239  | 3.540E-03     | 3.540E-03 | DCF3(4)        |
| DCSF | Sr-90+D   | 1.528E-04     | 1.528E-04 | DCF3(5)        |
| DCSF | U-235+D   | 2.673E-04     | 2.673E-04 | DCF3(6)        |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 3  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

| Menu | Parameter  | Current Value | Default   | Parameter Name |
|------|--|---------------|-----------|----------------|
| TF   | Soil to plant transfer factors:                          |               |           |                |
| TF   | Ac-227+D , plant/soil concentration ratio, dimensionless | 2.500E-03     | 2.500E-03 | RTF(1,1)       |
| TF   | Ac-227+D , plant/soil concentration ratio, dimensionless | 2.500E-03     | 2.500E-03 | RTF(1,2)       |
| TF   | Ac-227+D , plant/soil concentration ratio, dimensionless | 2.500E-03     | 2.500E-03 | RTF(1,3)       |
| TF   | Ac-227+D , plant/soil concentration ratio, dimensionless | 2.500E-03     | 2.500E-03 | RTF(1,4)       |
| TF   |  |               |           |                |
| TF   | Cs-137+D , plant/soil concentration ratio, dimensionless | 4.000E-02     | 4.000E-02 | RTF(2,1)       |
| TF   | Cs-137+D , plant/soil concentration ratio, dimensionless | 4.000E-02     | 4.000E-02 | RTF(2,2)       |
| TF   | Cs-137+D , plant/soil concentration ratio, dimensionless | 4.000E-02     | 4.000E-02 | RTF(2,3)       |
| TF   | Cs-137+D , plant/soil concentration ratio, dimensionless | 4.000E-02     | 4.000E-02 | RTF(2,4)       |
| TF   |  |               |           |                |
| TF   | Pa-231 , plant/soil concentration ratio, dimensionless   | 1.000E-02     | 1.000E-02 | RTF(3,1)       |
| TF   | Pa-231 , plant/soil concentration ratio, dimensionless   | 1.000E-02     | 1.000E-02 | RTF(3,2)       |
| TF   | Pa-231 , plant/soil concentration ratio, dimensionless   | 1.000E-02     | 1.000E-02 | RTF(3,3)       |
| TF   | Pa-231 , plant/soil concentration ratio, dimensionless   | 1.000E-02     | 1.000E-02 | RTF(3,4)       |
| TF   |  |               |           |                |
| TF   | Pu-239 , plant/soil concentration ratio, dimensionless   | 1.000E-03     | 1.000E-03 | RTF(4,1)       |
| TF   | Pu-239 , plant/soil concentration ratio, dimensionless   | 1.000E-03     | 1.000E-03 | RTF(4,2)       |
| TF   | Pu-239 , plant/soil concentration ratio, dimensionless   | 1.000E-03     | 1.000E-03 | RTF(4,3)       |
| TF   | Pu-239 , plant/soil concentration ratio, dimensionless   | 1.000E-03     | 1.000E-03 | RTF(4,4)       |
| TF   |  |               |           |                |
| TF   | Sr-90+D , plant/soil concentration ratio, dimensionless  | 3.000E-01     | 3.000E-01 | RTF(5,1)       |
| TF   | Sr-90+D , plant/soil concentration ratio, dimensionless  | 3.000E-01     | 3.000E-01 | RTF(5,2)       |
| TF   | Sr-90+D , plant/soil concentration ratio, dimensionless  | 3.000E-01     | 3.000E-01 | RTF(5,3)       |
| TF   | Sr-90+D , plant/soil concentration ratio, dimensionless  | 3.000E-01     | 3.000E-01 | RTF(5,4)       |
| TF   |  |               |           |                |
| TF   | U-235+D , plant/soil concentration ratio, dimensionless  | 2.500E-03     | 2.500E-03 | RTF(6,1)       |
| TF   | U-235+D , plant/soil concentration ratio, dimensionless  | 2.500E-03     | 2.500E-03 | RTF(6,2)       |
| TF   | U-235+D , plant/soil concentration ratio, dimensionless  | 2.500E-03     | 2.500E-03 | RTF(6,3)       |
| TF   | U-235+D , plant/soil concentration ratio, dimensionless  | 2.500E-03     | 2.500E-03 | RTF(6,4)       |
| TF   |  |               |           |                |
| TF   | intake to meat/milk transfer factors:                    |               |           |                |
| TF   | Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 2.000E-05     | 2.000E-05 | I_M(1,1)       |
| TF   | Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)  | 2.000E-05     | 2.000E-05 | I_M(1,2)       |
| TF   |  |               |           |                |
| TF   | Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.000E-02     | 3.000E-02 | I_M(2,1)       |
| TF   | Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)  | 8.000E-03     | 8.000E-03 | I_M(2,2)       |
| TF   |  |               |           |                |
| TF   | Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)   | 5.000E-03     | 5.000E-03 | I_M(3,1)       |
| TF   | Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)    | 5.000E-06     | 5.000E-06 | I_M(3,2)       |
| TF   |  |               |           |                |
| TF   | Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)   | 1.000E-04     | 1.000E-04 | I_M(4,1)       |
| TF   | Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)    | 1.000E-06     | 1.000E-06 | I_M(4,2)       |
| TF   |  |               |           |                |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 4

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

| Menu | Parameter   | Current Value | Default   | Parameter Name |
|------|---|---------------|-----------|----------------|
| TF   | Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-03     | 8.000E-03 | I_M(5,1)       |
| TF   | Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)  | 2.000E-03     | 2.000E-03 | I_M(5,2)       |
| TF   |   |               |           |                |
| TF   | U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.400E-04     | 3.400E-04 | I_M(6,1)       |
| TF   | U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)  | 6.000E-04     | 6.000E-04 | I_M(6,2)       |
| TF   |   |               |           |                |
| TF   | Bioaccumulation factors, fresh water, L/kg:             |               |           |                |
| TF   | Ac-227+D , fish   | 1.500E+01     | 1.500E+01 | BIOFA(1,1)     |
| TF   | Ac-227+D , crustacea and mollusks                       | 1.000E+03     | 1.000E+03 | BIOFA(1,2)     |
| TF   |   |               |           |                |
| TF   | Cs-137+D , fish   | 2.000E+03     | 2.000E+03 | BIOFA(2,1)     |
| TF   | Cs-137+D , crustacea and mollusks                       | 1.000E+02     | 1.000E+02 | BIOFA(2,2)     |
| TF   |   |               |           |                |
| TF   | Pa-231 , fish   | 1.000E+01     | 1.000E+01 | BIOFA(3,1)     |
| TF   | Pa-231 , crustacea and mollusks                         | 1.100E+02     | 1.100E+02 | BIOFA(3,2)     |
| TF   |   |               |           |                |
| TF   | Pu-239 , fish   | 3.000E+01     | 3.000E+01 | BIOFA(4,1)     |
| TF   | Pu-239 , crustacea and mollusks                         | 1.000E+02     | 1.000E+02 | BIOFA(4,2)     |
| TF   |   |               |           |                |
| TF   | Sr-90+D , fish  | 6.000E+01     | 6.000E+01 | BIOFA(5,1)     |
| TF   | Sr-90+D , crustacea and mollusks                        | 1.000E+02     | 1.000E+02 | BIOFA(5,2)     |
| TF   |   |               |           |                |
| TF   | U-235+D , fish  | 1.000E+01     | 1.000E+01 | BIOFA(6,1)     |
| TF   | U-235+D , crustacea and mollusks                        | 6.000E+01     | 6.000E+01 | BIOFA(6,2)     |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 5  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary

| Menu | Parameter                                      | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| FSTI | Exposure duration                              | 1.000E+00  | 3.000E+01 | ---             | ED             |
| FSTI | Basic radiation dose limit (mrem/yr)           | 2.500E+01  | 2.500E+01 | ---             | BRDL           |
| CONC | Initial principal radionuclide (pCi/g): Cs-137 | 1.850E-01  | 0.000E+00 | ---             | S1(2)          |
| CONC | Initial principal radionuclide (pCi/g): Pu-239 | 1.541E+00  | 0.000E+00 | ---             | S1(4)          |
| CONC | Initial principal radionuclide (pCi/g): Sr-90  | 1.670E-01  | 0.000E+00 | ---             | S1(5)          |
| VDEP | Deposition velocity for Ac-227                 | 1.000E-03  | 1.000E-03 | ---             | DEPVEL(1)      |
| VDEP | Deposition velocity for Cs-137                 | 1.000E-03  | 1.000E-03 | ---             | DEPVEL(2)      |
| VDEP | Deposition velocity for Pa-231                 | 1.000E-03  | 1.000E-03 | ---             | DEPVEL(3)      |
| VDEP | Deposition velocity for Pu-239                 | 1.000E-03  | 1.000E-03 | ---             | DEPVEL(4)      |
| VDEP | Deposition velocity for Sr-90                  | 1.000E-03  | 1.000E-03 | ---             | DEPVEL(5)      |
| VDEP | Deposition velocity for U-235                  | 1.000E-03  | 1.000E-03 | ---             | DEPVEL(6)      |
| DCLR | Distribution coefficients for Cs-137           |            |           |                 |                |
| DCLR | Contaminated zone (cm**3/g)                    | 2.800E+02  | 4.600E+03 | ---             | DCNUCC(2)      |
| DCLR | Unsaturated zone 1 (cm**3/g)                   | 2.800E+02  | 4.600E+03 | ---             | DCNUCU(2,1)    |
| DCLR | Saturated zone (cm**3/g)                       | 2.800E+02  | 4.600E+03 | ---             | DCNUCS(2)      |
| DCLR | Sediment in surface water body (cm**3/g)       | 4.800E+02  | 4.600E+03 | ---             | DCNUCSWB(2)    |
| DCLR | Agricultural area 1 (cm**3/g)                  | 2.800E+02  | 4.600E+03 | ---             | DCNUCOF(2,1)   |
| DCLR | Agricultural area 2 (cm**3/g)                  | 2.800E+02  | 4.600E+03 | ---             | DCNUCOF(2,2)   |
| DCLR | Agricultural area 3 (cm**3/g)                  | 2.800E+02  | 4.600E+03 | ---             | DCNUCOF(2,3)   |
| DCLR | Agricultural area 4 (cm**3/g)                  | 2.800E+02  | 4.600E+03 | ---             | DCNUCOF(2,4)   |
| DCLR | Offsite Dwelling (cm**3/g)                     | 2.800E+02  | 4.600E+03 | ---             | DCNUCDWE(2)    |
| DCLR | Initial Leach rate (/yr) Cs-137                | 0.000E+00  | 0.000E+00 | 5.461E-04       | ALEACH(2)      |
| DCLR | Distribution coefficients for Pu-239           |            |           |                 |                |
| DCLR | Contaminated zone (cm**3/g)                    | 2.600E+03  | 2.000E+03 | ---             | DCNUCC(4)      |
| DCLR | Unsaturated zone 1 (cm**3/g)                   | 2.600E+03  | 2.000E+03 | ---             | DCNUCU(4,1)    |
| DCLR | Saturated zone (cm**3/g)                       | 2.600E+03  | 2.000E+03 | ---             | DCNUCS(4)      |
| DCLR | Sediment in surface water body (cm**3/g)       | 3.000E+03  | 2.000E+03 | ---             | DCNUCSWB(4)    |
| DCLR | Agricultural area 1 (cm**3/g)                  | 2.600E+03  | 2.000E+03 | ---             | DCNUCOF(4,1)   |
| DCLR | Agricultural area 2 (cm**3/g)                  | 2.600E+03  | 2.000E+03 | ---             | DCNUCOF(4,2)   |
| DCLR | Agricultural area 3 (cm**3/g)                  | 2.600E+03  | 2.000E+03 | ---             | DCNUCOF(4,3)   |
| DCLR | Agricultural area 4 (cm**3/g)                  | 2.600E+03  | 2.000E+03 | ---             | DCNUCOF(4,4)   |
| DCLR | Offsite Dwelling (cm**3/g)                     | 2.600E+03  | 2.000E+03 | ---             | DCNUCDWE(4)    |
| DCLR | Initial Leach rate (/yr) Pu-239                | 0.000E+00  | 0.000E+00 | 5.884E-05       | ALEACH(4)      |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 6  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| DCLR | Distribution coefficients for Sr-90          |            |           |                 |                |
| DCLR | Contaminated zone (cm**3/g)                  | 5.000E+00  | 3.000E+01 | ---             | DCNUCC (5)     |
| DCLR | Unsaturated zone 1 (cm**3/g)                 | 5.000E+00  | 3.000E+01 | ---             | DCNUCU (5,1)   |
| DCLR | Saturated zone (cm**3/g)                     | 5.000E+00  | 3.000E+01 | ---             | DCNUCS (5)     |
| DCLR | Sediment in surface water body (cm**3/g)     | 1.500E+01  | 3.000E+01 | ---             | DCNUCSWB (5)   |
| DCLR | Agricultural area 1 (cm**3/g)                | 5.000E+00  | 3.000E+01 | ---             | DCNUCOF (5,1)  |
| DCLR | Agricultural area 2 (cm**3/g)                | 5.000E+00  | 3.000E+01 | ---             | DCNUCOF (5,2)  |
| DCLR | Agricultural area 3 (cm**3/g)                | 5.000E+00  | 3.000E+01 | ---             | DCNUCOF (5,3)  |
| DCLR | Agricultural area 4 (cm**3/g)                | 5.000E+00  | 3.000E+01 | ---             | DCNUCOF (5,4)  |
| DCLR | Offsite Dwelling (cm**3/g)                   | 5.000E+00  | 3.000E+01 | ---             | DCNUCDWE (5)   |
| DCLR | Initial Leach rate (/yr) Sr-90               | 0.000E+00  | 0.000E+00 | 2.989E-02       | ALEACH (5)     |
| DCLR | Distribution coefficients for progeny Ac-227 |            |           |                 |                |
| DCLR | Contaminated zone (cm**3/g)                  | 1.740E+03  | 2.000E+01 | ---             | DCNUCC (1)     |
| DCLR | Unsaturated zone 1 (cm**3/g)                 | 1.740E+03  | 2.000E+01 | ---             | DCNUCU (1,1)   |
| DCLR | Saturated zone (cm**3/g)                     | 1.740E+03  | 2.000E+01 | ---             | DCNUCS (1)     |
| DCLR | Sediment in surface water body (cm**3/g)     | 1.740E+03  | 2.000E+01 | ---             | DCNUCSWB (1)   |
| DCLR | Agricultural area 1 (cm**3/g)                | 1.740E+03  | 2.000E+01 | ---             | DCNUCOF (1,1)  |
| DCLR | Agricultural area 2 (cm**3/g)                | 1.740E+03  | 2.000E+01 | ---             | DCNUCOF (1,2)  |
| DCLR | Agricultural area 3 (cm**3/g)                | 1.740E+03  | 2.000E+01 | ---             | DCNUCOF (1,3)  |
| DCLR | Agricultural area 4 (cm**3/g)                | 1.740E+03  | 2.000E+01 | ---             | DCNUCOF (1,4)  |
| DCLR | Offsite Dwelling (cm**3/g)                   | 1.740E+03  | 2.000E+01 | ---             | DCNUCDWE (1)   |
| DCLR | Initial Leach rate (/yr) Ac-227              | 0.000E+00  | 0.000E+00 | 8.792E-05       | ALEACH (1)     |
| DCLR | Distribution coefficients for progeny Pa-231 |            |           |                 |                |
| DCLR | Contaminated zone (cm**3/g)                  | 2.040E+03  | 5.000E+01 | ---             | DCNUCC (3)     |
| DCLR | Unsaturated zone 1 (cm**3/g)                 | 2.040E+03  | 5.000E+01 | ---             | DCNUCU (3,1)   |
| DCLR | Saturated zone (cm**3/g)                     | 2.040E+03  | 5.000E+01 | ---             | DCNUCS (3)     |
| DCLR | Sediment in surface water body (cm**3/g)     | 2.040E+03  | 5.000E+01 | ---             | DCNUCSWB (3)   |
| DCLR | Agricultural area 1 (cm**3/g)                | 2.040E+03  | 5.000E+01 | ---             | DCNUCOF (3,1)  |
| DCLR | Agricultural area 2 (cm**3/g)                | 2.040E+03  | 5.000E+01 | ---             | DCNUCOF (3,2)  |
| DCLR | Agricultural area 3 (cm**3/g)                | 2.040E+03  | 5.000E+01 | ---             | DCNUCOF (3,3)  |
| DCLR | Agricultural area 4 (cm**3/g)                | 2.040E+03  | 5.000E+01 | ---             | DCNUCOF (3,4)  |
| DCLR | Offsite Dwelling (cm**3/g)                   | 2.040E+03  | 5.000E+01 | ---             | DCNUCDWE (3)   |
| DCLR | Initial Leach rate (/yr) Pa-231              | 0.000E+00  | 0.000E+00 | 7.499E-05       | ALEACH (3)     |
| DCLR | Distribution coefficients for progeny U-235  |            |           |                 |                |
| DCLR | Contaminated zone (cm**3/g)                  | 3.500E+01  | 5.000E+01 | ---             | DCNUCC (6)     |
| DCLR | Unsaturated zone 1 (cm**3/g)                 | 3.500E+01  | 5.000E+01 | ---             | DCNUCU (6,1)   |
| DCLR | Saturated zone (cm**3/g)                     | 3.500E+01  | 5.000E+01 | ---             | DCNUCS (6)     |
| DCLR | Sediment in surface water body (cm**3/g)     | 1.000E+01  | 5.000E+01 | ---             | DCNUCSWB (6)   |
| DCLR | Agricultural area 1 (cm**3/g)                | 3.500E+01  | 5.000E+01 | ---             | DCNUCOF (6,1)  |
| DCLR | Agricultural area 2 (cm**3/g)                | 3.500E+01  | 5.000E+01 | ---             | DCNUCOF (6,2)  |
| DCLR | Agricultural area 3 (cm**3/g)                | 3.500E+01  | 5.000E+01 | ---             | DCNUCOF (6,3)  |
| DCLR | Agricultural area 4 (cm**3/g)                | 3.500E+01  | 5.000E+01 | ---             | DCNUCOF (6,4)  |
| DCLR | Offsite Dwelling (cm**3/g)                   | 3.500E+01  | 5.000E+01 | ---             | DCNUCDWE (6)   |
| DCLR | Initial Leach rate (/yr) U-235               | 0.000E+00  | 0.000E+00 | 4.356E-03       | ALEACH (6)     |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 7  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default    | RESRAD computed | Parameter Name |
|------|--|------------|------------|-----------------|----------------|
| LYOT | Bearing of X axis (clockwise angle N-->X in degrees) | 1.000E+02  | 9.000E+01  | ---             | DNXBEARING     |
| LYOT | Length of Primary contamination in X Direction       | 1.540E+02  | 1.000E+02  | ---             | SOURCEXY (1)   |
| LYOT | Length of Primary contamination in Y Direction       | 1.020E+02  | 1.000E+02  | ---             | SOURCEXY (2)   |
| LYOT | Smaller X coordinate of Agricultural Area 1          | -5.350E+02 | 3.438E+01  | ---             | AGRIXY (1,1)   |
| LYOT | Larger X coordinate of Agricultural Area 1           | 3.150E+02  | 6.563E+01  | ---             | AGRIXY (2,1)   |
| LYOT | Smaller Y coordinate of Agricultural Area 1          | -6.800E+01 | 2.340E+02  | ---             | AGRIXY (3,1)   |
| LYOT | Larger Y coordinate of Agricultural Area 1           | 2.070E+02  | 2.660E+02  | ---             | AGRIXY (4,1)   |
| LYOT | Smaller X coordinate of Agricultural Area 2          | -5.350E+02 | 3.438E+01  | ---             | AGRIXY (1,2)   |
| LYOT | Larger X coordinate of Agricultural Area 2           | 3.150E+02  | 6.563E+01  | ---             | AGRIXY (2,2)   |
| LYOT | Smaller Y coordinate of Agricultural Area 2          | -6.800E+01 | 2.680E+02  | ---             | AGRIXY (3,2)   |
| LYOT | Larger Y coordinate of Agricultural Area 2           | 2.070E+02  | 3.000E+02  | ---             | AGRIXY (4,2)   |
| LYOT | Smaller X coordinate of Agricultural Area 3          | -5.350E+02 | 0.000E+00  | ---             | AGRIXY (1,3)   |
| LYOT | Larger X coordinate of Agricultural Area 3           | 3.150E+02  | 1.000E+02  | ---             | AGRIXY (2,3)   |
| LYOT | Smaller Y coordinate of Agricultural Area 3          | -6.800E+01 | 4.500E+02  | ---             | AGRIXY (3,3)   |
| LYOT | Larger Y coordinate of Agricultural Area 3           | 2.070E+02  | 5.500E+02  | ---             | AGRIXY (4,3)   |
| LYOT | Smaller X coordinate of Agricultural Area 4          | -5.350E+02 | 0.000E+00  | ---             | AGRIXY (1,4)   |
| LYOT | Larger X coordinate of Agricultural Area 4           | 3.150E+02  | 1.000E+02  | ---             | AGRIXY (2,4)   |
| LYOT | Smaller Y coordinate of Agricultural Area 4          | -6.800E+01 | 3.000E+02  | ---             | AGRIXY (3,4)   |
| LYOT | Larger Y coordinate of Agricultural Area 4           | 2.070E+02  | 4.000E+02  | ---             | AGRIXY (4,4)   |
| LYOT | Smaller X coordinate of Dwelling Area                | 0.000E+00  | 3.438E+01  | ---             | DWELLXY (1)    |
| LYOT | Larger X coordinate of Dwelling Area                 | 1.000E+00  | 6.563E+01  | ---             | DWELLXY (2)    |
| LYOT | Smaller Y coordinate of Dwelling Area                | 0.000E+00  | 1.340E+02  | ---             | DWELLXY (3)    |
| LYOT | Larger Y coordinate of Dwelling Area                 | 1.000E+00  | 1.660E+02  | ---             | DWELLXY (4)    |
| LYOT | Smaller X coordinate of Surface water body           | -6.600E+02 | -1.000E+02 | ---             | SWXY (1)       |
| LYOT | Larger X coordinate of Surface water body            | 3.400E+02  | 2.000E+02  | ---             | SWXY (2)       |
| LYOT | Smaller Y coordinate of Surface water body           | 2.070E+02  | 5.500E+02  | ---             | SWXY (3)       |
| LYOT | Larger Y coordinate of Surface water body            | 3.070E+02  | 8.500E+02  | ---             | SWXY (4)       |
| STOR | Storage times of contaminated foodstuffs (days):     |            |            |                 |                |
| STOR | Surface water  | 1.000E+00  | 1.000E+00  | ---             | STOR_T (1)     |
| STOR | Well water   | 1.000E+00  | 1.000E+00  | ---             | STOR_T (2)     |
| STOR | Fruits, non-leafy vegetables, and grain              | 1.400E+01  | 1.400E+01  | ---             | STOR_T (3)     |
| STOR | Leafy vegetables                                     | 1.000E+00  | 1.000E+00  | ---             | STOR_T (4)     |
| STOR | Livestock feed - pasture or silage                   | 1.000E+00  | 1.000E+00  | ---             | STOR_T (5)     |
| STOR | Livestock feed - grain                               | 4.500E+01  | 4.500E+01  | ---             | STOR_T (6)     |
| STOR | Meat and poultry                                     | 2.000E+01  | 2.000E+01  | ---             | STOR_T (7)     |
| STOR | Milk   | 1.000E+00  | 1.000E+00  | ---             | STOR_T (8)     |
| STOR | Fish   | 7.000E+00  | 7.000E+00  | ---             | STOR_T (9)     |
| STOR | Crustacea and mollusks                               | 7.000E+00  | 7.000E+00  | ---             | STOR_T (10)    |
| TIME | Times at which dose/risk are to be reported (yr)     | 1.000E+00  | 1.000E+00  | ---             | T (2)          |
| TIME | Times at which dose/risk are to be reported (yr)     | 3.000E+00  | 3.000E+00  | ---             | T (3)          |
| TIME | Times at which dose/risk are to be reported (yr)     | 6.000E+00  | 6.000E+00  | ---             | T (4)          |
| TIME | Times at which dose/risk are to be reported (yr)     | 1.200E+01  | 1.200E+01  | ---             | T (5)          |
| TIME | Times at which dose/risk are to be reported (yr)     | 3.000E+01  | 3.000E+01  | ---             | T (6)          |
| TIME | Times at which dose/risk are to be reported (yr)     | 7.500E+01  | 7.500E+01  | ---             | T (7)          |
| TIME | Times at which dose/risk are to be reported (yr)     | 1.750E+02  | 1.750E+02  | ---             | T (8)          |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 8  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| TIME | Times at which dose/risk are to be reported (yr)     | 4.200E+02  | 4.200E+02 | ---             | T(9)           |
| TIME | Times at which dose/risk are to be reported (yr)     | 9.700E+02  | 9.700E+02 | ---             | T(10)          |
| SITE | Precipitation (m/yr)                                 | 1.160E+00  | 1.000E+00 | ---             | PRECIP         |
| SITE | Average annual wind speed (m/sec)                    | 2.278E+00  | 2.000E+00 | ---             | WIND           |
| PRCZ | Area of primary contamination (m**2)                 | 1.571E+04  | 1.000E+04 | ---             | AREA           |
| PRCZ | Length parallel to aquifer flow (m)                  | 1.250E+02  | 1.000E+02 | ---             | LCZPAQ         |
| PRCZ | Depth of soil mixing layer (m)                       | 1.500E-01  | 1.500E-01 | ---             | DM             |
| PRCZ | Deposition velocity of dust (m)                      | 1.000E-03  | 1.000E-03 | ---             | DEPVEL_DUST    |
| PRCZ | Irrigation (m/yr)                                    | 0.000E+00  | 2.000E-01 | ---             | RI             |
| PRCZ | Evapotranspiration coefficient                       | 6.200E-01  | 5.000E-01 | ---             | EVAPTR         |
| PRCZ | Runoff coefficient                                   | 4.100E-01  | 2.000E-01 | ---             | RUNOFF         |
| PRCZ | Rainfall Erosion Index                               | 1.600E+02  | 1.600E+02 | ---             | RAINEROS       |
| PRCZ | Slope-length-steepness factor of prim. contamination | 4.000E-01  | 4.000E-01 | ---             | SLPLENSTPPC    |
| PRCZ | Cropping-management factor of primary contamination  | 3.000E-03  | 3.000E-03 | ---             | CRPMANGPC      |
| PRCZ | Conservation practice factor of prim. contamination  | 1.000E+00  | 1.000E+00 | ---             | CONVPRACPC     |
| PRCZ | Thickness of contaminated zone (m)                   | 1.000E+00  | 2.000E+00 | ---             | THICKO         |
| PRCZ | Contaminated zone total porosity                     | 3.600E-01  | 4.000E-01 | ---             | TPCZ           |
| PRCZ | Computed erosion rate of contaminated zone (m/yr)    | 0.000E+00  | 1.147E-05 | ---             | VCZ            |
| PRCZ | Density of contaminated zone (g/cm**3)               | 1.700E+00  | 1.500E+00 | ---             | DENSCZ         |
| PRCZ | Soil erodibility factor of contaminated zone         | 0.000E+00  | 4.000E-01 | ---             | ERODIBILITYCZ  |
| PRCZ | Contaminated zone field capacity                     | 2.000E-01  | 3.000E-01 | ---             | FCCZ           |
| PRCZ | Contaminated zone b parameter                        | 1.400E+00  | 5.300E+00 | ---             | BCZ            |
| PRCZ | Contaminated zone hydraulic conductivity (m/yr)      | 1.400E+02  | 1.000E+01 | ---             | HCCZ           |
| PRCZ | Contaminated zone effective porosity                 | 2.500E-01  | 4.000E-01 | ---             | EPCZ           |
| PRCZ | longitudinal dispersivity of prime contamination (m) | 5.000E-02  | 5.000E-02 | ---             | ALPHALCZ       |
| PRCZ | Cover depth (m)                                      | not used   | 0.000E+00 | ---             | COVERO         |
| PRCZ | Total porosity of the cover material                 | not used   | 4.000E-01 | ---             | TPCV           |
| PRCZ | Computed erosion rate of cover material (m/yr)       | not used   | 1.147E-05 | ---             | VCV            |
| PRCZ | Density of cover material (g/cm**3)                  | not used   | 1.500E+00 | ---             | DENSCV         |
| PRCZ | Soil erodibility factor of cover                     | 4.000E-01  | 4.000E-01 | ---             | ERODIBILITYCV  |
| PRCZ | Volumetric water content of the cover material       | not used   | 5.000E-02 | ---             | PH2OCV         |
| AGRI | Areal extent of Agricultural Area 1 (m**2)           | 2.338E+05  | 1.000E+03 | ---             | AREAO(1)       |
| AGRI | Fraction of Agri. Area 1 directly over the c.z.      | 6.720E-02  | 0.000E+00 | ---             | FAREA_PLANT(1) |
| AGRI | Evapotranspiration coefficient in Agri. Area 1       | 6.200E-01  | 5.000E-01 | ---             | EVAPTRN(1)     |
| AGRI | Runoff coefficient in Agricultural Area 1            | 4.100E-01  | 2.000E-01 | ---             | RUNOF(1)       |
| AGRI | Mixing depth/plow layer of Agricultural Area 1       | 1.500E-01  | 1.500E-01 | ---             | DPHMXG(1)      |
| AGRI | Water filled porosity of soil in Agri. Area 1        | 3.000E-01  | 3.000E-01 | ---             | TMOF(1)        |
| AGRI | Computed erosion rate of soil in Agri. Area 1        | 0.000E+00  | 1.147E-05 | ---             | EROSN(1)       |
| AGRI | Dry Bulk Density of soil in Agricultural Area 1      | 1.700E+00  | 1.500E+00 | ---             | RHOB(1)        |
| AGRI | Soil erodibility factor of Agricultural Area 1       | 0.000E+00  | 4.000E-01 | ---             | ERODIBILITY(1) |
| AGRI | Slope-length-steepness factor, Agricultural Area 1   | 4.000E-01  | 4.000E-01 | ---             | SLPLENSTP(1)   |
| AGRI | Cropping-management factor of Agricultural Area 1    | 3.000E-03  | 3.000E-03 | ---             | CRPMANG(1)     |
| AGRI | Conservation practice factor of Agricultural Area 1  | 1.000E+00  | 1.000E+00 | ---             | CONVPRAC(1)    |
| AGRI | Total porosity of soil in Agri. Area 1               | not used   | 4.000E-01 | ---             | TPOF(1)        |



# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 9  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter   | User Input | Default   | RESRAD computed | Parameter Name  |
|------|---|------------|-----------|-----------------|-----------------|
| AGRI | Areal extent of Agricultural Area 2 (m**2)            | 2.338E+05  | 1.000E+03 | ---             | AREAO (2)       |
| AGRI | Fraction of Agri. Area 2 directly over the c.z.       | 6.720E-02  | 0.000E+00 | ---             | FAREA_PLANT (2) |
| AGRI | Evapotranspiration coefficient in Agri. Area 2        | 6.200E-01  | 5.000E-01 | ---             | EVAPTRN (2)     |
| AGRI | Runoff coefficient in Agricultural Area 2             | 4.100E-01  | 2.000E-01 | ---             | RUNOF (2)       |
| AGRI | Mixing depth/plow layer of Agricultural Area 2        | 1.500E-01  | 1.500E-01 | ---             | DPTHMIXG (2)    |
| AGRI | Water filled porosity of soil in Agri. Area 2         | 3.000E-01  | 3.000E-01 | ---             | TMOF (2)        |
| AGRI | Computed erosion rate of soil in Agri. Area 2         | 0.000E+00  | 1.147E-05 | ---             | EROSN (2)       |
| AGRI | Dry Bulk Density of soil in Agricultural Area 2       | 1.700E+00  | 1.500E+00 | ---             | RHOB (2)        |
| AGRI | Soil erodibility factor of Agricultural Area 2        | 0.000E+00  | 4.000E-01 | ---             | ERODIBILITY (2) |
| AGRI | Slope-length-steepness factor, Agricultural Area 2    | 4.000E-01  | 4.000E-01 | ---             | SLPLENSTP (2)   |
| AGRI | Cropping-management factor of Agricultural Area 2     | 3.000E-03  | 3.000E-03 | ---             | CRPMANG (2)     |
| AGRI | Conservation practice factor of Agricultural Area 2   | 1.000E+00  | 1.000E+00 | ---             | CONVPRAC (2)    |
| AGRI | Total porosity of soil in Agri. Area 2                | not used   | 4.000E-01 | ---             | TPOF (2)        |
| AGRI | Areal extent of Agricultural Area 3 (m**2)            | 2.338E+05  | 1.000E+04 | ---             | AREAO (3)       |
| AGRI | Fraction of Agri. Area 3 directly over the c.z.       | 6.720E-02  | 0.000E+00 | ---             | FAREA_PLANT (3) |
| AGRI | Evapotranspiration coefficient in Agri. Area 3        | 6.200E-01  | 5.000E-01 | ---             | EVAPTRN (3)     |
| AGRI | Runoff coefficient in Agricultural Area 3             | 4.100E-01  | 2.000E-01 | ---             | RUNOF (3)       |
| AGRI | Mixing depth/plow layer of Agricultural Area 3        | 1.500E-01  | 1.500E-01 | ---             | DPTHMIXG (3)    |
| AGRI | Water filled porosity of soil in Agri. Area 3         | 3.000E-01  | 3.000E-01 | ---             | TMOF (3)        |
| AGRI | Computed erosion rate of soil in Agri. Area 3         | 0.000E+00  | 1.147E-05 | ---             | EROSN (3)       |
| AGRI | Dry Bulk Density of soil in Agricultural Area 3       | 1.700E+00  | 1.500E+00 | ---             | RHOB (3)        |
| AGRI | Soil erodibility factor of Agricultural Area 3        | 0.000E+00  | 4.000E-01 | ---             | ERODIBILITY (3) |
| AGRI | Slope-length-steepness factor, Agricultural Area 3    | 4.000E-01  | 4.000E-01 | ---             | SLPLENSTP (3)   |
| AGRI | Cropping-management factor of Agricultural Area 3     | 3.000E-03  | 3.000E-03 | ---             | CRPMANG (3)     |
| AGRI | Conservation practice factor of Agricultural Area 3   | 1.000E+00  | 1.000E+00 | ---             | CONVPRAC (3)    |
| AGRI | Total porosity of soil in Agri. Area 3                | not used   | 4.000E-01 | ---             | TPOF (3)        |
| AGRI | Areal extent of Agricultural Area 4 (m**2)            | 2.338E+05  | 1.000E+04 | ---             | AREAO (4)       |
| AGRI | Fraction of Agri. Area 4 directly over the c.z.       | 6.720E-02  | 0.000E+00 | ---             | FAREA_PLANT (4) |
| AGRI | Evapotranspiration coefficient in Agri. Area 4        | 6.200E-01  | 5.000E-01 | ---             | EVAPTRN (4)     |
| AGRI | Runoff coefficient in Agricultural Area 4             | 4.100E-01  | 2.000E-01 | ---             | RUNOF (4)       |
| AGRI | Mixing depth/plow layer of Agricultural Area 4        | 1.500E-01  | 1.500E-01 | ---             | DPTHMIXG (4)    |
| AGRI | Water filled porosity of soil in Agri. Area 4         | 3.000E-01  | 3.000E-01 | ---             | TMOF (4)        |
| AGRI | Computed erosion rate of soil in Agri. Area 4         | 0.000E+00  | 1.147E-05 | ---             | EROSN (4)       |
| AGRI | Dry Bulk Density of soil in Agricultural Area 4       | 1.700E+00  | 1.500E+00 | ---             | RHOB (4)        |
| AGRI | Soil erodibility factor of Agricultural Area 4        | 0.000E+00  | 4.000E-01 | ---             | ERODIBILITY (4) |
| AGRI | Slope-length-steepness factor, Agricultural Area 4    | 4.000E-01  | 4.000E-01 | ---             | SLPLENSTP (4)   |
| AGRI | Cropping-management factor of Agricultural Area 4     | 3.000E-03  | 3.000E-03 | ---             | CRPMANG (4)     |
| AGRI | Conservation practice factor of Agricultural Area 4   | 1.000E+00  | 1.000E+00 | ---             | CONVPRAC (4)    |
| AGRI | Total porosity of soil in Agri. Area 4                | not used   | 4.000E-01 | ---             | TPOF (4)        |
| DWEL | Areal extent of Offsite dwelling site (m**2)          | 1.000E+00  | 1.000E+03 | ---             | AREADWELL       |
| DWEL | Evapotranspiration coefficient in dwelling (Off) site | 6.200E-01  | 5.000E-01 | ---             | EVAPTRNDWELL    |
| DWEL | Runoff coefficient in Offsite dwelling site           | 4.100E-01  | 2.000E-01 | ---             | RUNOFDWELL      |
| DWEL | Mixing depth of Offsite dwelling site                 | 1.500E-01  | 1.500E-01 | ---             | DPTHMIXGDWELL   |
| DWEL | Water filled porosity of soil in Offsite Dwelling     | 3.000E-01  | 3.000E-01 | ---             | TMOFDWELL       |
| DWEL | Computed erosion rate of soil in Offsite Dwelling     | 0.000E+00  | 0.000E+00 | ---             | EROSNDWELL      |
| DWEL | Dry Bulk Density of soil in Offsite dwelling site     | 1.700E+00  | 1.500E+00 | ---             | RHOBWDWELL      |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 10  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default   | RESRAD computed | Parameter Name   |
|------|--|------------|-----------|-----------------|------------------|
| DWEL | Soil erodibility factor of soil in Dwelling site     | 0.000E+00  | 0.000E+00 | ---             | ERODIBILITYDWELL |
| DWEL | Slope-length-steepness factor of Dwelling site       | 4.000E-01  | 4.000E-01 | ---             | SLPLENSTDWELL    |
| DWEL | Cropping-management factor of Dwelling site          | 3.000E-03  | 3.000E-03 | ---             | CRPMANGDWELL     |
| DWEL | Conservation practice factor of Offsite Dwelling sit | 1.000E+00  | 1.000E+00 | ---             | CONVPRACDWELL    |
| DWEL | Total porosity of soil in Offsite Dwelling           | not used   | 4.000E-01 | ---             | TPOFDWELL        |
| AIRT | Dispersion Coefficients; 1 = Pasquill-Gifford        | 1          | 1         | ---             | IDISPMOD         |
| AIRT | Population zone; 1 = Rural                           | 1          | 1         | ---             | IZONE            |
| AIRT | Release height, (m)                                  | 1.000E+00  | 1.000E+00 | ---             | AIRRELHT         |
| AIRT | Heat flux for buoyant plume (cal/s),                 | 0.000E+00  | 0.000E+00 | ---             | HEATFLX          |
| AIRT | Anemometer height, (m)                               | 1.000E+01  | 1.000E+01 | ---             | ANH              |
| AIRT | Absolute temperature (Kelvin)                        | 2.850E+02  | 2.850E+02 | ---             | TABK             |
| AIRT | AM atmospheric mixing height (m)                     | 4.000E+02  | 4.000E+02 | ---             | AMIX             |
| AIRT | PM atmospheric mixing height (m)                     | 1.600E+03  | 1.600E+03 | ---             | PMIX             |
| AIRT | Elevation of Agricultural Area 1 above primary cont. | 0.000E+00  | 0.000E+00 | ---             | AGRIELEV(1)      |
| AIRT | Elevation of Agricultural Area 2 above primary cont. | 0.000E+00  | 0.000E+00 | ---             | AGRIELEV(2)      |
| AIRT | Elevation of Agricultural Area 3 above primary cont. | 0.000E+00  | 0.000E+00 | ---             | AGRIELEV(3)      |
| AIRT | Elevation of Agricultural Area 4 above primary cont. | 0.000E+00  | 0.000E+00 | ---             | AGRIELEV(4)      |
| AIRT | Elevation of Dwelling Site relative to primary cont. | 0.000E+00  | 0.000E+00 | ---             | DWELLELEV        |
| AIRT | Elevation of Surf.Wtr body relative to primary cont. | 0.000E+00  | 0.000E+00 | ---             | SWELEV           |
| AIRT | Joint frequency Meteorological data:                 |            |           |                 |                  |
| AIRT | Upper limit for windspeed class 1 (m/s)              | 7.500E-01  | 8.900E-01 | ---             | WINDSPEED(1)     |
| AIRT | Upper limit for windspeed class 2 (m/s)              | 2.250E+00  | 2.460E+00 | ---             | WINDSPEED(2)     |
| AIRT | Upper limit for windspeed class 3 (m/s)              | 4.500E+00  | 4.470E+00 | ---             | WINDSPEED(3)     |
| AIRT | Upper limit for windspeed class 4 (m/s)              | 7.500E+00  | 6.930E+00 | ---             | WINDSPEED(4)     |
| AIRT | Upper limit for windspeed class 5 (m/s)              | 1.050E+01  | 9.610E+00 | ---             | WINDSPEED(5)     |
| AIRT | Upper limit for windspeed class 6 (m/s)              | 1.350E+01  | 1.252E+01 | ---             | WINDSPEED(6)     |
| AIRT | Joint Frequency in N Sector                          |            |           |                 |                  |
| AIRT | for wind speed class 1 and stability class A         | 1.000E-04  | 1.000E+00 | ---             | DFREQ(1,1,1)     |
| AIRT | for wind speed class 1 and stability class B         | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,1)     |
| AIRT | for wind speed class 1 and stability class C         | 1.200E-04  | 0.000E+00 | ---             | DFREQ(1,3,1)     |
| AIRT | for wind speed class 1 and stability class D         | 6.950E-03  | 0.000E+00 | ---             | DFREQ(1,4,1)     |
| AIRT | for wind speed class 1 and stability class E         | 1.983E-02  | 0.000E+00 | ---             | DFREQ(1,5,1)     |
| AIRT | for wind speed class 1 and stability class F         | 1.547E-02  | 0.000E+00 | ---             | DFREQ(1,6,1)     |
| AIRT | Joint Frequency in N Sector                          |            |           |                 |                  |
| AIRT | for wind speed class 2 and stability class A         | 2.200E-04  | 0.000E+00 | ---             | DFREQ(2,1,1)     |
| AIRT | for wind speed class 2 and stability class B         | 5.600E-04  | 0.000E+00 | ---             | DFREQ(2,2,1)     |
| AIRT | for wind speed class 2 and stability class C         | 1.660E-03  | 0.000E+00 | ---             | DFREQ(2,3,1)     |
| AIRT | for wind speed class 2 and stability class D         | 2.274E-02  | 0.000E+00 | ---             | DFREQ(2,4,1)     |
| AIRT | for wind speed class 2 and stability class E         | 2.191E-02  | 0.000E+00 | ---             | DFREQ(2,5,1)     |
| AIRT | for wind speed class 2 and stability class F         | 2.400E-03  | 0.000E+00 | ---             | DFREQ(2,6,1)     |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 11  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in N Sector                  |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 5.100E-04  | 0.000E+00 | ---             | DFREQ(3,1,1)   |
| AIRT | for wind speed class 3 and stability class B | 1.030E-03  | 0.000E+00 | ---             | DFREQ(3,2,1)   |
| AIRT | for wind speed class 3 and stability class C | 1.810E-03  | 0.000E+00 | ---             | DFREQ(3,3,1)   |
| AIRT | for wind speed class 3 and stability class D | 1.506E-02  | 0.000E+00 | ---             | DFREQ(3,4,1)   |
| AIRT | for wind speed class 3 and stability class E | 7.710E-03  | 0.000E+00 | ---             | DFREQ(3,5,1)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,1)   |
| AIRT | Joint Frequency in N Sector                  |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,1,1)   |
| AIRT | for wind speed class 4 and stability class B | 7.000E-05  | 0.000E+00 | ---             | DFREQ(4,2,1)   |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,1)   |
| AIRT | for wind speed class 4 and stability class D | 6.100E-04  | 0.000E+00 | ---             | DFREQ(4,4,1)   |
| AIRT | for wind speed class 4 and stability class E | 2.400E-04  | 0.000E+00 | ---             | DFREQ(4,5,1)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,1)   |
| AIRT | Joint Frequency in N Sector                  |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,1)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,1)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,1)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,1)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,1)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,1)   |
| AIRT | Joint Frequency in N Sector                  |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,1)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,1)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,1)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,1)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,1)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,1)   |
| AIRT | Joint Frequency in NNE Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,1,2)   |
| AIRT | for wind speed class 1 and stability class B | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,2)   |
| AIRT | for wind speed class 1 and stability class C | 7.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,2)   |
| AIRT | for wind speed class 1 and stability class D | 7.200E-03  | 0.000E+00 | ---             | DFREQ(1,4,2)   |
| AIRT | for wind speed class 1 and stability class E | 1.092E-02  | 0.000E+00 | ---             | DFREQ(1,5,2)   |
| AIRT | for wind speed class 1 and stability class F | 6.760E-03  | 0.000E+00 | ---             | DFREQ(1,6,2)   |
| AIRT | Joint Frequency in NNE Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 2.700E-04  | 0.000E+00 | ---             | DFREQ(2,1,2)   |
| AIRT | for wind speed class 2 and stability class B | 8.300E-04  | 0.000E+00 | ---             | DFREQ(2,2,2)   |
| AIRT | for wind speed class 2 and stability class C | 1.810E-03  | 0.000E+00 | ---             | DFREQ(2,3,2)   |
| AIRT | for wind speed class 2 and stability class D | 2.296E-02  | 0.000E+00 | ---             | DFREQ(2,4,2)   |
| AIRT | for wind speed class 2 and stability class E | 7.050E-03  | 0.000E+00 | ---             | DFREQ(2,5,2)   |
| AIRT | for wind speed class 2 and stability class F | 2.200E-04  | 0.000E+00 | ---             | DFREQ(2,6,2)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 12  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in NNE Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 3.900E-04  | 0.000E+00 | ---             | DFREQ(3,1,2)   |
| AIRT | for wind speed class 3 and stability class B | 6.400E-04  | 0.000E+00 | ---             | DFREQ(3,2,2)   |
| AIRT | for wind speed class 3 and stability class C | 7.100E-04  | 0.000E+00 | ---             | DFREQ(3,3,2)   |
| AIRT | for wind speed class 3 and stability class D | 6.930E-03  | 0.000E+00 | ---             | DFREQ(3,4,2)   |
| AIRT | for wind speed class 3 and stability class E | 9.500E-04  | 0.000E+00 | ---             | DFREQ(3,5,2)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,2)   |
| AIRT | Joint Frequency in NNE Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,2)   |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,2)   |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,2)   |
| AIRT | for wind speed class 4 and stability class D | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,4,2)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,2)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,2)   |
| AIRT | Joint Frequency in NNE Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,2)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,2)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,2)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,2)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,2)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,2)   |
| AIRT | Joint Frequency in NNE Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,2)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,2)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,2)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,2)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,2)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,2)   |
| AIRT | Joint Frequency in NE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,1,3)   |
| AIRT | for wind speed class 1 and stability class B | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,3)   |
| AIRT | for wind speed class 1 and stability class C | 7.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,3)   |
| AIRT | for wind speed class 1 and stability class D | 6.290E-03  | 0.000E+00 | ---             | DFREQ(1,4,3)   |
| AIRT | for wind speed class 1 and stability class E | 6.860E-03  | 0.000E+00 | ---             | DFREQ(1,5,3)   |
| AIRT | for wind speed class 1 and stability class F | 4.060E-03  | 0.000E+00 | ---             | DFREQ(1,6,3)   |
| AIRT | Joint Frequency in NE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 3.900E-04  | 0.000E+00 | ---             | DFREQ(2,1,3)   |
| AIRT | for wind speed class 2 and stability class B | 1.220E-03  | 0.000E+00 | ---             | DFREQ(2,2,3)   |
| AIRT | for wind speed class 2 and stability class C | 2.500E-03  | 0.000E+00 | ---             | DFREQ(2,3,3)   |
| AIRT | for wind speed class 2 and stability class D | 1.785E-02  | 0.000E+00 | ---             | DFREQ(2,4,3)   |
| AIRT | for wind speed class 2 and stability class E | 1.440E-03  | 0.000E+00 | ---             | DFREQ(2,5,3)   |
| AIRT | for wind speed class 2 and stability class F | 2.000E-05  | 0.000E+00 | ---             | DFREQ(2,6,3)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 13  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in NE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 3.400E-04  | 0.000E+00 | ---             | DFREQ(3,1,3)   |
| AIRT | for wind speed class 3 and stability class B | 6.600E-04  | 0.000E+00 | ---             | DFREQ(3,2,3)   |
| AIRT | for wind speed class 3 and stability class C | 7.300E-04  | 0.000E+00 | ---             | DFREQ(3,3,3)   |
| AIRT | for wind speed class 3 and stability class D | 4.430E-03  | 0.000E+00 | ---             | DFREQ(3,4,3)   |
| AIRT | for wind speed class 3 and stability class E | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,5,3)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,3)   |
| AIRT | Joint Frequency in NE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,3)   |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,3)   |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,3)   |
| AIRT | for wind speed class 4 and stability class D | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,4,3)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,3)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,3)   |
| AIRT | Joint Frequency in NE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,3)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,3)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,3)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,3)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,3)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,3)   |
| AIRT | Joint Frequency in NE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,3)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,3)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,3)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,3)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,3)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,3)   |
| AIRT | Joint Frequency in ENE Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,1,4)   |
| AIRT | for wind speed class 1 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,4)   |
| AIRT | for wind speed class 1 and stability class C | 7.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,4)   |
| AIRT | for wind speed class 1 and stability class D | 6.150E-03  | 0.000E+00 | ---             | DFREQ(1,4,4)   |
| AIRT | for wind speed class 1 and stability class E | 6.540E-03  | 0.000E+00 | ---             | DFREQ(1,5,4)   |
| AIRT | for wind speed class 1 and stability class F | 2.720E-03  | 0.000E+00 | ---             | DFREQ(1,6,4)   |
| AIRT | Joint Frequency in ENE Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 2.400E-04  | 0.000E+00 | ---             | DFREQ(2,1,4)   |
| AIRT | for wind speed class 2 and stability class B | 6.400E-04  | 0.000E+00 | ---             | DFREQ(2,2,4)   |
| AIRT | for wind speed class 2 and stability class C | 1.180E-03  | 0.000E+00 | ---             | DFREQ(2,3,4)   |
| AIRT | for wind speed class 2 and stability class D | 1.227E-02  | 0.000E+00 | ---             | DFREQ(2,4,4)   |
| AIRT | for wind speed class 2 and stability class E | 1.000E-03  | 0.000E+00 | ---             | DFREQ(2,5,4)   |
| AIRT | for wind speed class 2 and stability class F | 1.000E-04  | 0.000E+00 | ---             | DFREQ(2,6,4)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 14  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in ENE Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,1,4)   |
| AIRT | for wind speed class 3 and stability class B | 2.400E-04  | 0.000E+00 | ---             | DFREQ(3,2,4)   |
| AIRT | for wind speed class 3 and stability class C | 4.700E-04  | 0.000E+00 | ---             | DFREQ(3,3,4)   |
| AIRT | for wind speed class 3 and stability class D | 2.350E-03  | 0.000E+00 | ---             | DFREQ(3,4,4)   |
| AIRT | for wind speed class 3 and stability class E | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,5,4)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,4)   |
| AIRT | Joint Frequency in ENE Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,4)   |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,4)   |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,4)   |
| AIRT | for wind speed class 4 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,4,4)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,4)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,4)   |
| AIRT | Joint Frequency in ENE Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,4)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,4)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,4)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,4)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,4)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,4)   |
| AIRT | Joint Frequency in ENE Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,4)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,4)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,4)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,4)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,4)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,4)   |
| AIRT | Joint Frequency in E Sector                  |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 2.000E-04  | 0.000E+00 | ---             | DFREQ(1,1,5)   |
| AIRT | for wind speed class 1 and stability class B | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,5)   |
| AIRT | for wind speed class 1 and stability class C | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,5)   |
| AIRT | for wind speed class 1 and stability class D | 8.320E-03  | 0.000E+00 | ---             | DFREQ(1,4,5)   |
| AIRT | for wind speed class 1 and stability class E | 7.100E-03  | 0.000E+00 | ---             | DFREQ(1,5,5)   |
| AIRT | for wind speed class 1 and stability class F | 1.660E-03  | 0.000E+00 | ---             | DFREQ(1,6,5)   |
| AIRT | Joint Frequency in E Sector                  |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 2.700E-04  | 0.000E+00 | ---             | DFREQ(2,1,5)   |
| AIRT | for wind speed class 2 and stability class B | 8.300E-04  | 0.000E+00 | ---             | DFREQ(2,2,5)   |
| AIRT | for wind speed class 2 and stability class C | 1.740E-03  | 0.000E+00 | ---             | DFREQ(2,3,5)   |
| AIRT | for wind speed class 2 and stability class D | 2.025E-02  | 0.000E+00 | ---             | DFREQ(2,4,5)   |
| AIRT | for wind speed class 2 and stability class E | 1.620E-03  | 0.000E+00 | ---             | DFREQ(2,5,5)   |
| AIRT | for wind speed class 2 and stability class F | 1.700E-04  | 0.000E+00 | ---             | DFREQ(2,6,5)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 15  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in E Sector                  |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,1,5)   |
| AIRT | for wind speed class 3 and stability class B | 3.400E-04  | 0.000E+00 | ---             | DFREQ(3,2,5)   |
| AIRT | for wind speed class 3 and stability class C | 5.100E-04  | 0.000E+00 | ---             | DFREQ(3,3,5)   |
| AIRT | for wind speed class 3 and stability class D | 5.240E-03  | 0.000E+00 | ---             | DFREQ(3,4,5)   |
| AIRT | for wind speed class 3 and stability class E | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,5,5)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,5)   |
| AIRT | Joint Frequency in E Sector                  |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,5)   |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,5)   |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,5)   |
| AIRT | for wind speed class 4 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,4,5)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,5)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,5)   |
| AIRT | Joint Frequency in E Sector                  |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,5)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,5)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,5)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,5)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,5)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,5)   |
| AIRT | Joint Frequency in E Sector                  |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,5)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,5)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,5)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,5)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,5)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,5)   |
| AIRT | Joint Frequency in ESE Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,6)   |
| AIRT | for wind speed class 1 and stability class B | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,6)   |
| AIRT | for wind speed class 1 and stability class C | 2.000E-04  | 0.000E+00 | ---             | DFREQ(1,3,6)   |
| AIRT | for wind speed class 1 and stability class D | 1.050E-02  | 0.000E+00 | ---             | DFREQ(1,4,6)   |
| AIRT | for wind speed class 1 and stability class E | 7.760E-03  | 0.000E+00 | ---             | DFREQ(1,5,6)   |
| AIRT | for wind speed class 1 and stability class F | 6.900E-04  | 0.000E+00 | ---             | DFREQ(1,6,6)   |
| AIRT | Joint Frequency in ESE Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 5.400E-04  | 0.000E+00 | ---             | DFREQ(2,1,6)   |
| AIRT | for wind speed class 2 and stability class B | 1.640E-03  | 0.000E+00 | ---             | DFREQ(2,2,6)   |
| AIRT | for wind speed class 2 and stability class C | 3.500E-03  | 0.000E+00 | ---             | DFREQ(2,3,6)   |
| AIRT | for wind speed class 2 and stability class D | 3.529E-02  | 0.000E+00 | ---             | DFREQ(2,4,6)   |
| AIRT | for wind speed class 2 and stability class E | 4.480E-03  | 0.000E+00 | ---             | DFREQ(2,5,6)   |
| AIRT | for wind speed class 2 and stability class F | 5.000E-05  | 0.000E+00 | ---             | DFREQ(2,6,6)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 16  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in ESE Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 9.800E-04  | 0.000E+00 | ---             | DFREQ(3,1,6)   |
| AIRT | for wind speed class 3 and stability class B | 1.490E-03  | 0.000E+00 | ---             | DFREQ(3,2,6)   |
| AIRT | for wind speed class 3 and stability class C | 1.760E-03  | 0.000E+00 | ---             | DFREQ(3,3,6)   |
| AIRT | for wind speed class 3 and stability class D | 1.809E-02  | 0.000E+00 | ---             | DFREQ(3,4,6)   |
| AIRT | for wind speed class 3 and stability class E | 5.000E-05  | 0.000E+00 | ---             | DFREQ(3,5,6)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,6)   |
| AIRT | Joint Frequency in ESE Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,6)   |
| AIRT | for wind speed class 4 and stability class B | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,2,6)   |
| AIRT | for wind speed class 4 and stability class C | 5.000E-05  | 0.000E+00 | ---             | DFREQ(4,3,6)   |
| AIRT | for wind speed class 4 and stability class D | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,4,6)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,6)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,6)   |
| AIRT | Joint Frequency in ESE Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,6)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,6)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,6)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,6)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,6)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,6)   |
| AIRT | Joint Frequency in ESE Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,6)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,6)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,6)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,6)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,6)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,6)   |
| AIRT | Joint Frequency in SE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,1,7)   |
| AIRT | for wind speed class 1 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,7)   |
| AIRT | for wind speed class 1 and stability class C | 1.700E-04  | 0.000E+00 | ---             | DFREQ(1,3,7)   |
| AIRT | for wind speed class 1 and stability class D | 9.060E-03  | 0.000E+00 | ---             | DFREQ(1,4,7)   |
| AIRT | for wind speed class 1 and stability class E | 4.280E-03  | 0.000E+00 | ---             | DFREQ(1,5,7)   |
| AIRT | for wind speed class 1 and stability class F | 4.900E-04  | 0.000E+00 | ---             | DFREQ(1,6,7)   |
| AIRT | Joint Frequency in SE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 1.130E-03  | 0.000E+00 | ---             | DFREQ(2,1,7)   |
| AIRT | for wind speed class 2 and stability class B | 2.910E-03  | 0.000E+00 | ---             | DFREQ(2,2,7)   |
| AIRT | for wind speed class 2 and stability class C | 4.970E-03  | 0.000E+00 | ---             | DFREQ(2,3,7)   |
| AIRT | for wind speed class 2 and stability class D | 6.305E-02  | 0.000E+00 | ---             | DFREQ(2,4,7)   |
| AIRT | for wind speed class 2 and stability class E | 6.540E-03  | 0.000E+00 | ---             | DFREQ(2,5,7)   |
| AIRT | for wind speed class 2 and stability class F | 1.500E-04  | 0.000E+00 | ---             | DFREQ(2,6,7)   |



# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 17  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in SE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 5.920E-03  | 0.000E+00 | ---             | DFREQ(3,1,7)   |
| AIRT | for wind speed class 3 and stability class B | 5.900E-03  | 0.000E+00 | ---             | DFREQ(3,2,7)   |
| AIRT | for wind speed class 3 and stability class C | 8.350E-03  | 0.000E+00 | ---             | DFREQ(3,3,7)   |
| AIRT | for wind speed class 3 and stability class D | 4.447E-02  | 0.000E+00 | ---             | DFREQ(3,4,7)   |
| AIRT | for wind speed class 3 and stability class E | 6.900E-04  | 0.000E+00 | ---             | DFREQ(3,5,7)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,7)   |
| AIRT | Joint Frequency in SE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 5.000E-05  | 0.000E+00 | ---             | DFREQ(4,1,7)   |
| AIRT | for wind speed class 4 and stability class B | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,2,7)   |
| AIRT | for wind speed class 4 and stability class C | 1.000E-04  | 0.000E+00 | ---             | DFREQ(4,3,7)   |
| AIRT | for wind speed class 4 and stability class D | 2.000E-04  | 0.000E+00 | ---             | DFREQ(4,4,7)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,7)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,7)   |
| AIRT | Joint Frequency in SE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,7)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,7)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,7)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,7)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,7)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,7)   |
| AIRT | Joint Frequency in SE Sector                 |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,7)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,7)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,7)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,7)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,7)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,7)   |
| AIRT | Joint Frequency in SSE Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,8)   |
| AIRT | for wind speed class 1 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,8)   |
| AIRT | for wind speed class 1 and stability class C | 1.000E-04  | 0.000E+00 | ---             | DFREQ(1,3,8)   |
| AIRT | for wind speed class 1 and stability class D | 3.600E-03  | 0.000E+00 | ---             | DFREQ(1,4,8)   |
| AIRT | for wind speed class 1 and stability class E | 1.470E-03  | 0.000E+00 | ---             | DFREQ(1,5,8)   |
| AIRT | for wind speed class 1 and stability class F | 5.600E-04  | 0.000E+00 | ---             | DFREQ(1,6,8)   |
| AIRT | Joint Frequency in SSE Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 4.700E-04  | 0.000E+00 | ---             | DFREQ(2,1,8)   |
| AIRT | for wind speed class 2 and stability class B | 8.300E-04  | 0.000E+00 | ---             | DFREQ(2,2,8)   |
| AIRT | for wind speed class 2 and stability class C | 2.330E-03  | 0.000E+00 | ---             | DFREQ(2,3,8)   |
| AIRT | for wind speed class 2 and stability class D | 1.542E-02  | 0.000E+00 | ---             | DFREQ(2,4,8)   |
| AIRT | for wind speed class 2 and stability class E | 8.300E-04  | 0.000E+00 | ---             | DFREQ(2,5,8)   |
| AIRT | for wind speed class 2 and stability class F | 1.000E-04  | 0.000E+00 | ---             | DFREQ(2,6,8)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 18  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in SSE Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 1.640E-03  | 0.000E+00 | ---             | DFREQ(3,1,8)   |
| AIRT | for wind speed class 3 and stability class B | 2.330E-03  | 0.000E+00 | ---             | DFREQ(3,2,8)   |
| AIRT | for wind speed class 3 and stability class C | 2.890E-03  | 0.000E+00 | ---             | DFREQ(3,3,8)   |
| AIRT | for wind speed class 3 and stability class D | 1.205E-02  | 0.000E+00 | ---             | DFREQ(3,4,8)   |
| AIRT | for wind speed class 3 and stability class E | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,5,8)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,8)   |
| AIRT | Joint Frequency in SSE Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 1.500E-04  | 0.000E+00 | ---             | DFREQ(4,1,8)   |
| AIRT | for wind speed class 4 and stability class B | 5.000E-05  | 0.000E+00 | ---             | DFREQ(4,2,8)   |
| AIRT | for wind speed class 4 and stability class C | 1.200E-04  | 0.000E+00 | ---             | DFREQ(4,3,8)   |
| AIRT | for wind speed class 4 and stability class D | 1.000E-04  | 0.000E+00 | ---             | DFREQ(4,4,8)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,8)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,8)   |
| AIRT | Joint Frequency in SSE Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,8)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,8)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,8)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,8)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,8)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,8)   |
| AIRT | Joint Frequency in SSE Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,8)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,8)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,8)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,8)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,8)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,8)   |
| AIRT | Joint Frequency in S Sector                  |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,9)   |
| AIRT | for wind speed class 1 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,9)   |
| AIRT | for wind speed class 1 and stability class C | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,9)   |
| AIRT | for wind speed class 1 and stability class D | 3.210E-03  | 0.000E+00 | ---             | DFREQ(1,4,9)   |
| AIRT | for wind speed class 1 and stability class E | 9.300E-04  | 0.000E+00 | ---             | DFREQ(1,5,9)   |
| AIRT | for wind speed class 1 and stability class F | 3.900E-04  | 0.000E+00 | ---             | DFREQ(1,6,9)   |
| AIRT | Joint Frequency in S Sector                  |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 5.100E-04  | 0.000E+00 | ---             | DFREQ(2,1,9)   |
| AIRT | for wind speed class 2 and stability class B | 5.900E-04  | 0.000E+00 | ---             | DFREQ(2,2,9)   |
| AIRT | for wind speed class 2 and stability class C | 1.740E-03  | 0.000E+00 | ---             | DFREQ(2,3,9)   |
| AIRT | for wind speed class 2 and stability class D | 1.031E-02  | 0.000E+00 | ---             | DFREQ(2,4,9)   |
| AIRT | for wind speed class 2 and stability class E | 2.000E-04  | 0.000E+00 | ---             | DFREQ(2,5,9)   |
| AIRT | for wind speed class 2 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(2,6,9)   |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 19  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in S Sector                  |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 4.900E-04  | 0.000E+00 | ---             | DFREQ(3,1,9)   |
| AIRT | for wind speed class 3 and stability class B | 4.400E-04  | 0.000E+00 | ---             | DFREQ(3,2,9)   |
| AIRT | for wind speed class 3 and stability class C | 7.300E-04  | 0.000E+00 | ---             | DFREQ(3,3,9)   |
| AIRT | for wind speed class 3 and stability class D | 3.080E-03  | 0.000E+00 | ---             | DFREQ(3,4,9)   |
| AIRT | for wind speed class 3 and stability class E | 2.000E-05  | 0.000E+00 | ---             | DFREQ(3,5,9)   |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,9)   |
| AIRT | Joint Frequency in S Sector                  |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,9)   |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,9)   |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,9)   |
| AIRT | for wind speed class 4 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,4,9)   |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,9)   |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,9)   |
| AIRT | Joint Frequency in S Sector                  |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,9)   |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,9)   |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,9)   |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,9)   |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,9)   |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,9)   |
| AIRT | Joint Frequency in S Sector                  |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,9)   |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,9)   |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,9)   |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,9)   |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,9)   |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,9)   |
| AIRT | Joint Frequency in SSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,10)  |
| AIRT | for wind speed class 1 and stability class B | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,10)  |
| AIRT | for wind speed class 1 and stability class C | 2.200E-04  | 0.000E+00 | ---             | DFREQ(1,3,10)  |
| AIRT | for wind speed class 1 and stability class D | 3.400E-03  | 0.000E+00 | ---             | DFREQ(1,4,10)  |
| AIRT | for wind speed class 1 and stability class E | 9.300E-04  | 0.000E+00 | ---             | DFREQ(1,5,10)  |
| AIRT | for wind speed class 1 and stability class F | 2.400E-04  | 0.000E+00 | ---             | DFREQ(1,6,10)  |
| AIRT | Joint Frequency in SSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 4.400E-04  | 0.000E+00 | ---             | DFREQ(2,1,10)  |
| AIRT | for wind speed class 2 and stability class B | 6.900E-04  | 0.000E+00 | ---             | DFREQ(2,2,10)  |
| AIRT | for wind speed class 2 and stability class C | 9.500E-04  | 0.000E+00 | ---             | DFREQ(2,3,10)  |
| AIRT | for wind speed class 2 and stability class D | 6.390E-03  | 0.000E+00 | ---             | DFREQ(2,4,10)  |
| AIRT | for wind speed class 2 and stability class E | 2.000E-04  | 0.000E+00 | ---             | DFREQ(2,5,10)  |
| AIRT | for wind speed class 2 and stability class F | 2.000E-05  | 0.000E+00 | ---             | DFREQ(2,6,10)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 20  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in SSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 2.900E-04  | 0.000E+00 | ---             | DFREQ(3,1,10)  |
| AIRT | for wind speed class 3 and stability class B | 3.700E-04  | 0.000E+00 | ---             | DFREQ(3,2,10)  |
| AIRT | for wind speed class 3 and stability class C | 2.700E-04  | 0.000E+00 | ---             | DFREQ(3,3,10)  |
| AIRT | for wind speed class 3 and stability class D | 1.130E-03  | 0.000E+00 | ---             | DFREQ(3,4,10)  |
| AIRT | for wind speed class 3 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,5,10)  |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,10)  |
| AIRT | Joint Frequency in SSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,10)  |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,10)  |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,10)  |
| AIRT | for wind speed class 4 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,4,10)  |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,10)  |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,10)  |
| AIRT | Joint Frequency in SSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,10)  |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,10)  |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,10)  |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,10)  |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,10)  |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,10)  |
| AIRT | Joint Frequency in SSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,10)  |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,10)  |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,10)  |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,10)  |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,10)  |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,10)  |
| AIRT | Joint Frequency in SW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,11)  |
| AIRT | for wind speed class 1 and stability class B | 7.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,11)  |
| AIRT | for wind speed class 1 and stability class C | 1.200E-04  | 0.000E+00 | ---             | DFREQ(1,3,11)  |
| AIRT | for wind speed class 1 and stability class D | 2.230E-03  | 0.000E+00 | ---             | DFREQ(1,4,11)  |
| AIRT | for wind speed class 1 and stability class E | 7.800E-04  | 0.000E+00 | ---             | DFREQ(1,5,11)  |
| AIRT | for wind speed class 1 and stability class F | 4.900E-04  | 0.000E+00 | ---             | DFREQ(1,6,11)  |
| AIRT | Joint Frequency in SW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 3.200E-04  | 0.000E+00 | ---             | DFREQ(2,1,11)  |
| AIRT | for wind speed class 2 and stability class B | 5.400E-04  | 0.000E+00 | ---             | DFREQ(2,2,11)  |
| AIRT | for wind speed class 2 and stability class C | 8.100E-04  | 0.000E+00 | ---             | DFREQ(2,3,11)  |
| AIRT | for wind speed class 2 and stability class D | 4.160E-03  | 0.000E+00 | ---             | DFREQ(2,4,11)  |
| AIRT | for wind speed class 2 and stability class E | 2.200E-04  | 0.000E+00 | ---             | DFREQ(2,5,11)  |
| AIRT | for wind speed class 2 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(2,6,11)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 21  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in SW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 2.400E-04  | 0.000E+00 | ---             | DFREQ(3,1,11)  |
| AIRT | for wind speed class 3 and stability class B | 2.400E-04  | 0.000E+00 | ---             | DFREQ(3,2,11)  |
| AIRT | for wind speed class 3 and stability class C | 2.700E-04  | 0.000E+00 | ---             | DFREQ(3,3,11)  |
| AIRT | for wind speed class 3 and stability class D | 7.100E-04  | 0.000E+00 | ---             | DFREQ(3,4,11)  |
| AIRT | for wind speed class 3 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,5,11)  |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,11)  |
| AIRT | Joint Frequency in SW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,11)  |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,11)  |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,11)  |
| AIRT | for wind speed class 4 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,4,11)  |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,11)  |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,11)  |
| AIRT | Joint Frequency in SW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,11)  |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,11)  |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,11)  |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,11)  |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,11)  |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,11)  |
| AIRT | Joint Frequency in SW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,11)  |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,11)  |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,11)  |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,11)  |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,11)  |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,11)  |
| AIRT | Joint Frequency in WSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,12)  |
| AIRT | for wind speed class 1 and stability class B | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,12)  |
| AIRT | for wind speed class 1 and stability class C | 7.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,12)  |
| AIRT | for wind speed class 1 and stability class D | 2.200E-03  | 0.000E+00 | ---             | DFREQ(1,4,12)  |
| AIRT | for wind speed class 1 and stability class E | 1.320E-03  | 0.000E+00 | ---             | DFREQ(1,5,12)  |
| AIRT | for wind speed class 1 and stability class F | 4.200E-04  | 0.000E+00 | ---             | DFREQ(1,6,12)  |
| AIRT | Joint Frequency in WSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 2.700E-04  | 0.000E+00 | ---             | DFREQ(2,1,12)  |
| AIRT | for wind speed class 2 and stability class B | 3.200E-04  | 0.000E+00 | ---             | DFREQ(2,2,12)  |
| AIRT | for wind speed class 2 and stability class C | 4.400E-04  | 0.000E+00 | ---             | DFREQ(2,3,12)  |
| AIRT | for wind speed class 2 and stability class D | 3.480E-03  | 0.000E+00 | ---             | DFREQ(2,4,12)  |
| AIRT | for wind speed class 2 and stability class E | 2.000E-04  | 0.000E+00 | ---             | DFREQ(2,5,12)  |
| AIRT | for wind speed class 2 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(2,6,12)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 22  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in WSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 2.900E-04  | 0.000E+00 | ---             | DFREQ(3,1,12)  |
| AIRT | for wind speed class 3 and stability class B | 1.000E-04  | 0.000E+00 | ---             | DFREQ(3,2,12)  |
| AIRT | for wind speed class 3 and stability class C | 1.500E-04  | 0.000E+00 | ---             | DFREQ(3,3,12)  |
| AIRT | for wind speed class 3 and stability class D | 2.860E-03  | 0.000E+00 | ---             | DFREQ(3,4,12)  |
| AIRT | for wind speed class 3 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,5,12)  |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,12)  |
| AIRT | Joint Frequency in WSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,12)  |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,12)  |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,12)  |
| AIRT | for wind speed class 4 and stability class D | 2.000E-04  | 0.000E+00 | ---             | DFREQ(4,4,12)  |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,12)  |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,12)  |
| AIRT | Joint Frequency in WSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,12)  |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,12)  |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,12)  |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,12)  |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,12)  |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,12)  |
| AIRT | Joint Frequency in WSW Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,12)  |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,12)  |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,12)  |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,12)  |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,12)  |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,12)  |
| AIRT | Joint Frequency in W Sector                  |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,13)  |
| AIRT | for wind speed class 1 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,13)  |
| AIRT | for wind speed class 1 and stability class C | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,13)  |
| AIRT | for wind speed class 1 and stability class D | 2.520E-03  | 0.000E+00 | ---             | DFREQ(1,4,13)  |
| AIRT | for wind speed class 1 and stability class E | 2.330E-03  | 0.000E+00 | ---             | DFREQ(1,5,13)  |
| AIRT | for wind speed class 1 and stability class F | 1.030E-03  | 0.000E+00 | ---             | DFREQ(1,6,13)  |
| AIRT | Joint Frequency in W Sector                  |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 3.900E-04  | 0.000E+00 | ---             | DFREQ(2,1,13)  |
| AIRT | for wind speed class 2 and stability class B | 3.700E-04  | 0.000E+00 | ---             | DFREQ(2,2,13)  |
| AIRT | for wind speed class 2 and stability class C | 4.200E-04  | 0.000E+00 | ---             | DFREQ(2,3,13)  |
| AIRT | for wind speed class 2 and stability class D | 3.940E-03  | 0.000E+00 | ---             | DFREQ(2,4,13)  |
| AIRT | for wind speed class 2 and stability class E | 3.700E-04  | 0.000E+00 | ---             | DFREQ(2,5,13)  |
| AIRT | for wind speed class 2 and stability class F | 2.000E-05  | 0.000E+00 | ---             | DFREQ(2,6,13)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 23  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in W Sector                  |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 2.200E-04  | 0.000E+00 | ---             | DFREQ(3,1,13)  |
| AIRT | for wind speed class 3 and stability class B | 1.700E-04  | 0.000E+00 | ---             | DFREQ(3,2,13)  |
| AIRT | for wind speed class 3 and stability class C | 4.900E-04  | 0.000E+00 | ---             | DFREQ(3,3,13)  |
| AIRT | for wind speed class 3 and stability class D | 3.130E-03  | 0.000E+00 | ---             | DFREQ(3,4,13)  |
| AIRT | for wind speed class 3 and stability class E | 1.000E-04  | 0.000E+00 | ---             | DFREQ(3,5,13)  |
| AIRT | for wind speed class 3 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(3,6,13)  |
| AIRT | Joint Frequency in W Sector                  |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,13)  |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,13)  |
| AIRT | for wind speed class 4 and stability class C | 1.000E-04  | 0.000E+00 | ---             | DFREQ(4,3,13)  |
| AIRT | for wind speed class 4 and stability class D | 2.000E-05  | 0.000E+00 | ---             | DFREQ(4,4,13)  |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,13)  |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,13)  |
| AIRT | Joint Frequency in W Sector                  |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,13)  |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,13)  |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,13)  |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,13)  |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,13)  |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,13)  |
| AIRT | Joint Frequency in W Sector                  |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,13)  |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,13)  |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,13)  |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,13)  |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,13)  |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,13)  |
| AIRT | Joint Frequency in WNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,14)  |
| AIRT | for wind speed class 1 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,2,14)  |
| AIRT | for wind speed class 1 and stability class C | 7.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,14)  |
| AIRT | for wind speed class 1 and stability class D | 3.430E-03  | 0.000E+00 | ---             | DFREQ(1,4,14)  |
| AIRT | for wind speed class 1 and stability class E | 2.790E-03  | 0.000E+00 | ---             | DFREQ(1,5,14)  |
| AIRT | for wind speed class 1 and stability class F | 2.350E-03  | 0.000E+00 | ---             | DFREQ(1,6,14)  |
| AIRT | Joint Frequency in WNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 1.700E-04  | 0.000E+00 | ---             | DFREQ(2,1,14)  |
| AIRT | for wind speed class 2 and stability class B | 2.400E-04  | 0.000E+00 | ---             | DFREQ(2,2,14)  |
| AIRT | for wind speed class 2 and stability class C | 5.400E-04  | 0.000E+00 | ---             | DFREQ(2,3,14)  |
| AIRT | for wind speed class 2 and stability class D | 7.690E-03  | 0.000E+00 | ---             | DFREQ(2,4,14)  |
| AIRT | for wind speed class 2 and stability class E | 1.790E-03  | 0.000E+00 | ---             | DFREQ(2,5,14)  |
| AIRT | for wind speed class 2 and stability class F | 3.400E-04  | 0.000E+00 | ---             | DFREQ(2,6,14)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 24  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in WNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 1.500E-04  | 0.000E+00 | ---             | DFREQ(3,1,14)  |
| AIRT | for wind speed class 3 and stability class B | 1.000E-04  | 0.000E+00 | ---             | DFREQ(3,2,14)  |
| AIRT | for wind speed class 3 and stability class C | 3.400E-04  | 0.000E+00 | ---             | DFREQ(3,3,14)  |
| AIRT | for wind speed class 3 and stability class D | 4.950E-03  | 0.000E+00 | ---             | DFREQ(3,4,14)  |
| AIRT | for wind speed class 3 and stability class E | 1.700E-04  | 0.000E+00 | ---             | DFREQ(3,5,14)  |
| AIRT | for wind speed class 3 and stability class F | 2.000E-05  | 0.000E+00 | ---             | DFREQ(3,6,14)  |
| AIRT | Joint Frequency in WNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,14)  |
| AIRT | for wind speed class 4 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,2,14)  |
| AIRT | for wind speed class 4 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,3,14)  |
| AIRT | for wind speed class 4 and stability class D | 5.000E-05  | 0.000E+00 | ---             | DFREQ(4,4,14)  |
| AIRT | for wind speed class 4 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,5,14)  |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,14)  |
| AIRT | Joint Frequency in WNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,14)  |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,14)  |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,14)  |
| AIRT | for wind speed class 5 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,4,14)  |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,14)  |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,14)  |
| AIRT | Joint Frequency in WNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,14)  |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,14)  |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,14)  |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,14)  |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,14)  |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,14)  |
| AIRT | Joint Frequency in NW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(1,1,15)  |
| AIRT | for wind speed class 1 and stability class B | 2.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,15)  |
| AIRT | for wind speed class 1 and stability class C | 1.200E-04  | 0.000E+00 | ---             | DFREQ(1,3,15)  |
| AIRT | for wind speed class 1 and stability class D | 4.680E-03  | 0.000E+00 | ---             | DFREQ(1,4,15)  |
| AIRT | for wind speed class 1 and stability class E | 6.730E-03  | 0.000E+00 | ---             | DFREQ(1,5,15)  |
| AIRT | for wind speed class 1 and stability class F | 5.460E-03  | 0.000E+00 | ---             | DFREQ(1,6,15)  |
| AIRT | Joint Frequency in NW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 2.200E-04  | 0.000E+00 | ---             | DFREQ(2,1,15)  |
| AIRT | for wind speed class 2 and stability class B | 3.700E-04  | 0.000E+00 | ---             | DFREQ(2,2,15)  |
| AIRT | for wind speed class 2 and stability class C | 9.500E-04  | 0.000E+00 | ---             | DFREQ(2,3,15)  |
| AIRT | for wind speed class 2 and stability class D | 1.616E-02  | 0.000E+00 | ---             | DFREQ(2,4,15)  |
| AIRT | for wind speed class 2 and stability class E | 1.060E-02  | 0.000E+00 | ---             | DFREQ(2,5,15)  |
| AIRT | for wind speed class 2 and stability class F | 1.760E-03  | 0.000E+00 | ---             | DFREQ(2,6,15)  |



# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 25  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter                                    | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| AIRT | Joint Frequency in NW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 3 and stability class A | 2.400E-04  | 0.000E+00 | ---             | DFREQ(3,1,15)  |
| AIRT | for wind speed class 3 and stability class B | 3.900E-04  | 0.000E+00 | ---             | DFREQ(3,2,15)  |
| AIRT | for wind speed class 3 and stability class C | 1.080E-03  | 0.000E+00 | ---             | DFREQ(3,3,15)  |
| AIRT | for wind speed class 3 and stability class D | 1.709E-02  | 0.000E+00 | ---             | DFREQ(3,4,15)  |
| AIRT | for wind speed class 3 and stability class E | 4.870E-03  | 0.000E+00 | ---             | DFREQ(3,5,15)  |
| AIRT | for wind speed class 3 and stability class F | 7.000E-05  | 0.000E+00 | ---             | DFREQ(3,6,15)  |
| AIRT | Joint Frequency in NW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 4 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,1,15)  |
| AIRT | for wind speed class 4 and stability class B | 5.000E-05  | 0.000E+00 | ---             | DFREQ(4,2,15)  |
| AIRT | for wind speed class 4 and stability class C | 5.000E-05  | 0.000E+00 | ---             | DFREQ(4,3,15)  |
| AIRT | for wind speed class 4 and stability class D | 2.790E-03  | 0.000E+00 | ---             | DFREQ(4,4,15)  |
| AIRT | for wind speed class 4 and stability class E | 7.000E-05  | 0.000E+00 | ---             | DFREQ(4,5,15)  |
| AIRT | for wind speed class 4 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(4,6,15)  |
| AIRT | Joint Frequency in NW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 5 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,1,15)  |
| AIRT | for wind speed class 5 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,2,15)  |
| AIRT | for wind speed class 5 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,3,15)  |
| AIRT | for wind speed class 5 and stability class D | 1.000E-04  | 0.000E+00 | ---             | DFREQ(5,4,15)  |
| AIRT | for wind speed class 5 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,5,15)  |
| AIRT | for wind speed class 5 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(5,6,15)  |
| AIRT | Joint Frequency in NW Sector                 |            |           |                 |                |
| AIRT | for wind speed class 6 and stability class A | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,1,15)  |
| AIRT | for wind speed class 6 and stability class B | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,2,15)  |
| AIRT | for wind speed class 6 and stability class C | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,3,15)  |
| AIRT | for wind speed class 6 and stability class D | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,4,15)  |
| AIRT | for wind speed class 6 and stability class E | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,5,15)  |
| AIRT | for wind speed class 6 and stability class F | 0.000E+00  | 0.000E+00 | ---             | DFREQ(6,6,15)  |
| AIRT | Joint Frequency in NNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 1 and stability class A | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,1,16)  |
| AIRT | for wind speed class 1 and stability class B | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,2,16)  |
| AIRT | for wind speed class 1 and stability class C | 5.000E-05  | 0.000E+00 | ---             | DFREQ(1,3,16)  |
| AIRT | for wind speed class 1 and stability class D | 4.410E-03  | 0.000E+00 | ---             | DFREQ(1,4,16)  |
| AIRT | for wind speed class 1 and stability class E | 1.408E-02  | 0.000E+00 | ---             | DFREQ(1,5,16)  |
| AIRT | for wind speed class 1 and stability class F | 1.741E-02  | 0.000E+00 | ---             | DFREQ(1,6,16)  |
| AIRT | Joint Frequency in NNW Sector                |            |           |                 |                |
| AIRT | for wind speed class 2 and stability class A | 1.500E-04  | 0.000E+00 | ---             | DFREQ(2,1,16)  |
| AIRT | for wind speed class 2 and stability class B | 4.700E-04  | 0.000E+00 | ---             | DFREQ(2,2,16)  |
| AIRT | for wind speed class 2 and stability class C | 9.500E-04  | 0.000E+00 | ---             | DFREQ(2,3,16)  |
| AIRT | for wind speed class 2 and stability class D | 1.307E-02  | 0.000E+00 | ---             | DFREQ(2,4,16)  |
| AIRT | for wind speed class 2 and stability class E | 1.694E-02  | 0.000E+00 | ---             | DFREQ(2,5,16)  |
| AIRT | for wind speed class 2 and stability class F | 3.330E-03  | 0.000E+00 | ---             | DFREQ(2,6,16)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 26  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default    | RESRAD computed | Parameter Name |
|------|--|------------|------------|-----------------|----------------|
| AIRT | Joint Frequency in NNW Sector                        |            |            |                 |                |
| AIRT | for wind speed class 3 and stability class A         | 2.400E-04  | 0.000E+00  | ---             | DFREQ(3,1,16)  |
| AIRT | for wind speed class 3 and stability class B         | 9.800E-04  | 0.000E+00  | ---             | DFREQ(3,2,16)  |
| AIRT | for wind speed class 3 and stability class C         | 1.030E-03  | 0.000E+00  | ---             | DFREQ(3,3,16)  |
| AIRT | for wind speed class 3 and stability class D         | 1.951E-02  | 0.000E+00  | ---             | DFREQ(3,4,16)  |
| AIRT | for wind speed class 3 and stability class E         | 1.165E-02  | 0.000E+00  | ---             | DFREQ(3,5,16)  |
| AIRT | for wind speed class 3 and stability class F         | 2.400E-04  | 0.000E+00  | ---             | DFREQ(3,6,16)  |
| AIRT | Joint Frequency in NNW Sector                        |            |            |                 |                |
| AIRT | for wind speed class 4 and stability class A         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(4,1,16)  |
| AIRT | for wind speed class 4 and stability class B         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(4,2,16)  |
| AIRT | for wind speed class 4 and stability class C         | 2.200E-04  | 0.000E+00  | ---             | DFREQ(4,3,16)  |
| AIRT | for wind speed class 4 and stability class D         | 6.610E-03  | 0.000E+00  | ---             | DFREQ(4,4,16)  |
| AIRT | for wind speed class 4 and stability class E         | 2.300E-03  | 0.000E+00  | ---             | DFREQ(4,5,16)  |
| AIRT | for wind speed class 4 and stability class F         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(4,6,16)  |
| AIRT | Joint Frequency in NNW Sector                        |            |            |                 |                |
| AIRT | for wind speed class 5 and stability class A         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(5,1,16)  |
| AIRT | for wind speed class 5 and stability class B         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(5,2,16)  |
| AIRT | for wind speed class 5 and stability class C         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(5,3,16)  |
| AIRT | for wind speed class 5 and stability class D         | 7.100E-04  | 0.000E+00  | ---             | DFREQ(5,4,16)  |
| AIRT | for wind speed class 5 and stability class E         | 2.700E-04  | 0.000E+00  | ---             | DFREQ(5,5,16)  |
| AIRT | for wind speed class 5 and stability class F         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(5,6,16)  |
| AIRT | Joint Frequency in NNW Sector                        |            |            |                 |                |
| AIRT | for wind speed class 6 and stability class A         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(6,1,16)  |
| AIRT | for wind speed class 6 and stability class B         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(6,2,16)  |
| AIRT | for wind speed class 6 and stability class C         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(6,3,16)  |
| AIRT | for wind speed class 6 and stability class D         | 7.000E-05  | 0.000E+00  | ---             | DFREQ(6,4,16)  |
| AIRT | for wind speed class 6 and stability class E         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(6,5,16)  |
| AIRT | for wind speed class 6 and stability class F         | 0.000E+00  | 0.000E+00  | ---             | DFREQ(6,6,16)  |
| AIRT | Spacing of points used for areal integration, (m)    | 1.000E+01  | 1.000E+01  | ---             | ATGRID         |
| GWTR | fractional accuracy desired - convergence criteria   | 1.000E-03  | 1.000E-03  | ---             | EPS            |
| GWTR | Distance from d/g edge of contamination to Well, (m) | 1.000E+02  | 1.000E+02  | ---             | OFFFLPAQW      |
| GWTR | Contamination to Well c/c distance normal to flow, m | 0.000E+00  | 0.000E+00  | ---             | OFFFLNAQW      |
| GWTR | Distance from d/g edge of cz to surface water, (m)   | 4.500E+02  | 4.500E+02  | ---             | OFFFLPAQS      |
| GWTR | Contamination to near edge of swb,c/c normal to flow | -1.500E+02 | -1.500E+02 | ---             | OFFFLNAQSN     |
| GWTR | Contamination to far edge of swb, c/c normal to flow | 1.500E+02  | 1.500E+02  | ---             | OFFFLNAQSF     |
| GWTR | Number of main sub zones in primary contamination    | 1          | 1          | ---             | NPCZ           |
| GWTR | Number of minor sub zones in last main PC sub zone   | 1          | 1          | ---             | NPCZF          |
| GWTR | Number of main sub zones in each unsaturated stratum | 1          | 1          | ---             | NPSS           |
| GWTR | Number of minor sub zones in last main UZ sub zone   | 1          | 1          | ---             | NPSSF          |
| GWTR | Number of main sub zones in saturated stratum        | 1          | 1          | ---             | NAQS           |
| GWTR | Number of minor sub zones in last main SZ sub zone   | 1          | 1          | ---             | NAQSF          |
| GWTR | Distribution coefficient and longitudinal dispersion | 1          | 1          | ---             |                |

| 1 = Nuclide specific distribution coefficients in all subzones. Longitudinal dispersion in all but the subzone of transformation.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 27  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

### Site-Specific Parameter Summary (continued)

| Menu | Parameter   | User Input | Default   | RESRAD computed | Parameter Name |
|------|---|------------|-----------|-----------------|----------------|
| GWTR | Retardation factor flag for groundwater transport                                 | 0          | 0         | ---             |                |
|      | 0 = (total porosity + distribution coefficient*dry bulk density) / total porosity |            |           |                 |                |
| USZN | Number of unsaturated zone strata   | 1          | 1         | ---             | NS             |
| USZN | Unsat. zone 1, thickness (m)  | 2.000E+00  | 4.000E+00 | ---             | H(1)           |
| USZN | Unsat. zone 1, soil density (g/cm**3)   | 1.700E+00  | 1.500E+00 | ---             | DENSUZ(1)      |
| USZN | Unsat. zone 1, total porosity   | 3.600E-01  | 4.000E-01 | ---             | TPUZ(1)        |
| USZN | Unsat. zone 1, effective porosity   | 2.500E-01  | 2.000E-01 | ---             | EPUZ(1)        |
| USZN | Unsat. zone 1, field capacity   | 2.000E-01  | 3.000E-01 | ---             | FCUZ(1)        |
| USZN | Unsat. zone 1, hydraulic conductivity (m/yr)                                      | 1.400E+02  | 1.000E+01 | ---             | HCUZ(1)        |
| USZN | Unsat. zone 1, soil-specific b parameter  | 1.400E+00  | 5.300E+00 | ---             | BUZ(1)         |
| USZN | Unsat. zone 1, longitudinal dispersivity (m)                                      | 1.000E-01  | 1.000E-01 | ---             | ALPHALU(1)     |
| SZNE | Well pump intake depth (m below water table)                                      | 5.000E+00  | 1.000E+01 | ---             | DWIBWT         |
| SZNE | Depth of aquifer contributing to surface water body                               | 5.000E+00  | 1.000E+01 | ---             | DPTHASQW       |
| SZNE | Thickness of saturated zone (m)   | 1.000E+02  | 1.000E+02 | ---             | DPTHASQ        |
| SZNE | Density of saturated zone (g/cm**3)   | 1.700E+00  | 1.500E+00 | ---             | DENSAQ         |
| SZNE | Saturated zone total porosity   | 3.600E-01  | 4.000E-01 | ---             | TPSZ           |
| SZNE | Saturated zone effective porosity   | 2.500E-01  | 2.000E-01 | ---             | EPSZ           |
| SZNE | Saturated zone hydraulic conductivity (m/yr)                                      | 1.400E+03  | 1.000E+02 | ---             | HCSZ           |
| SZNE | Saturated zone hydraulic gradient to well   | 3.000E-02  | 2.000E-02 | ---             | HGW            |
| SZNE | Satur. zone hydraulic gradient to surface water body                              | 3.000E-02  | 2.000E-02 | ---             | HGSW           |
| SZNE | longitudinal dispersivity to well (m)   | 3.000E+00  | 3.000E+00 | ---             | ALPHALOW       |
| SZNE | longitudinal dispersivity to SWB (m)  | 1.000E+01  | 1.000E+01 | ---             | ALPHALOSW      |
| SZNE | lateral (horizontal) dispersivity to well (m)                                     | 4.000E-01  | 4.000E-01 | ---             | ALPHATW        |
| SZNE | lateral (horizontal) dispersivity to SWB (m)                                      | 1.000E+00  | 1.000E+00 | ---             | ALPHATSW       |
| SZNE | lateral (vertical) dispersivity to well (m)                                       | 2.000E-02  | 2.000E-02 | ---             | ALPHAVW        |
| SZNE | lateral (vertical) dispersivity to SWB (m)  | 6.000E-02  | 6.000E-02 | ---             | ALPHAVSW       |
| SZNE | Irrigation rate over aquifer to well (m/yr)                                       | not used   | 0.000E+00 | ---             | RIAQW          |
| SZNE | Irrigation rate over aquifer to SWB (m/yr)  | not used   | 0.000E+00 | ---             | RIAQSW         |
| SZNE | Evapotranspiration coefficient over aquifer to well                               | not used   | 1.000E+00 | ---             | EVAPTRAQW      |
| SZNE | Evapotranspiration coefficient over aquifer to SWB                                | not used   | 1.000E+00 | ---             | EVAPTRAQSW     |
| SZNE | Runoff coefficient over aquifer to well   | not used   | 1.000E+00 | ---             | RUNOFFAQW      |
| SZNE | Runoff coefficient over aquifer to SWB  | not used   | 1.000E+00 | ---             | RUNOFFAQSW     |
| SZNE | Concentration of mobile colloids in the aquifer                                   | 0.000E+00  | 0.000E+00 | ---             | CCOL           |
| SZNE | Water - Soil Distribution coefficient of colloids                                 | 0.000E+00  | 0.000E+00 | ---             | K1Co1          |
| SZNE | Water - Mobile Colloids Distribution coefficient                                  | 0.000E+00  | 0.000E+00 | ---             | K3Co1          |
| WTRU | Drinking water intake (L/yr)  | 0.000E+00  | 5.100E+02 | ---             | DWI            |
| WTRU | Fraction of drinking water from surface water                                     | 0.000E+00  | 0.000E+00 | ---             | FSWD           |
| WTRU | Fraction of drinking water from well water  | 0.000E+00  | 1.000E+00 | ---             | FWWD           |
| WTRU | Fraction of household water from surface water                                    | 0.000E+00  | 0.000E+00 | ---             | FSWHH          |
| WTRU | Fraction of household water from well water                                       | 0.000E+00  | 1.000E+00 | ---             | FWWHH          |
| WTRU | Livestock water intake for meat 1 (L/day)   | 5.000E+01  | 5.000E+01 | ---             | LWI(1)         |
| WTRU | Fraction of livestock water 1 from surface water                                  | 1.000E+00  | 0.000E+00 | ---             | FSWL(1)        |
| WTRU | Fraction of livestock water 1 from well water                                     | 0.000E+00  | 1.000E+00 | ---             | FWWL(1)        |
| WTRU | Livestock water intake for milk (L/day)   | 0.000E+00  | 1.600E+02 | ---             | LWI(2)         |

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 28  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

### Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| WTRU | Fraction of dairy cow water from surface water           | 0.000E+00  | 0.000E+00 | ---             | FSWLV(2)       |
| WTRU | Fraction of dairy cow water from well water              | 0.000E+00  | 1.000E+00 | ---             | FWWL(2)        |
| WTRU | Irrigation rate in Agricultural Area 1 (m/yr)            | 0.000E+00  | 2.000E-01 | ---             | RIRRI(1)       |
| WTRU | Fraction of irrigation water 1 from surface water        | 0.000E+00  | 0.000E+00 | ---             | FSWIR(1)       |
| WTRU | Fraction of irrigation water 1 from well water           | 0.000E+00  | 1.000E+00 | ---             | FWWIR(1)       |
| WTRU | Irrigation rate in Agricultural Area 2 (m/yr)            | 0.000E+00  | 2.000E-01 | ---             | RIRRI(2)       |
| WTRU | Fraction of irrigation water 2 from surface water        | 0.000E+00  | 0.000E+00 | ---             | FSWIR(2)       |
| WTRU | Fraction of irrigation water 2 from well water           | 0.000E+00  | 1.000E+00 | ---             | FWWIR(2)       |
| WTRU | Irrigation rate in Agricultural Area 3 (m/yr)            | 0.000E+00  | 2.000E-01 | ---             | RIRRI(3)       |
| WTRU | Fraction of irrigation water 3 from surface water        | 0.000E+00  | 0.000E+00 | ---             | FSWIR(3)       |
| WTRU | Fraction of irrigation water 3 from well water           | 0.000E+00  | 1.000E+00 | ---             | FWWIR(3)       |
| WTRU | Irrigation rate in Agricultural Area 4 (m/yr)            | 0.000E+00  | 2.000E-01 | ---             | RIRRI(4)       |
| WTRU | Fraction of irrigation water 4 from surface water        | 0.000E+00  | 0.000E+00 | ---             | FSWIR(4)       |
| WTRU | Fraction of irrigation water 4 from well water           | 0.000E+00  | 1.000E+00 | ---             | FWWIR(4)       |
| WTRU | Irrigation rate in Offsite dwelling site (m/yr)          | 0.000E+00  | 2.000E-01 | ---             | RIRRIDWELL     |
| WTRU | Fraction of irrigation water from surface water          | 0.000E+00  | 0.000E+00 | ---             | FSWIRDWELL     |
| WTRU | Fraction of irrigation water from well water             | 0.000E+00  | 1.000E+00 | ---             | FWWIRDWELL     |
| WTRU | Well pumping rate (m <sup>3</sup> /yr)                   | 0.000E+00  | 5.100E+03 | ---             | UW             |
| SWBY | Sediment delivery ratio                                  | 1.000E+00  | 1.000E+00 | ---             | SDR            |
| SWBY | Volume of surface water body                             | 1.000E+05  | 1.500E+05 | ---             | VLAKE          |
| SWBY | Mean residence time of water in surface water body       | 2.740E-03  | 1.000E+00 | ---             | TLAKE          |
| SWBY | Surface area of water in surface water body              | 1.000E+05  | 9.000E+04 | ---             | ALAKE          |
| INGE | Fish consumption (kg/yr)                                 | 4.900E+01  | 5.400E+00 | ---             | DFI(1)         |
| INGE | Fraction of Fish from affected area                      | 1.000E+00  | 5.000E-01 | ---             | FFISH(1)       |
| INGE | Other Aquatic food consumption (kg/yr)                   | 0.000E+00  | 9.000E-01 | ---             | DFI(2)         |
| INGE | Fraction of Aquatic food from affected area              | 1.000E+00  | 5.000E-01 | ---             | FFISH(2)       |
| INGE | Non-Leafy vegetables consumption (kg/yr)                 | 8.260E+01  | 1.600E+02 | ---             | DVI(1)         |
| INGE | Fraction of vegetable 1 from affected area               | 1.000E+00  | 5.000E-01 | ---             | FVEG(1)        |
| INGE | Leafy vegetable consumption (kg/yr)                      | 5.900E+01  | 1.400E+01 | ---             | DVI(2)         |
| INGE | Fraction of vegetable 2 from affected area               | 1.000E+00  | 5.000E-01 | ---             | FVEG(2)        |
| INGE | Meat 1 consumption (kg/yr)                               | 7.260E+01  | 6.300E+01 | ---             | DMI(1)         |
| INGE | Fraction of meat 1 from affected area                    | 1.000E+00  | 1.000E+00 | ---             | FMEMI(1)       |
| INGE | Milk consumption (L/yr)                                  | 0.000E+00  | 9.200E+01 | ---             | DMI(2)         |
| INGE | Fraction of milk from affected area                      | 1.000E+00  | 1.000E+00 | ---             | FMEMI(2)       |
| INGE | Soil ingestion rate (g/yr)                               | 1.830E+01  | 3.650E+01 | ---             | SOIL           |
| VEGE | Wet weight crop yield for Non-Leafy (kg/m <sup>2</sup> ) | 1.750E+00  | 7.000E-01 | ---             | YIELD(1)       |
| VEGE | Growing Season for Non-Leafy (years)                     | 1.700E-01  | 1.700E-01 | ---             | GROWTIME(1)    |
| VEGE | Translocation Factor for Non-Leafy                       | 1.000E-01  | 1.000E-01 | ---             | FOLI_F(1)      |
| VEGE | Weathering Removal Constant for Non-Leafy                | 1.800E+01  | 2.000E+01 | ---             | RWEATHER(1)    |
| VEGE | Foliar Interception Fraction for dust Non-Leafy          | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(1,1)  |
| VEGE | Foliar Interception-n Fract-n for irrigation Non-Leafy   | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(1,2)  |
| VEGE | Depth of roots for Non-Leafy (m)                         | 9.000E-01  | 1.200E+00 | ---             | DROOT(1)       |
| VEGE | Wet weight crop yield for Leafy (kg/m <sup>2</sup> )     | 1.500E+00  | 1.500E+00 | ---             | YIELD(2)       |
| VEGE | Growing Season for Leafy (years)                         | 2.500E-01  | 2.500E-01 | ---             | GROWTIME(2)    |

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 29

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

### Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| VEGE | Translocation Factor for Leafy                       | 1.000E+00  | 1.000E+00 | ---             | FOLI_F(2)      |
| VEGE | Weathering Removal Constant for Leafy                | 1.800E+01  | 2.000E+01 | ---             | RWEATHER(2)    |
| VEGE | Foliar Interception Fraction for Leafy               | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(2,1)  |
| VEGE | Foliar Interception-n Fract-n for irrigation Leafy   | 6.700E-01  | 2.500E-01 | ---             | FINTCEPT(2,2)  |
| VEGE | Depth of roots for Leafy (m)                         | 9.000E-01  | 9.000E-01 | ---             | DROOT(2)       |
| VEGE | Wet weight crop yield for Pasture (kg/m**2)          | 1.100E+00  | 1.100E+00 | ---             | YIELD(3)       |
| VEGE | Growing Season for Pasture (years)                   | 8.000E-02  | 8.000E-02 | ---             | GROWTIME(3)    |
| VEGE | Translocation Factor for Pasture                     | 1.000E+00  | 1.000E+00 | ---             | FOLI_F(3)      |
| VEGE | Weathering Removal Constant for Pasture              | 1.800E+01  | 2.000E+01 | ---             | RWEATHER(3)    |
| VEGE | Foliar Interception Fraction for dust Pasture        | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(3,1)  |
| VEGE | Foliar Interception-n Fract-n for irrigation Pasture | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(3,2)  |
| VEGE | Depth of roots for Pasture (m)                       | 9.000E-01  | 9.000E-01 | ---             | DROOT(3)       |
| VEGE | Wet weight crop yield for Grain (kg/m**2)            | 7.000E-01  | 7.000E-01 | ---             | YIELD(4)       |
| VEGE | Growing Season for Grain (years)                     | 1.700E-01  | 1.700E-01 | ---             | GROWTIME(4)    |
| VEGE | Translocation Factor for Grain                       | 1.000E-01  | 1.000E-01 | ---             | FOLI_F(4)      |
| VEGE | Weathering Removal Constant for Grain                | 1.800E+01  | 2.000E+01 | ---             | RWEATHER(4)    |
| VEGE | Foliar Interception Fraction for dust Grain          | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(4,1)  |
| VEGE | Foliar Interception-n Fract-n for irrigation Grain   | 2.500E-01  | 2.500E-01 | ---             | FINTCEPT(4,2)  |
| VEGE | Depth of roots for Grain (m)                         | 9.000E-01  | 1.200E+00 | ---             | DROOT(4)       |
| LINT | Feed 1 intake by livestock 1 (kg/day)                | 2.250E+00  | 1.400E+01 | ---             | LFI(1,1)       |
| LINT | Soil intake with feed 1 by livestock 1 (kg/day)      | 5.000E-01  | 1.000E-01 | ---             | LSI(1,1)       |
| LINT | Feed 1 intake by dairy cow (kg/day)                  | 0.000E+00  | 4.400E+01 | ---             | LFI(2,1)       |
| LINT | Soil intake with feed 1 by dairy cow (kg/day)        | 0.000E+00  | 4.000E-01 | ---             | LSI(2,1)       |
| LINT | Feed 2 intake by livestock 1 (kg/day)                | 0.000E+00  | 5.400E+01 | ---             | LFI(1,2)       |
| LINT | Soil intake with feed 2 by livestock 1 (kg/day)      | 0.000E+00  | 4.000E-01 | ---             | LSI(1,2)       |
| LINT | Feed 2 intake by dairy cow (kg/day)                  | 0.000E+00  | 1.100E+01 | ---             | LFI(2,2)       |
| LINT | Soil intake with feed 2 by dairy cow (kg/day)        | 0.000E+00  | 1.000E-01 | ---             | LSI(2,2)       |
| INHE | Inhalation rate (m**3/yr)                            | 8.400E+03  | 8.400E+03 | ---             | INHALR         |
| INHE | Mass loading above primary contamination (g/m**3)    | 1.480E-05  | 1.000E-04 | ---             | MLFD           |
| INHE | Mass loading for inhalation (g/m**3)                 | 1.480E-05  | 1.000E-04 | ---             | MLINH          |
| INHE | Indoor dust filtration factor, inhalation            | 1.000E+00  | 4.000E-01 | ---             | SHF3           |
| INHE | Shielding factor, external gamma                     | 2.730E-01  | 7.000E-01 | ---             | SHF1           |
| INHE | Shape factor flag, external gamma                    | -1.000E+00 | 1.000E+00 | noncircular     | FS             |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 30  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter   | User Input | Default   | RESRAD computed | Parameter Name |
|------|---|------------|-----------|-----------------|----------------|
| SEXT | Onsite shape factor array (used if non-circular):   |            |           |                 |                |
| SEXT | Radii of shape factor array (used if non-circular): |            |           |                 |                |
| SEXT | Outer annular radius (m), ring 1:                   | 7.917E+00  | 6.000E+00 | ---             | RAD_SHAPE ( 1) |
| SEXT | Outer annular radius (m), ring 2:                   | 1.583E+01  | 1.200E+01 | ---             | RAD_SHAPE ( 2) |
| SEXT | Outer annular radius (m), ring 3:                   | 2.375E+01  | 1.800E+01 | ---             | RAD_SHAPE ( 3) |
| SEXT | Outer annular radius (m), ring 4:                   | 3.167E+01  | 2.400E+01 | ---             | RAD_SHAPE ( 4) |
| SEXT | Outer annular radius (m), ring 5:                   | 3.958E+01  | 3.000E+01 | ---             | RAD_SHAPE ( 5) |
| SEXT | Outer annular radius (m), ring 6:                   | 4.750E+01  | 3.600E+01 | ---             | RAD_SHAPE ( 6) |
| SEXT | Outer annular radius (m), ring 7:                   | 5.542E+01  | 4.200E+01 | ---             | RAD_SHAPE ( 7) |
| SEXT | Outer annular radius (m), ring 8:                   | 6.333E+01  | 4.800E+01 | ---             | RAD_SHAPE ( 8) |
| SEXT | Outer annular radius (m), ring 9:                   | 7.125E+01  | 5.400E+01 | ---             | RAD_SHAPE ( 9) |
| SEXT | Outer annular radius (m), ring 10:                  | 7.917E+01  | 6.000E+01 | ---             | RAD_SHAPE(10)  |
| SEXT | Outer annular radius (m), ring 11:                  | 8.708E+01  | 6.600E+01 | ---             | RAD_SHAPE(11)  |
| SEXT | Outer annular radius (m), ring 12:                  | 9.500E+01  | 7.200E+01 | ---             | RAD_SHAPE(12)  |
| SEXT | Fractions of annular areas within AREA:             |            |           |                 |                |
| SEXT | Ring 1  | 1.000E+00  | 1.000E+00 | ---             | FRACA ( 1)     |
| SEXT | Ring 2  | 1.000E+00  | 1.000E+00 | ---             | FRACA ( 2)     |
| SEXT | Ring 3  | 1.000E+00  | 1.000E+00 | ---             | FRACA ( 3)     |
| SEXT | Ring 4  | 9.800E-01  | 1.000E+00 | ---             | FRACA ( 4)     |
| SEXT | Ring 5  | 1.000E+00  | 1.000E+00 | ---             | FRACA ( 5)     |
| SEXT | Ring 6  | 1.000E+00  | 1.000E+00 | ---             | FRACA ( 6)     |
| SEXT | Ring 7  | 8.900E-01  | 1.000E+00 | ---             | FRACA ( 7)     |
| SEXT | Ring 8  | 6.500E-01  | 1.000E+00 | ---             | FRACA ( 8)     |
| SEXT | Ring 9  | 5.500E-01  | 7.700E-01 | ---             | FRACA ( 9)     |
| SEXT | Ring 10   | 4.500E-01  | 3.700E-01 | ---             | FRACA(10)      |
| SEXT | Ring 11   | 1.900E-01  | 1.700E-01 | ---             | FRACA(11)      |
| SEXT | Ring 12   | 3.300E-02  | 3.100E-02 | ---             | FRACA(12)      |
| SEXT | Shape factor array from offsite dwelling:           |            |           |                 |                |
| SEXT | Radii of shape factor array (used if non-circular): |            |           |                 |                |
| SEXT | Outer annular radius (m), ring 13:                  | 1.550E+01  | 1.325E+01 | ---             | RAD_SHAPE(13)  |
| SEXT | Outer annular radius (m), ring 14:                  | 3.100E+01  | 2.650E+01 | ---             | RAD_SHAPE(14)  |
| SEXT | Outer annular radius (m), ring 15:                  | 4.650E+01  | 3.975E+01 | ---             | RAD_SHAPE(15)  |
| SEXT | Outer annular radius (m), ring 16:                  | 6.200E+01  | 5.300E+01 | ---             | RAD_SHAPE(16)  |
| SEXT | Outer annular radius (m), ring 17:                  | 7.750E+01  | 6.625E+01 | ---             | RAD_SHAPE(17)  |
| SEXT | Outer annular radius (m), ring 18:                  | 9.300E+01  | 7.950E+01 | ---             | RAD_SHAPE(18)  |
| SEXT | Outer annular radius (m), ring 19:                  | 1.085E+02  | 9.275E+01 | ---             | RAD_SHAPE(19)  |
| SEXT | Outer annular radius (m), ring 20:                  | 1.240E+02  | 1.060E+02 | ---             | RAD_SHAPE(20)  |
| SEXT | Outer annular radius (m), ring 21:                  | 1.395E+02  | 1.193E+02 | ---             | RAD_SHAPE(21)  |
| SEXT | Outer annular radius (m), ring 22:                  | 1.550E+02  | 1.325E+02 | ---             | RAD_SHAPE(22)  |
| SEXT | Outer annular radius (m), ring 23:                  | 1.705E+02  | 1.458E+02 | ---             | RAD_SHAPE(23)  |
| SEXT | Outer annular radius (m), ring 24:                  | 1.860E+02  | 1.590E+02 | ---             | RAD_SHAPE(24)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 31  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter   | User Input | Default   | RESRAD computed | Parameter Name |
|------|---|------------|-----------|-----------------|----------------|
| SEXT | Fractions of annular areas within AREA:             |            |           |                 |                |
| SEXT | Ring 13   | 3.000E-01  | 0.000E+00 | ---             | FRACA (13)     |
| SEXT | Ring 14   | 3.000E-01  | 0.000E+00 | ---             | FRACA (14)     |
| SEXT | Ring 15   | 3.000E-01  | 0.000E+00 | ---             | FRACA (15)     |
| SEXT | Ring 16   | 2.500E-01  | 2.400E-02 | ---             | FRACA (16)     |
| SEXT | Ring 17   | 2.500E-01  | 1.900E-01 | ---             | FRACA (17)     |
| SEXT | Ring 18   | 2.500E-01  | 2.400E-01 | ---             | FRACA (18)     |
| SEXT | Ring 19   | 2.300E-01  | 2.000E-01 | ---             | FRACA (19)     |
| SEXT | Ring 20   | 1.700E-01  | 1.700E-01 | ---             | FRACA (20)     |
| SEXT | Ring 21   | 1.400E-01  | 1.500E-01 | ---             | FRACA (21)     |
| SEXT | Ring 22   | 1.200E-01  | 1.300E-01 | ---             | FRACA (22)     |
| SEXT | Ring 23   | 5.700E-02  | 1.200E-01 | ---             | FRACA (23)     |
| SEXT | Ring 24   | 1.300E-02  | 5.200E-02 | ---             | FRACA (24)     |
| SEXT | Shape factor array from offsite area 1:             |            |           |                 |                |
| SEXT | Radii of shape factor array (used if non-circular): |            |           |                 |                |
| SEXT | Outer annular radius (m), ring 25:                  | 1.100E+02  | 1.100E+02 | ---             | RAD_SHAPE (25) |
| SEXT | Outer annular radius (m), ring 26:                  | 1.147E+02  | 1.147E+02 | ---             | RAD_SHAPE (26) |
| SEXT | Outer annular radius (m), ring 27:                  | 1.301E+02  | 1.301E+02 | ---             | RAD_SHAPE (27) |
| SEXT | Outer annular radius (m), ring 28:                  | 1.492E+02  | 1.492E+02 | ---             | RAD_SHAPE (28) |
| SEXT | Outer annular radius (m), ring 29:                  | 1.684E+02  | 1.684E+02 | ---             | RAD_SHAPE (29) |
| SEXT | Outer annular radius (m), ring 30:                  | 1.875E+02  | 1.875E+02 | ---             | RAD_SHAPE (30) |
| SEXT | Outer annular radius (m), ring 31:                  | 2.066E+02  | 2.066E+02 | ---             | RAD_SHAPE (31) |
| SEXT | Outer annular radius (m), ring 32:                  | 2.257E+02  | 2.257E+02 | ---             | RAD_SHAPE (32) |
| SEXT | Outer annular radius (m), ring 33:                  | 2.449E+02  | 2.449E+02 | ---             | RAD_SHAPE (33) |
| SEXT | Outer annular radius (m), ring 34:                  | 2.640E+02  | 2.640E+02 | ---             | RAD_SHAPE (34) |
| SEXT | Outer annular radius (m), ring 35:                  | 2.660E+02  | 2.660E+02 | ---             | RAD_SHAPE (35) |
| SEXT | Outer annular radius (m), ring 36:                  | 2.730E+02  | 2.730E+02 | ---             | RAD_SHAPE (36) |
| SEXT | Fractions of annular areas within AREA:             |            |           |                 |                |
| SEXT | Ring 25   | 0.000E+00  | 0.000E+00 | ---             | FRACA (25)     |
| SEXT | Ring 26   | 4.668E-02  | 4.668E-02 | ---             | FRACA (26)     |
| SEXT | Ring 27   | 1.119E-01  | 1.119E-01 | ---             | FRACA (27)     |
| SEXT | Ring 28   | 1.203E-01  | 1.203E-01 | ---             | FRACA (28)     |
| SEXT | Ring 29   | 1.049E-01  | 1.049E-01 | ---             | FRACA (29)     |
| SEXT | Ring 30   | 9.312E-02  | 9.312E-02 | ---             | FRACA (30)     |
| SEXT | Ring 31   | 8.375E-02  | 8.375E-02 | ---             | FRACA (31)     |
| SEXT | Ring 32   | 7.612E-02  | 7.612E-02 | ---             | FRACA (32)     |
| SEXT | Ring 33   | 6.978E-02  | 6.978E-02 | ---             | FRACA (33)     |
| SEXT | Ring 34   | 6.442E-02  | 6.442E-02 | ---             | FRACA (34)     |
| SEXT | Ring 35   | 4.224E-02  | 4.224E-02 | ---             | FRACA (35)     |
| SEXT | Ring 36   | 1.114E-02  | 1.114E-02 | ---             | FRACA (36)     |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 32  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter   | User Input | Default   | RESRAD computed | Parameter Name |
|------|---|------------|-----------|-----------------|----------------|
| SEXT | Shape factor array from offsite area 2:             |            |           |                 |                |
| SEXT | Radii of shape factor array (used if non-circular): |            |           |                 |                |
| SEXT | Outer annular radius (m), ring 37:                  | 1.100E+02  | 1.100E+02 | ---             | RAD_SHAPE (37) |
| SEXT | Outer annular radius (m), ring 38:                  | 1.147E+02  | 1.147E+02 | ---             | RAD_SHAPE (38) |
| SEXT | Outer annular radius (m), ring 39:                  | 1.301E+02  | 1.301E+02 | ---             | RAD_SHAPE (39) |
| SEXT | Outer annular radius (m), ring 40:                  | 1.492E+02  | 1.492E+02 | ---             | RAD_SHAPE (40) |
| SEXT | Outer annular radius (m), ring 41:                  | 1.684E+02  | 1.684E+02 | ---             | RAD_SHAPE (41) |
| SEXT | Outer annular radius (m), ring 42:                  | 1.875E+02  | 1.875E+02 | ---             | RAD_SHAPE (42) |
| SEXT | Outer annular radius (m), ring 43:                  | 2.066E+02  | 2.066E+02 | ---             | RAD_SHAPE (43) |
| SEXT | Outer annular radius (m), ring 44:                  | 2.257E+02  | 2.257E+02 | ---             | RAD_SHAPE (44) |
| SEXT | Outer annular radius (m), ring 45:                  | 2.449E+02  | 2.449E+02 | ---             | RAD_SHAPE (45) |
| SEXT | Outer annular radius (m), ring 46:                  | 2.640E+02  | 2.640E+02 | ---             | RAD_SHAPE (46) |
| SEXT | Outer annular radius (m), ring 47:                  | 2.660E+02  | 2.660E+02 | ---             | RAD_SHAPE (47) |
| SEXT | Outer annular radius (m), ring 48:                  | 2.730E+02  | 2.730E+02 | ---             | RAD_SHAPE (48) |
| SEXT | Fractions of annular areas within AREA:             |            |           |                 |                |
| SEXT | Ring 37   | 0.000E+00  | 0.000E+00 | ---             | FRACA (37)     |
| SEXT | Ring 38   | 4.668E-02  | 4.668E-02 | ---             | FRACA (38)     |
| SEXT | Ring 39   | 1.119E-01  | 1.119E-01 | ---             | FRACA (39)     |
| SEXT | Ring 40   | 1.203E-01  | 1.203E-01 | ---             | FRACA (40)     |
| SEXT | Ring 41   | 1.049E-01  | 1.049E-01 | ---             | FRACA (41)     |
| SEXT | Ring 42   | 9.312E-02  | 9.312E-02 | ---             | FRACA (42)     |
| SEXT | Ring 43   | 8.375E-02  | 8.375E-02 | ---             | FRACA (43)     |
| SEXT | Ring 44   | 7.612E-02  | 7.612E-02 | ---             | FRACA (44)     |
| SEXT | Ring 45   | 6.978E-02  | 6.978E-02 | ---             | FRACA (45)     |
| SEXT | Ring 46   | 6.442E-02  | 6.442E-02 | ---             | FRACA (46)     |
| SEXT | Ring 47   | 4.224E-02  | 4.224E-02 | ---             | FRACA (47)     |
| SEXT | Ring 48   | 1.114E-02  | 1.114E-02 | ---             | FRACA (48)     |
| SEXT | Shape factor array from offsite area 3:             |            |           |                 |                |
| SEXT | Radii of shape factor array (used if non-circular): |            |           |                 |                |
| SEXT | Outer annular radius (m), ring 49:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (49) |
| SEXT | Outer annular radius (m), ring 50:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (50) |
| SEXT | Outer annular radius (m), ring 51:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (51) |
| SEXT | Outer annular radius (m), ring 52:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (52) |
| SEXT | Outer annular radius (m), ring 53:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (53) |
| SEXT | Outer annular radius (m), ring 54:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (54) |
| SEXT | Outer annular radius (m), ring 55:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (55) |
| SEXT | Outer annular radius (m), ring 56:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (56) |
| SEXT | Outer annular radius (m), ring 57:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (57) |
| SEXT | Outer annular radius (m), ring 58:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (58) |
| SEXT | Outer annular radius (m), ring 59:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (59) |
| SEXT | Outer annular radius (m), ring 60:                  | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (60) |



# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 33  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| SEXT | Fractions of annular areas within AREA:              |            |           |                 |                |
| SEXT | Ring 49  | 0.000E+00  | 0.000E+00 | ---             | FRACA (49)     |
| SEXT | Ring 50  | 0.000E+00  | 0.000E+00 | ---             | FRACA (50)     |
| SEXT | Ring 51  | 0.000E+00  | 0.000E+00 | ---             | FRACA (51)     |
| SEXT | Ring 52  | 0.000E+00  | 0.000E+00 | ---             | FRACA (52)     |
| SEXT | Ring 53  | 0.000E+00  | 0.000E+00 | ---             | FRACA (53)     |
| SEXT | Ring 54  | 0.000E+00  | 0.000E+00 | ---             | FRACA (54)     |
| SEXT | Ring 55  | 0.000E+00  | 0.000E+00 | ---             | FRACA (55)     |
| SEXT | Ring 56  | 0.000E+00  | 0.000E+00 | ---             | FRACA (56)     |
| SEXT | Ring 57  | 0.000E+00  | 0.000E+00 | ---             | FRACA (57)     |
| SEXT | Ring 58  | 0.000E+00  | 0.000E+00 | ---             | FRACA (58)     |
| SEXT | Ring 59  | 0.000E+00  | 0.000E+00 | ---             | FRACA (59)     |
| SEXT | Ring 60  | 0.000E+00  | 0.000E+00 | ---             | FRACA (60)     |
| SEXT | Shape factor array from offsite area 4:              |            |           |                 |                |
| SEXT | Radii of shape factor array (used if non-circular):  |            |           |                 |                |
| SEXT | Outer annular radius (m), ring 61:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (61) |
| SEXT | Outer annular radius (m), ring 62:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (62) |
| SEXT | Outer annular radius (m), ring 63:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (63) |
| SEXT | Outer annular radius (m), ring 64:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (64) |
| SEXT | Outer annular radius (m), ring 65:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (65) |
| SEXT | Outer annular radius (m), ring 66:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (66) |
| SEXT | Outer annular radius (m), ring 67:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (67) |
| SEXT | Outer annular radius (m), ring 68:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (68) |
| SEXT | Outer annular radius (m), ring 69:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (69) |
| SEXT | Outer annular radius (m), ring 70:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (70) |
| SEXT | Outer annular radius (m), ring 71:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (71) |
| SEXT | Outer annular radius (m), ring 72:                   | 1.000E+01  | 1.000E+01 | ---             | RAD_SHAPE (72) |
| SEXT | Fractions of annular areas within AREA:              |            |           |                 |                |
| SEXT | Ring 61  | 0.000E+00  | 0.000E+00 | ---             | FRACA (61)     |
| SEXT | Ring 62  | 0.000E+00  | 0.000E+00 | ---             | FRACA (62)     |
| SEXT | Ring 63  | 0.000E+00  | 0.000E+00 | ---             | FRACA (63)     |
| SEXT | Ring 64  | 0.000E+00  | 0.000E+00 | ---             | FRACA (64)     |
| SEXT | Ring 65  | 0.000E+00  | 0.000E+00 | ---             | FRACA (65)     |
| SEXT | Ring 66  | 0.000E+00  | 0.000E+00 | ---             | FRACA (66)     |
| SEXT | Ring 67  | 0.000E+00  | 0.000E+00 | ---             | FRACA (67)     |
| SEXT | Ring 68  | 0.000E+00  | 0.000E+00 | ---             | FRACA (68)     |
| SEXT | Ring 69  | 0.000E+00  | 0.000E+00 | ---             | FRACA (69)     |
| SEXT | Ring 70  | 0.000E+00  | 0.000E+00 | ---             | FRACA (70)     |
| SEXT | Ring 71  | 0.000E+00  | 0.000E+00 | ---             | FRACA (71)     |
| SEXT | Ring 72  | 0.000E+00  | 0.000E+00 | ---             | FRACA (72)     |
| OCCU | Fraction of time spent indoors on contaminated site  | 0.000E+00  | 0.000E+00 | ---             | FIND           |
| OCCU | Fraction of time spent outdoors on contaminated site | 3.333E-01  | 0.000E+00 | ---             | FOTD           |
| OCCU | Fraction of time spent indoors in Offsite Dwelling   | 0.000E+00  | 5.000E-01 | ---             | FINDDWELL      |
| OCCU | Fraction of time spent outdoors in Offsite Dwelling  | 0.000E+00  | 1.000E-01 | ---             | FOTDDWELL      |
| OCCU | Fraction of time spent outdoors in agri. area 1      | 4.170E-02  | 1.000E-01 | ---             | OCCUPANCY (1)  |
| OCCU | Fraction of time spent outdoors in agri. area 2      | 6.280E-02  | 1.000E-01 | ---             | OCCUPANCY (2)  |

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 34  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

## Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default    | RESRAD computed | Parameter Name   |
|------|--|------------|------------|-----------------|------------------|
| OCCU | Fraction of time spent outdoors in agri. area 3  | 0.000E+00  | 1.000E-01  | ---             | OCCUPANCY (3)    |
| OCCU | Fraction of time spent outdoors in agri. area 4  | 0.000E+00  | 1.000E-01  | ---             | OCCUPANCY (4)    |
| RADN | Diffusion coefficient for radon gas (m/sec):     |            |            |                 |                  |
| RADN | in cover material                                | not used   | 2.000E-06  | ---             | DIFCV            |
| RADN | in contaminated zone soil                        | not used   | 2.000E-06  | ---             | DIFCZ            |
| RADN | in fruit, grain and non-leafy vegetable field    | not used   | 2.000E-06  | ---             | DIFOS (1)        |
| RADN | in leafy vegetable field                         | not used   | 2.000E-06  | ---             | DIFOS (2)        |
| RADN | in pature  | not used   | 2.000E-06  | ---             | DIFOS (3)        |
| RADN | in livestock grain field                         | not used   | 2.000E-06  | ---             | DIFOS (4)        |
| RADN | in offsite dwelling site                         | not used   | 2.000E-06  | ---             | DIFOS (5)        |
| RADN | in foundation material                           | not used   | 3.000E-07  | ---             | DIFFL            |
| RADN | Thickness of building foundation (m)             | not used   | 1.500E-01  | ---             | FLOOR1           |
| RADN | Bulk density of building foundation (g/cm**3)    | not used   | 2.400E+00  | ---             | DENSFL           |
| RADN | Total porosity of the building foundation        | not used   | 1.000E-01  | ---             | TPFL             |
| RADN | Volumetric water content of the foundation       | not used   | 3.000E-02  | ---             | PH2OFL           |
| RADN | Building depth below ground surface (m)          | not used   | -1.000E+00 | ---             | DMFL             |
| RADN | Radon vertical dimension of mixing (m)           | not used   | 2.000E+00  | ---             | HMIX             |
| RADN | Height of the building (room) (m)                | not used   | 2.500E+00  | ---             | HRM              |
| RADN | Average building air exchange rate (1/hr)        | not used   | 5.000E-01  | ---             | REXG             |
| RADN | Building interior area factor                    | not used   | 0.000E+00  | ---             | FAI              |
| RADN | Emanating power of Rn-222 gas                    | not used   | 2.500E-01  | ---             | EMANA (1)        |
| RADN | Emanating power of Rn-220 gas                    | not used   | 1.500E-01  | ---             | EMANA (2)        |
| C14  | C-14 evasion layer thickness in soil (m)         | not used   | 3.000E-01  | ---             | DMC              |
| C14  | Vertical dimension of mixing for vegetation (m)  | not used   | 1.000E+00  | ---             | HMIXV            |
| C14  | C-14 evasion flux rate from soil (1/sec)         | not used   | 7.000E-07  | ---             | C14EVSN          |
| C14  | C-12 evasion flux rate from soil (1/sec)         | not used   | 1.000E-10  | ---             | C12EVSN          |
| C14  | Fraction of vegetation carbon from air           | not used   | 9.800E-01  | ---             | CAIR             |
| C14  | Fraction of vegetation carbon from soil          | not used   | 2.000E-02  | ---             | CSOIL            |
| C12  | C-12 concentration in the atmosphere (g/m**3)    | not used   | 1.800E-01  | ---             | C12AIR           |
| C12  | C-12 concentration in contaminated soil (g/g)    | not used   | 3.000E-02  | ---             | C12CZ            |
| C12  | C-12 concentration in water (g/cm**3)            | not used   | 2.000E-05  | ---             | C12WTR           |
| C12  | C-12 concentration in meat 1 (g/g)               | not used   | 2.400E-01  | ---             | C12MEAT_MILK (1) |
| C12  | C-12 concentration in milk (g/g)                 | not used   | 7.000E-02  | ---             | C12MEAT_MILK (2) |
| C12  | C-12 concentration in vegetable 1 (g/g)          | not used   | 4.000E-01  | ---             | C12PLANT (1)     |
| C12  | C-12 concentration in vegetable 2 (g/g)          | not used   | 9.000E-02  | ---             | C12PLANT (2)     |
| C12  | C-12 concentration in livestock feed 1 (g/g)     | not used   | 9.000E-02  | ---             | C12PLANT (3)     |
| C12  | C-12 concentration in livestock feed 2 (g/g)     | not used   | 4.000E-01  | ---             | C12PLANT (4)     |
| H3   | Humidity in air (g/cm**3)                        | not used   | 8.000E+00  | ---             | HUMID            |
| H3   | Mass fraction of water in meat 1 (g/g)           | not used   | 6.000E-01  | ---             | H2OMEAT_MILK (1) |
| H3   | Mass fraction of water in milk (g/g)             | not used   | 8.800E-01  | ---             | H2OMEAT_MILK (2) |
| H3   | Mass fraction of water in vegetable 1 (g/g)      | not used   | 8.000E-01  | ---             | H2OPLANT (1)     |
| H3   | Mass fraction of water in vegetable 2 (g/g)      | not used   | 8.000E-01  | ---             | H2OPLANT (2)     |
| H3   | Mass fraction of water in livestock feed 1 (g/g) | not used   | 8.000E-01  | ---             | H2OPLANT (3)     |

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 35  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

### Site-Specific Parameter Summary (continued)

| Menu | Parameter  | User Input | Default   | RESRAD computed | Parameter Name |
|------|--|------------|-----------|-----------------|----------------|
| H3   | Mass fraction of water in livestock feed 2 (g/g) | not used   | 8.000E-01 | ---             | H2OPLANT(4)    |

### 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     |

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 36

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

| Contaminated Zone Dimensions | Initial Soil Concentrations, pCi/g |
|------------------------------|------------------------------------|
| Area: 15708.00 square meters | Cs-137    1.850E-01                |
| Thickness: 1.00 meters       | Pu-239    1.541E+00                |
| Cover Depth: 0.00 meters     | Sr-90     1.670E-01                |

Total Dose TDOSE(t), mrem/yr

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

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

| t (years): | 0.000E+00 | 1.000E+00 | 3.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 7.500E+01 | 1.750E+02 | 4.200E+02 | 9.700E+02 |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| TDOSE(t):  | 3.649E-01 | 3.564E-01 | 3.403E-01 | 3.182E-01 | 2.805E-01 | 2.043E-01 | 1.261E-01 | 9.329E-02 | 8.819E-02 | 8.403E-02 |
| M(t):      | 1.460E-02 | 1.426E-02 | 1.361E-02 | 1.273E-02 | 1.122E-02 | 8.170E-03 | 5.045E-03 | 3.732E-03 | 3.528E-03 | 3.361E-03 |

Maximum TDOSE(t): 3.649E-01 mrem/yr at t = 0 years

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 37

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 0 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 5.02E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 5.42E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 4.51E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.08E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 4.08E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 3.91E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>5.06E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>2.01E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 0 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |          | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %          |
| Cs-137            | 1.96E-01        | 54        | 4.26E-08        | 0        | 0.00E+00        | 0        | 3.48E-03        | 1         | 7.89E-04        | 0        | 0.00E+00        | 0        | 5.58E-05        | 0        | 2.00E-01        | 55         |
| Pu-239            | 1.45E-04        | 0         | 4.83E-03        | 1        | 0.00E+00        | 0        | 5.19E-02        | 14        | 1.34E-03        | 0        | 0.00E+00        | 0        | 3.33E-02        | 9        | 9.15E-02        | 25         |
| Sr-90             | 1.26E-03        | 0         | 1.55E-06        | 0        | 0.00E+00        | 0        | 7.10E-02        | 19        | 1.14E-03        | 0        | 0.00E+00        | 0        | 1.52E-04        | 0        | 7.35E-02        | 20         |
| <b>Total</b>      | <b>1.97E-01</b> | <b>54</b> | <b>4.83E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.26E-01</b> | <b>35</b> | <b>3.27E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.35E-02</b> | <b>9</b> | <b>3.65E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 38

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 1 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 6.54E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 7.27E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.99E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.48E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 5.18E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 5.12E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>6.70E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>2.72E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 1 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |          | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %          |
| Cs-137            | 1.91E-01        | 54        | 4.16E-08        | 0        | 0.00E+00        | 0        | 3.40E-03        | 1         | 7.71E-04        | 0        | 0.00E+00        | 0        | 5.45E-05        | 0        | 1.95E-01        | 55         |
| Pu-239            | 1.45E-04        | 0         | 4.83E-03        | 1        | 0.00E+00        | 0        | 5.19E-02        | 15        | 1.34E-03        | 0        | 0.00E+00        | 0        | 3.33E-02        | 9        | 9.15E-02        | 26         |
| Sr-90             | 1.19E-03        | 0         | 1.47E-06        | 0        | 0.00E+00        | 0        | 6.73E-02        | 19        | 1.08E-03        | 0        | 0.00E+00        | 0        | 1.44E-04        | 0        | 6.97E-02        | 20         |
| <b>Total</b>      | <b>1.92E-01</b> | <b>54</b> | <b>4.83E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.23E-01</b> | <b>34</b> | <b>3.19E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.35E-02</b> | <b>9</b> | <b>3.56E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 39

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 3 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 6.24E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 6.93E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.99E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.48E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 4.65E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 4.60E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>6.66E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>2.63E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 3 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 1.82E-01        | 54        | 3.97E-08        | 0        | 0.00E+00        | 0        | 3.24E-03        | 1         | 7.35E-04        | 0        | 0.00E+00        | 0        | 5.19E-05        | 0         | 1.86E-01        | 55         |
| Pu-239            | 1.45E-04        | 0         | 4.83E-03        | 1        | 0.00E+00        | 0        | 5.19E-02        | 15        | 1.34E-03        | 0        | 0.00E+00        | 0        | 3.33E-02        | 10        | 9.15E-02        | 27         |
| Sr-90             | 1.07E-03        | 0         | 1.32E-06        | 0        | 0.00E+00        | 0        | 6.04E-02        | 18        | 9.72E-04        | 0        | 0.00E+00        | 0        | 1.29E-04        | 0         | 6.26E-02        | 18         |
| <b>Total</b>      | <b>1.83E-01</b> | <b>54</b> | <b>4.83E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.16E-01</b> | <b>34</b> | <b>3.04E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.34E-02</b> | <b>10</b> | <b>3.40E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 40

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 6 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 5.81E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 6.46E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.99E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.48E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 3.96E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 3.91E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>6.61E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>2.52E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 6 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 1.70E-01        | 53        | 3.69E-08        | 0        | 0.00E+00        | 0        | 3.02E-03        | 1         | 6.85E-04        | 0        | 0.00E+00        | 0        | 4.84E-05        | 0         | 1.73E-01        | 55         |
| Pu-239            | 1.45E-04        | 0         | 4.82E-03        | 2        | 0.00E+00        | 0        | 5.19E-02        | 16        | 1.34E-03        | 0        | 0.00E+00        | 0        | 3.33E-02        | 10        | 9.14E-02        | 29         |
| Sr-90             | 9.12E-04        | 0         | 1.13E-06        | 0        | 0.00E+00        | 0        | 5.14E-02        | 16        | 8.27E-04        | 0        | 0.00E+00        | 0        | 1.10E-04        | 0         | 5.33E-02        | 17         |
| <b>Total</b>      | <b>1.71E-01</b> | <b>54</b> | <b>4.82E-03</b> | <b>2</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.06E-01</b> | <b>33</b> | <b>2.85E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.34E-02</b> | <b>11</b> | <b>3.18E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.



## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 41

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 12 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 5.04E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 5.60E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.99E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.48E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 2.87E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 2.84E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>6.52E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>2.32E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 12 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 1.47E-01        | 52        | 3.21E-08        | 0        | 0.00E+00        | 0        | 2.62E-03        | 1         | 5.94E-04        | 0        | 0.00E+00        | 0        | 4.20E-05        | 0         | 1.50E-01        | 54         |
| Pu-239            | 1.45E-04        | 0         | 4.82E-03        | 2        | 0.00E+00        | 0        | 5.19E-02        | 18        | 1.34E-03        | 0        | 0.00E+00        | 0        | 3.32E-02        | 12        | 9.14E-02        | 33         |
| Sr-90             | 6.61E-04        | 0         | 8.16E-07        | 0        | 0.00E+00        | 0        | 3.73E-02        | 13        | 5.99E-04        | 0        | 0.00E+00        | 0        | 7.96E-05        | 0         | 3.86E-02        | 14         |
| <b>Total</b>      | <b>1.48E-01</b> | <b>53</b> | <b>4.82E-03</b> | <b>2</b> | <b>0.00E+00</b> | <b>0</b> | <b>9.17E-02</b> | <b>33</b> | <b>2.53E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.34E-02</b> | <b>12</b> | <b>2.80E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 42

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 30 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 3.29E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 3.66E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.98E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.48E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 1.09E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.08E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>6.32E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.95E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 30 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 9.62E-02        | 47        | 2.09E-08        | 0        | 0.00E+00        | 0        | 1.71E-03        | 1         | 3.88E-04        | 0        | 0.00E+00        | 0        | 2.74E-05        | 0         | 9.83E-02        | 48         |
| Pu-239            | 1.45E-04        | 0         | 4.81E-03        | 2        | 0.00E+00        | 0        | 5.18E-02        | 25        | 1.33E-03        | 1        | 0.00E+00        | 0        | 3.32E-02        | 16        | 9.12E-02        | 45         |
| Sr-90             | 2.51E-04        | 0         | 3.10E-07        | 0        | 0.00E+00        | 0        | 1.42E-02        | 7         | 2.28E-04        | 0        | 0.00E+00        | 0        | 3.03E-05        | 0         | 1.47E-02        | 7          |
| <b>Total</b>      | <b>9.66E-02</b> | <b>47</b> | <b>4.81E-03</b> | <b>2</b> | <b>0.00E+00</b> | <b>0</b> | <b>6.77E-02</b> | <b>33</b> | <b>1.95E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.32E-02</b> | <b>16</b> | <b>2.04E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 43

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 75 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 1.14E-10        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.26E-13        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.95E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.47E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 3.60E-06        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 3.53E-08        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>3.60E-06</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.53E-08</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 75 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |           | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 3.32E-02        | 26        | 7.23E-09        | 0        | 0.00E+00        | 0        | 5.90E-04        | 0         | 1.34E-04        | 0        | 0.00E+00        | 0        | 9.46E-06        | 0         | 3.39E-02        | 27         |
| Pu-239            | 1.44E-04        | 0         | 4.79E-03        | 4        | 0.00E+00        | 0        | 5.16E-02        | 41        | 1.33E-03        | 1        | 0.00E+00        | 0        | 3.31E-02        | 26        | 9.09E-02        | 72         |
| Sr-90             | 2.24E-05        | 0         | 2.77E-08        | 0        | 0.00E+00        | 0        | 1.27E-03        | 1         | 2.03E-05        | 0        | 0.00E+00        | 0        | 2.70E-06        | 0         | 1.31E-03        | 1          |
| <b>Total</b>      | <b>3.34E-02</b> | <b>26</b> | <b>4.79E-03</b> | <b>4</b> | <b>0.00E+00</b> | <b>0</b> | <b>5.34E-02</b> | <b>42</b> | <b>1.48E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.31E-02</b> | <b>26</b> | <b>1.26E-01</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

# Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 44  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
 in mrem/yr and as a Percentage of Total Dose at t = 175 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 1.07E-11        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.19E-14        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.90E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.46E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 1.89E-06        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.87E-08        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>1.90E-06</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.87E-08</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
 in mrem/yr and as a Percentage of Total Dose at t = 175 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |          | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 3.12E-03        | 3        | 6.79E-10        | 0        | 0.00E+00        | 0        | 5.55E-05        | 0         | 1.26E-05        | 0        | 0.00E+00        | 0        | 8.89E-07        | 0         | 3.19E-03        | 3          |
| Pu-239            | 1.43E-04        | 0        | 4.75E-03        | 5        | 0.00E+00        | 0        | 5.11E-02        | 55        | 1.32E-03        | 1        | 0.00E+00        | 0        | 3.28E-02        | 35        | 9.01E-02        | 97         |
| Sr-90             | 1.04E-07        | 0        | 1.29E-10        | 0        | 0.00E+00        | 0        | 5.89E-06        | 0         | 9.47E-08        | 0        | 0.00E+00        | 0        | 1.26E-08        | 0         | 8.01E-06        | 0          |
| <b>Total</b>      | <b>3.26E-03</b> | <b>3</b> | <b>4.75E-03</b> | <b>5</b> | <b>0.00E+00</b> | <b>0</b> | <b>5.12E-02</b> | <b>55</b> | <b>1.33E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.28E-02</b> | <b>35</b> | <b>9.33E-02</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 45

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 420 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 3.25E-14        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 3.61E-17        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.78E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.43E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 3.70E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 3.66E-14        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>5.78E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.46E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 420 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |          | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 9.49E-06        | 0        | 2.07E-12        | 0        | 0.00E+00        | 0        | 1.69E-07        | 0         | 3.83E-08        | 0        | 0.00E+00        | 0        | 2.71E-09        | 0         | 9.70E-06        | 0          |
| Pu-239            | 1.40E-04        | 0        | 4.65E-03        | 5        | 0.00E+00        | 0        | 5.00E-02        | 57        | 1.29E-03        | 1        | 0.00E+00        | 0        | 3.21E-02        | 36        | 8.82E-02        | 100        |
| Sr-90             | 2.02E-13        | 0        | 2.49E-16        | 0        | 0.00E+00        | 0        | 1.14E-11        | 0         | 1.83E-13        | 0        | 0.00E+00        | 0        | 2.43E-14        | 0         | 1.55E-11        | 0          |
| <b>Total</b>      | <b>1.49E-04</b> | <b>0</b> | <b>4.65E-03</b> | <b>5</b> | <b>0.00E+00</b> | <b>0</b> | <b>5.00E-02</b> | <b>57</b> | <b>1.29E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.21E-02</b> | <b>36</b> | <b>8.82E-02</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 46

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 970 years

From releases to ground water and to surface water

| Radio-<br>Nuclide | Ground          |          | Fish            |          | Radon           |          | Plant           |          | Meat            |          | Milk            |          | Soil            |          | Water           |          |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|----------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %        |
| Cs-137            | 0.00E+00        | 0        | 7.29E-20        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 8.10E-23        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Pu-239            | 0.00E+00        | 0        | 5.55E-09        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 1.48E-12        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| Sr-90             | 0.00E+00        | 0        | 5.52E-25        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 5.46E-27        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        | 0.00E+00        | 0        |
| <b>Total</b>      | <b>0.00E+00</b> | <b>0</b> | <b>5.55E-09</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>1.48E-12</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> | <b>0.00E+00</b> | <b>0</b> |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 970 years

Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)

| Radio-<br>Nuclide | Ground          |          | Inhalation      |          | Radon           |          | Plant           |           | Meat            |          | Milk            |          | Soil            |           | All Pathways*   |            |
|-------------------|-----------------|----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|----------|-----------------|----------|-----------------|-----------|-----------------|------------|
|                   | Dose            | %        | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %        | Dose            | %        | Dose            | %         | Dose            | %          |
| Cs-137            | 2.13E-11        | 0        | 4.63E-18        | 0        | 0.00E+00        | 0        | 3.79E-13        | 0         | 8.59E-14        | 0        | 0.00E+00        | 0        | 6.07E-15        | 0         | 2.17E-11        | 0          |
| Pu-239            | 1.33E-04        | 0        | 4.43E-03        | 5        | 0.00E+00        | 0        | 4.77E-02        | 57        | 1.23E-03        | 1        | 0.00E+00        | 0        | 3.06E-02        | 36        | 8.40E-02        | 100        |
| Sr-90             | 3.02E-26        | 0        | 3.72E-29        | 0        | 0.00E+00        | 0        | 1.70E-24        | 0         | 2.74E-26        | 0        | 0.00E+00        | 0        | 3.63E-27        | 0         | 2.32E-24        | 0          |
| <b>Total</b>      | <b>1.33E-04</b> | <b>0</b> | <b>4.43E-03</b> | <b>5</b> | <b>0.00E+00</b> | <b>0</b> | <b>4.77E-02</b> | <b>57</b> | <b>1.23E-03</b> | <b>1</b> | <b>0.00E+00</b> | <b>0</b> | <b>3.06E-02</b> | <b>36</b> | <b>8.40E-02</b> | <b>100</b> |

\*Sum of dose from all releases and from primary contamination.

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 47

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Dose/Source Ratios Summed Over All Pathways  
Parent and Progeny Principal Radionuclide Contributions Indicated

| Parent<br>(i) | Product<br>(j) | Thread<br>Fraction | DSR(j,t) (mrem/yr)/(pCi/g) |           |           |           |           |           |           |           |           |           |
|---------------|----------------|--------------------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|               |                |                    | 0.000E+00                  | 1.000E+00 | 3.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 7.500E+01 | 1.750E+02 | 4.200E+02 | 9.700E+02 |
| Cs-137+D      | Cs-137+D       | 1.000E+00          | 1.080E+00                  | 1.055E+00 | 1.006E+00 | 9.375E-01 | 8.135E-01 | 5.315E-01 | 1.833E-01 | 1.722E-02 | 5.243E-05 | 1.176E-10 |
| Pu-239        | Pu-239         | 1.000E+00          | 5.937E-02                  | 5.936E-02 | 5.935E-02 | 5.934E-02 | 5.931E-02 | 5.921E-02 | 5.898E-02 | 5.846E-02 | 5.722E-02 | 5.453E-02 |
| Pu-239        | U-235+D        | 1.000E+00          | 1.231E-10                  | 3.688E-10 | 8.570E-10 | 1.581E-09 | 3.001E-09 | 7.039E-09 | 1.582E-08 | 3.002E-08 | 4.647E-08 | 5.229E-08 |
| Pu-239        | Pa-231         | 1.000E+00          | 4.664E-15                  | 3.100E-14 | 1.627E-13 | 5.560E-13 | 2.038E-12 | 1.182E-11 | 6.787E-11 | 3.192E-10 | 1.352E-09 | 4.226E-09 |
| Pu-239        | Ac-227+D       | 1.000E+00          | 4.118E-17                  | 5.202E-16 | 5.540E-15 | 3.322E-14 | 2.208E-13 | 2.739E-12 | 2.959E-11 | 2.051E-10 | 1.062E-09 | 3.585E-09 |
| Pu-239        | ΣDSR(j)        |                    | 5.937E-02                  | 5.936E-02 | 5.935E-02 | 5.934E-02 | 5.931E-02 | 5.921E-02 | 5.898E-02 | 5.846E-02 | 5.722E-02 | 5.453E-02 |
| Sr-90+D       | Sr-90+D        | 1.000E+00          | 4.402E-01                  | 4.173E-01 | 3.748E-01 | 3.190E-01 | 2.312E-01 | 8.794E-02 | 7.870E-03 | 4.797E-05 | 9.305E-11 | 1.389E-23 |

The DSR includes contributions from associated (half-life ≤ 30 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g  
Basic Radiation Dose Limit = 2.500E+01 mrem/yr

| Nuclide<br>(i) | t = 0.000E+00 | 1.000E+00 | 3.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 7.500E+01 | 1.750E+02 | 4.200E+02 | 9.700E+02  |
|----------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Cs-137         | 2.314E+01     | 2.369E+01 | 2.484E+01 | 2.667E+01 | 3.073E+01 | 4.704E+01 | 1.364E+02 | 1.452E+03 | 4.768E+05 | 2.127E+11  |
| Pu-239         | 4.211E+02     | 4.211E+02 | 4.212E+02 | 4.213E+02 | 4.215E+02 | 4.222E+02 | 4.239E+02 | 4.276E+02 | 4.369E+02 | 4.585E+02  |
| Sr-90          | 5.679E+01     | 5.991E+01 | 6.670E+01 | 7.836E+01 | 1.081E+02 | 2.843E+02 | 3.177E+03 | 5.212E+05 | 2.687E+11 | *1.365E+14 |

\*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)  
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g  
at tmin = time of minimum single radionuclide soil guideline  
and at tmax = time of maximum total dose = 0 years

| Nuclide<br>(i) | Initial<br>(pCi/g) | tmin<br>(years) | DSR(i,tmin) | G(i,tmin)<br>(pCi/g) | DSR(i,tmax) | G(i,tmax)<br>(pCi/g) |
|----------------|--------------------|-----------------|-------------|----------------------|-------------|----------------------|
| Cs-137         | 1.850E-01          | 0               | 1.080E+00   | 2.314E+01            | 1.080E+00   | 2.314E+01            |
| Pu-239         | 1.541E+00          | 0               | 5.937E-02   | 4.211E+02            | 5.937E-02   | 4.211E+02            |
| Sr-90          | 1.670E-01          | 0               | 4.402E-01   | 5.679E+01            | 4.402E-01   | 5.679E+01            |

## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 48

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

### Individual Nuclide Dose Summed Over All Pathways Parent Nuclide and Thread Fraction Indicated

| Nuclide<br>(j) | Parent<br>(i) | THF(i)    | DOSE(j,t), mrem/yr |           |           |           |           |           |           |           |           |           |
|----------------|---------------|-----------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                |               |           | t= 0.000E+00       | 1.000E+00 | 3.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 7.500E+01 | 1.750E+02 | 4.200E+02 | 9.700E+02 |
| Cs-137         | Cs-137        | 1.000E+00 | 1.999E-01          | 1.952E-01 | 1.862E-01 | 1.734E-01 | 1.505E-01 | 9.832E-02 | 3.392E-02 | 3.186E-03 | 9.700E-06 | 2.175E-11 |
| Pu-239         | Pu-239        | 1.000E+00 | 9.149E-02          | 9.148E-02 | 9.146E-02 | 9.144E-02 | 9.139E-02 | 9.125E-02 | 9.089E-02 | 9.009E-02 | 8.818E-02 | 8.403E-02 |
| U-235          | Pu-239        | 1.000E+00 | 1.897E-10          | 5.683E-10 | 1.321E-09 | 2.436E-09 | 4.624E-09 | 1.085E-08 | 2.439E-08 | 4.626E-08 | 7.161E-08 | 8.058E-08 |
| Pa-231         | Pu-239        | 1.000E+00 | 7.187E-15          | 4.778E-14 | 2.507E-13 | 8.569E-13 | 3.140E-12 | 1.822E-11 | 1.046E-10 | 4.919E-10 | 2.083E-09 | 6.512E-09 |
| Ac-227         | Pu-239        | 1.000E+00 | 6.345E-17          | 8.017E-16 | 8.537E-15 | 5.119E-14 | 3.402E-13 | 4.220E-12 | 4.560E-11 | 3.160E-10 | 1.637E-09 | 5.525E-09 |
| Sr-90          | Sr-90         | 1.000E+00 | 7.352E-02          | 6.969E-02 | 6.259E-02 | 5.328E-02 | 3.861E-02 | 1.469E-02 | 1.314E-03 | 8.011E-06 | 1.554E-11 | 2.320E-24 |

THF(i) is the thread fraction of the parent nuclide.

### Individual Nuclide Soil Concentration Parent Nuclide and Thread Fraction Indicated

| Nuclide<br>(j) | Parent<br>(i) | THF(i)    | S(j,t), pCi/g |           |           |           |           |           |           |           |           |           |
|----------------|---------------|-----------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                |               |           | t= 0.000E+00  | 1.000E+00 | 3.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 7.500E+01 | 1.750E+02 | 4.200E+02 | 9.700E+02 |
| Cs-137         | Cs-137        | 1.000E+00 | 1.850E-01     | 1.807E-01 | 1.723E-01 | 1.605E-01 | 1.393E-01 | 9.100E-02 | 3.139E-02 | 2.949E-03 | 8.977E-06 | 2.013E-11 |
| Pu-239         | Pu-239        | 1.000E+00 | 1.541E+00     | 1.541E+00 | 1.541E+00 | 1.540E+00 | 1.539E+00 | 1.537E+00 | 1.531E+00 | 1.518E+00 | 1.485E+00 | 1.415E+00 |
| U-235          | Pu-239        | 1.000E+00 | 0.000E+00     | 1.514E-09 | 4.523E-09 | 8.986E-09 | 1.773E-08 | 4.262E-08 | 9.677E-08 | 1.842E-07 | 2.856E-07 | 3.214E-07 |
| Pa-231         | Pu-239        | 1.000E+00 | 0.000E+00     | 1.638E-14 | 1.446E-13 | 5.736E-13 | 2.271E-12 | 1.382E-11 | 8.085E-11 | 3.830E-10 | 1.627E-09 | 5.092E-09 |
| Ac-227         | Pu-239        | 1.000E+00 | 0.000E+00     | 1.811E-16 | 4.550E-15 | 3.500E-14 | 2.648E-13 | 3.553E-12 | 3.960E-11 | 2.775E-10 | 1.444E-09 | 4.880E-09 |
| Sr-90          | Sr-90         | 1.000E+00 | 1.670E-01     | 1.583E-01 | 1.422E-01 | 1.210E-01 | 8.768E-02 | 3.335E-02 | 2.977E-03 | 1.386E-05 | 2.681E-11 | 4.002E-24 |

THF(i) is the thread fraction of the parent nuclide.



## Appendix H45 – RESRAD-Offsite 3.1 Output for AREA 4.5 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 20:52 Page 49

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.5 HUNTER PU.ROF

Run Time Information

ResOCalc.EXE execution began at 20:52 on 10/26/2016

ResOCalc.EXE execution ended at 20:52 on 10/26/2016

ResOCalc.EXE execution time 3.083 seconds