

# Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 1  
Parent Dose Report  
Title : RESRAD-OFFSITE Default Parameters  
File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 2  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 3  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 4

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 5  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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	3.180E-01	0.000E+00	---	S1(2)
CONC	Initial principal radionuclide (pCi/g): Pu-239	1.700E-01	0.000E+00	---	S1(4)
CONC	Initial principal radionuclide (pCi/g): Sr-90	2.760E-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	5.462E-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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 6  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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	2.990E-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	8.793E-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	7.500E-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	4.357E-03	ALEACH (6)

# Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 7  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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)	9.000E+01	9.000E+01	---	DNXBEARING
LYOT	Length of Primary contamination in X Direction	1.530E+02	1.000E+02	---	SOURCEXY (1)
LYOT	Length of Primary contamination in Y Direction	1.210E+02	1.000E+02	---	SOURCEXY (2)
LYOT	Smaller X coordinate of Agricultural Area 1	-1.100E+02	3.438E+01	---	AGRIXY (1,1)
LYOT	Larger X coordinate of Agricultural Area 1	7.900E+02	6.563E+01	---	AGRIXY (2,1)
LYOT	Smaller Y coordinate of Agricultural Area 1	-2.250E+02	2.340E+02	---	AGRIXY (3,1)
LYOT	Larger Y coordinate of Agricultural Area 1	2.750E+02	2.660E+02	---	AGRIXY (4,1)
LYOT	Smaller X coordinate of Agricultural Area 2	-1.100E+02	3.438E+01	---	AGRIXY (1,2)
LYOT	Larger X coordinate of Agricultural Area 2	7.900E+02	6.563E+01	---	AGRIXY (2,2)
LYOT	Smaller Y coordinate of Agricultural Area 2	-2.250E+02	2.680E+02	---	AGRIXY (3,2)
LYOT	Larger Y coordinate of Agricultural Area 2	2.750E+02	3.000E+02	---	AGRIXY (4,2)
LYOT	Smaller X coordinate of Agricultural Area 3	-1.100E+02	0.000E+00	---	AGRIXY (1,3)
LYOT	Larger X coordinate of Agricultural Area 3	7.900E+02	1.000E+02	---	AGRIXY (2,3)
LYOT	Smaller Y coordinate of Agricultural Area 3	-2.250E+02	4.500E+02	---	AGRIXY (3,3)
LYOT	Larger Y coordinate of Agricultural Area 3	2.750E+02	5.500E+02	---	AGRIXY (4,3)
LYOT	Smaller X coordinate of Agricultural Area 4	-1.100E+02	0.000E+00	---	AGRIXY (1,4)
LYOT	Larger X coordinate of Agricultural Area 4	7.900E+02	1.000E+02	---	AGRIXY (2,4)
LYOT	Smaller Y coordinate of Agricultural Area 4	-2.250E+02	3.000E+02	---	AGRIXY (3,4)
LYOT	Larger Y coordinate of Agricultural Area 4	2.750E+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	-1.100E+02	-1.000E+02	---	SWXY (1)
LYOT	Larger X coordinate of Surface water body	9.900E+02	2.000E+02	---	SWXY (2)
LYOT	Smaller Y coordinate of Surface water body	-3.250E+02	5.500E+02	---	SWXY (3)
LYOT	Larger Y coordinate of Surface water body	-2.250E+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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 8  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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)	1.851E+04	1.000E+04	---	AREA
PRCZ	Length parallel to aquifer flow (m)	1.360E+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)	5.875E-02	2.000E-01	---	RI
PRCZ	Evapotranspiration coefficient	6.500E-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)	4.500E+05	1.000E+03	---	AREAO(1)
AGRI	Fraction of Agri. Area 1 directly over the c.z.	4.114E-02	0.000E+00	---	FAREA_PLANT(1)
AGRI	Evapotranspiration coefficient in Agri. Area 1	6.500E-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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 9  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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)	4.500E+05	1.000E+03	---	AREAO (2)
AGRI	Fraction of Agri. Area 2 directly over the c.z.	4.114E-02	0.000E+00	---	FAREA_PLANT (2)
AGRI	Evapotranspiration coefficient in Agri. Area 2	6.500E-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. Are2	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)	4.500E+05	1.000E+04	---	AREAO (3)
AGRI	Fraction of Agri. Area 3 directly over the c.z.	4.114E-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. Are3	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)	4.500E+05	1.000E+04	---	AREAO (4)
AGRI	Fraction of Agri. Area 4 directly over the c.z.	4.114E-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. Are4	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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 10  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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	---	SLPLENSTPDWELL
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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 11  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 12  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 13  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 14  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 15  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 16  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 17  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 18  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 19  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 20  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 21  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 22  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 23  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 24  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 25  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 26  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 27  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 28  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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)	5.875E-02	2.000E-01	---	RIRRIG(1)
WTRU	Fraction of irrigation water 1 from surface water	5.000E-01	0.000E+00	---	FSWIR(1)
WTRU	Fraction of irrigation water 1 from well water	5.000E-01	1.000E+00	---	FWWIR(1)
WTRU	Irrigation rate in Agricultural Area 2 (m/yr)	5.875E-02	2.000E-01	---	RIRRIG(2)
WTRU	Fraction of irrigation water 2 from surface water	5.000E-01	0.000E+00	---	FSWIR(2)
WTRU	Fraction of irrigation water 2 from well water	5.000E-01	1.000E+00	---	FWWIR(2)
WTRU	Irrigation rate in Agricultural Area 3 (m/yr)	0.000E+00	2.000E-01	---	RIRRIG(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	---	RIRRIG(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	---	RIRRIGDWELL
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**3/yr)	4.227E+04	5.100E+03	---	UW
SWBY	Sediment delivery ratio	1.000E+00	1.000E+00	---	SDR
SWBY	Volume of surface water body	1.100E+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	1.100E+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)	5.220E+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**2)	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**2)	1.500E+00	1.500E+00	---	YIELD(2)
VEGE	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	GROWTIME(2)

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 29  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 30  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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:	8.250E+00	6.000E+00	---	RAD_SHAPE ( 1)
SEXT	Outer annular radius (m), ring 2:	1.650E+01	1.200E+01	---	RAD_SHAPE ( 2)
SEXT	Outer annular radius (m), ring 3:	2.475E+01	1.800E+01	---	RAD_SHAPE ( 3)
SEXT	Outer annular radius (m), ring 4:	3.300E+01	2.400E+01	---	RAD_SHAPE ( 4)
SEXT	Outer annular radius (m), ring 5:	4.125E+01	3.000E+01	---	RAD_SHAPE ( 5)
SEXT	Outer annular radius (m), ring 6:	4.950E+01	3.600E+01	---	RAD_SHAPE ( 6)
SEXT	Outer annular radius (m), ring 7:	5.775E+01	4.200E+01	---	RAD_SHAPE ( 7)
SEXT	Outer annular radius (m), ring 8:	6.600E+01	4.800E+01	---	RAD_SHAPE ( 8)
SEXT	Outer annular radius (m), ring 9:	7.425E+01	5.400E+01	---	RAD_SHAPE ( 9)
SEXT	Outer annular radius (m), ring 10:	8.250E+01	6.000E+01	---	RAD_SHAPE (10)
SEXT	Outer annular radius (m), ring 11:	9.075E+01	6.600E+01	---	RAD_SHAPE (11)
SEXT	Outer annular radius (m), ring 12:	9.900E+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	1.000E+00	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	1.000E+00	1.000E+00	---	FRACA ( 7)
SEXT	Ring 8	8.800E-01	1.000E+00	---	FRACA ( 8)
SEXT	Ring 9	6.800E-01	7.700E-01	---	FRACA ( 9)
SEXT	Ring 10	4.300E-01	3.700E-01	---	FRACA (10)
SEXT	Ring 11	1.800E-01	1.700E-01	---	FRACA (11)
SEXT	Ring 12	3.800E-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:	1.625E+01	1.325E+01	---	RAD_SHAPE (13)
SEXT	Outer annular radius (m), ring 14:	3.250E+01	2.650E+01	---	RAD_SHAPE (14)
SEXT	Outer annular radius (m), ring 15:	4.875E+01	3.975E+01	---	RAD_SHAPE (15)
SEXT	Outer annular radius (m), ring 16:	6.500E+01	5.300E+01	---	RAD_SHAPE (16)
SEXT	Outer annular radius (m), ring 17:	8.125E+01	6.625E+01	---	RAD_SHAPE (17)
SEXT	Outer annular radius (m), ring 18:	9.750E+01	7.950E+01	---	RAD_SHAPE (18)
SEXT	Outer annular radius (m), ring 19:	1.138E+02	9.275E+01	---	RAD_SHAPE (19)
SEXT	Outer annular radius (m), ring 20:	1.300E+02	1.060E+02	---	RAD_SHAPE (20)
SEXT	Outer annular radius (m), ring 21:	1.463E+02	1.193E+02	---	RAD_SHAPE (21)
SEXT	Outer annular radius (m), ring 22:	1.625E+02	1.325E+02	---	RAD_SHAPE (22)
SEXT	Outer annular radius (m), ring 23:	1.788E+02	1.458E+02	---	RAD_SHAPE (23)
SEXT	Outer annular radius (m), ring 24:	1.950E+02	1.590E+02	---	RAD_SHAPE (24)

# Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 31  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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	2.500E-01	2.000E-01	---	FRACA (19)
SEXT	Ring 20	2.300E-01	1.700E-01	---	FRACA (20)
SEXT	Ring 21	1.700E-01	1.500E-01	---	FRACA (21)
SEXT	Ring 22	1.200E-01	1.300E-01	---	FRACA (22)
SEXT	Ring 23	5.000E-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:	1.870E+02	1.870E+02	---	RAD_SHAPE (25)
SEXT	Outer annular radius (m), ring 26:	1.887E+02	1.887E+02	---	RAD_SHAPE (26)
SEXT	Outer annular radius (m), ring 27:	2.102E+02	2.102E+02	---	RAD_SHAPE (27)
SEXT	Outer annular radius (m), ring 28:	2.287E+02	2.287E+02	---	RAD_SHAPE (28)
SEXT	Outer annular radius (m), ring 29:	2.473E+02	2.473E+02	---	RAD_SHAPE (29)
SEXT	Outer annular radius (m), ring 30:	2.658E+02	2.658E+02	---	RAD_SHAPE (30)
SEXT	Outer annular radius (m), ring 31:	2.844E+02	2.844E+02	---	RAD_SHAPE (31)
SEXT	Outer annular radius (m), ring 32:	3.029E+02	3.029E+02	---	RAD_SHAPE (32)
SEXT	Outer annular radius (m), ring 33:	3.215E+02	3.215E+02	---	RAD_SHAPE (33)
SEXT	Outer annular radius (m), ring 34:	3.400E+02	3.400E+02	---	RAD_SHAPE (34)
SEXT	Outer annular radius (m), ring 35:	3.409E+02	3.409E+02	---	RAD_SHAPE (35)
SEXT	Outer annular radius (m), ring 36:	3.533E+02	3.533E+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	2.125E-02	2.125E-02	---	FRACA (26)
SEXT	Ring 27	6.979E-02	6.979E-02	---	FRACA (27)
SEXT	Ring 28	9.024E-02	9.024E-02	---	FRACA (28)
SEXT	Ring 29	8.283E-02	8.283E-02	---	FRACA (29)
SEXT	Ring 30	7.658E-02	7.658E-02	---	FRACA (30)
SEXT	Ring 31	7.122E-02	7.122E-02	---	FRACA (31)
SEXT	Ring 32	6.658E-02	6.658E-02	---	FRACA (32)
SEXT	Ring 33	6.251E-02	6.251E-02	---	FRACA (33)
SEXT	Ring 34	5.892E-02	5.892E-02	---	FRACA (34)
SEXT	Ring 35	4.549E-02	4.549E-02	---	FRACA (35)
SEXT	Ring 36	1.657E-02	1.657E-02	---	FRACA (36)

# Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 32  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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:	1.870E+02	1.870E+02	---	RAD_SHAPE (37)
SEXT	Outer annular radius (m), ring 38:	1.887E+02	1.887E+02	---	RAD_SHAPE (38)
SEXT	Outer annular radius (m), ring 39:	2.102E+02	2.102E+02	---	RAD_SHAPE (39)
SEXT	Outer annular radius (m), ring 40:	2.287E+02	2.287E+02	---	RAD_SHAPE (40)
SEXT	Outer annular radius (m), ring 41:	2.473E+02	2.473E+02	---	RAD_SHAPE (41)
SEXT	Outer annular radius (m), ring 42:	2.658E+02	2.658E+02	---	RAD_SHAPE (42)
SEXT	Outer annular radius (m), ring 43:	2.844E+02	2.844E+02	---	RAD_SHAPE (43)
SEXT	Outer annular radius (m), ring 44:	3.029E+02	3.029E+02	---	RAD_SHAPE (44)
SEXT	Outer annular radius (m), ring 45:	3.215E+02	3.215E+02	---	RAD_SHAPE (45)
SEXT	Outer annular radius (m), ring 46:	3.400E+02	3.400E+02	---	RAD_SHAPE (46)
SEXT	Outer annular radius (m), ring 47:	3.409E+02	3.409E+02	---	RAD_SHAPE (47)
SEXT	Outer annular radius (m), ring 48:	3.533E+02	3.533E+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	2.125E-02	2.125E-02	---	FRACA (38)
SEXT	Ring 39	6.979E-02	6.979E-02	---	FRACA (39)
SEXT	Ring 40	9.024E-02	9.024E-02	---	FRACA (40)
SEXT	Ring 41	8.283E-02	8.283E-02	---	FRACA (41)
SEXT	Ring 42	7.658E-02	7.658E-02	---	FRACA (42)
SEXT	Ring 43	7.122E-02	7.122E-02	---	FRACA (43)
SEXT	Ring 44	6.658E-02	6.658E-02	---	FRACA (44)
SEXT	Ring 45	6.251E-02	6.251E-02	---	FRACA (45)
SEXT	Ring 46	5.892E-02	5.892E-02	---	FRACA (46)
SEXT	Ring 47	4.549E-02	4.549E-02	---	FRACA (47)
SEXT	Ring 48	1.657E-02	1.657E-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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 33  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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	3.436E-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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 34  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 35  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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 H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 36

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 HUNTER PU.ROF

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
Area: 18513.00 square meters	Cs-137      3.180E-01
Thickness: 1.00 meters	Pu-239      1.700E-01
Cover Depth: 0.00 meters	Sr-90      2.760E-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)

	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
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):	4.348E-01	4.227E-01	3.996E-01	3.676E-01	3.122E-01	1.964E-01	8.440E-02	1.351E-02	7.660E-03	7.283E-03
M(t):	1.739E-02	1.691E-02	1.598E-02	1.470E-02	1.249E-02	7.854E-03	3.376E-03	5.404E-04	3.064E-04	2.913E-04

Maximum TDOSE(t): 4.348E-01 mrem/yr at t = 0 years

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 37  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	6.11E-16	0	2.15E-10	0	0.00E+00	0	4.01E-13	0	1.67E-13	0	0.00E+00	0	1.79E-19	0	0.00E+00	0
Pu-239	3.07E-20	0	1.24E-10	0	0.00E+00	0	1.54E-11	0	2.14E-14	0	0.00E+00	0	6.93E-18	0	0.00E+00	0
Sr-90	3.70E-18	0	1.68E-11	0	0.00E+00	0	1.05E-12	0	1.16E-13	0	0.00E+00	0	4.42E-19	0	0.00E+00	0
<b>Total</b>	<b>6.15E-16</b>	<b>0</b>	<b>3.56E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.69E-11</b>	<b>0</b>	<b>3.04E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.55E-18</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	3.47E-01	80	7.67E-08	0	0.00E+00	0	3.66E-03	1	5.97E-04	0	0.00E+00	0	9.88E-05	0	3.52E-01	81
Pu-239	1.65E-05	0	5.58E-04	0	0.00E+00	0	3.51E-03	1	6.49E-05	0	0.00E+00	0	3.78E-03	1	7.93E-03	2
Sr-90	2.15E-03	0	2.69E-06	0	0.00E+00	0	7.18E-02	17	8.30E-04	0	0.00E+00	0	2.58E-04	0	7.50E-02	17
<b>Total</b>	<b>3.50E-01</b>	<b>80</b>	<b>5.61E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.90E-02</b>	<b>18</b>	<b>1.49E-03</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.14E-03</b>	<b>1</b>	<b>4.35E-01</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 38

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	2.37E-15	0	2.80E-10	0	0.00E+00	0	5.20E-13	0	2.24E-13	0	0.00E+00	0	6.97E-19	0	0.00E+00	0
Pu-239	1.22E-19	0	1.65E-10	0	0.00E+00	0	2.03E-11	0	2.93E-14	0	0.00E+00	0	2.75E-17	0	0.00E+00	0
Sr-90	1.32E-17	0	2.14E-11	0	0.00E+00	0	1.35E-12	0	1.52E-13	0	0.00E+00	0	1.58E-18	0	0.00E+00	0
<b>Total</b>	<b>2.39E-15</b>	<b>0</b>	<b>4.67E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.22E-11</b>	<b>0</b>	<b>4.05E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.97E-17</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	3.39E-01	80	7.49E-08	0	0.00E+00	0	3.58E-03	1	5.83E-04	0	0.00E+00	0	9.65E-05	0	3.44E-01	81
Pu-239	1.65E-05	0	5.58E-04	0	0.00E+00	0	3.51E-03	1	6.49E-05	0	0.00E+00	0	3.78E-03	1	7.93E-03	2
Sr-90	2.04E-03	0	2.55E-06	0	0.00E+00	0	6.81E-02	16	7.87E-04	0	0.00E+00	0	2.45E-04	0	7.11E-02	17
<b>Total</b>	<b>3.41E-01</b>	<b>81</b>	<b>5.61E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.51E-02</b>	<b>18</b>	<b>1.44E-03</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.12E-03</b>	<b>1</b>	<b>4.23E-01</b>	<b>100</b>

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

# Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 39  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	5.85E-15	0	2.68E-10	0	0.00E+00	0	4.99E-13	0	2.14E-13	0	0.00E+00	0	1.72E-18	0	0.00E+00	0
Pu-239	3.14E-19	0	1.65E-10	0	0.00E+00	0	2.03E-11	0	2.93E-14	0	0.00E+00	0	7.09E-17	0	0.00E+00	0
Sr-90	2.65E-17	0	1.92E-11	0	0.00E+00	0	1.25E-12	0	1.36E-13	0	0.00E+00	0	3.16E-18	0	0.00E+00	0
<b>Total</b>	<b>5.88E-15</b>	<b>0</b>	<b>4.52E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.21E-11</b>	<b>0</b>	<b>3.79E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.58E-17</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	3.24E-01	81	7.15E-08	0	0.00E+00	0	3.41E-03	1	5.56E-04	0	0.00E+00	0	9.20E-05	0	3.28E-01	82
Pu-239	1.65E-05	0	5.58E-04	0	0.00E+00	0	3.50E-03	1	6.49E-05	0	0.00E+00	0	3.78E-03	1	7.93E-03	2
Sr-90	1.83E-03	0	2.29E-06	0	0.00E+00	0	6.11E-02	15	7.07E-04	0	0.00E+00	0	2.20E-04	0	6.39E-02	16
<b>Total</b>	<b>3.26E-01</b>	<b>81</b>	<b>5.60E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>6.80E-02</b>	<b>17</b>	<b>1.33E-03</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.09E-03</b>	<b>1</b>	<b>4.00E-01</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 40  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	1.04E-14	0	2.49E-10	0	0.00E+00	0	4.69E-13	0	1.99E-13	0	0.00E+00	0	3.06E-18	0	0.00E+00	0
Pu-239	6.03E-19	0	1.65E-10	0	0.00E+00	0	2.03E-11	0	2.93E-14	0	0.00E+00	0	1.36E-16	0	0.00E+00	0
Sr-90	3.50E-17	0	1.63E-11	0	0.00E+00	0	1.10E-12	0	1.16E-13	0	0.00E+00	0	4.17E-18	0	0.00E+00	0
<b>Total</b>	<b>1.05E-14</b>	<b>0</b>	<b>4.30E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.19E-11</b>	<b>0</b>	<b>3.44E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.43E-16</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	3.02E-01	82	6.66E-08	0	0.00E+00	0	3.18E-03	1	5.18E-04	0	0.00E+00	0	8.57E-05	0	3.05E-01	83
Pu-239	1.65E-05	0	5.58E-04	0	0.00E+00	0	3.50E-03	1	6.49E-05	0	0.00E+00	0	3.78E-03	1	7.92E-03	2
Sr-90	1.56E-03	0	1.95E-06	0	0.00E+00	0	5.20E-02	14	6.02E-04	0	0.00E+00	0	1.87E-04	0	5.44E-02	15
<b>Total</b>	<b>3.03E-01</b>	<b>82</b>	<b>5.60E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>5.87E-02</b>	<b>16</b>	<b>1.18E-03</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.05E-03</b>	<b>1</b>	<b>3.68E-01</b>	<b>100</b>

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



## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 41  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	1.75E-14	0	2.16E-10	0	0.00E+00	0	4.15E-13	0	1.73E-13	0	0.00E+00	0	5.15E-18	0	0.00E+00	0
Pu-239	1.18E-18	0	1.65E-10	0	0.00E+00	0	2.03E-11	0	2.93E-14	0	0.00E+00	0	2.66E-16	0	0.00E+00	0
Sr-90	3.41E-17	0	1.18E-11	0	0.00E+00	0	8.19E-13	0	8.41E-14	0	0.00E+00	0	4.06E-18	0	0.00E+00	0
<b>Total</b>	<b>1.76E-14</b>	<b>0</b>	<b>3.93E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.15E-11</b>	<b>0</b>	<b>2.86E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.75E-16</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	2.62E-01	84	5.78E-08	0	0.00E+00	0	2.76E-03	1	4.50E-04	0	0.00E+00	0	7.44E-05	0	2.65E-01	85
Pu-239	1.65E-05	0	5.58E-04	0	0.00E+00	0	3.50E-03	1	6.48E-05	0	0.00E+00	0	3.78E-03	1	7.92E-03	3
Sr-90	1.13E-03	0	1.41E-06	0	0.00E+00	0	3.77E-02	12	4.36E-04	0	0.00E+00	0	1.36E-04	0	3.94E-02	13
<b>Total</b>	<b>2.63E-01</b>	<b>84</b>	<b>5.59E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.40E-02</b>	<b>14</b>	<b>9.51E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.99E-03</b>	<b>1</b>	<b>3.12E-01</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 42  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	2.75E-14	0	1.41E-10	0	0.00E+00	0	2.85E-13	0	1.13E-13	0	0.00E+00	0	8.08E-18	0	0.00E+00	0
Pu-239	2.90E-18	0	1.65E-10	0	0.00E+00	0	2.03E-11	0	2.92E-14	0	0.00E+00	0	6.54E-16	0	0.00E+00	0
Sr-90	5.17E-09	0	4.50E-12	0	0.00E+00	0	3.99E-04	0	3.20E-14	0	0.00E+00	0	6.16E-10	0	0.00E+00	0
<b>Total</b>	<b>5.17E-09</b>	<b>0</b>	<b>3.10E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.99E-04</b>	<b>0</b>	<b>1.74E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>6.16E-10</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	1.71E-01	87	3.77E-08	0	0.00E+00	0	1.80E-03	1	2.94E-04	0	0.00E+00	0	4.86E-05	0	1.73E-01	88
Pu-239	1.65E-05	0	5.57E-04	0	0.00E+00	0	3.50E-03	2	6.47E-05	0	0.00E+00	0	3.77E-03	2	7.91E-03	4
Sr-90	4.29E-04	0	5.37E-07	0	0.00E+00	0	1.43E-02	7	1.66E-04	0	0.00E+00	0	5.16E-05	0	1.54E-02	8
<b>Total</b>	<b>1.71E-01</b>	<b>87</b>	<b>5.57E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.96E-02</b>	<b>10</b>	<b>5.24E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.87E-03</b>	<b>2</b>	<b>1.96E-01</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 43  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	2.21E-14	0	4.87E-11	0	0.00E+00	0	1.09E-13	0	3.89E-14	0	0.00E+00	0	6.48E-18	0	0.00E+00	0
Pu-239	7.12E-18	0	1.64E-10	0	0.00E+00	0	2.03E-11	0	2.91E-14	0	0.00E+00	0	1.61E-15	0	0.00E+00	0
Sr-90	6.41E-07	0	5.90E-06	0	0.00E+00	0	1.55E-02	18	4.16E-08	0	0.00E+00	0	7.64E-08	0	0.00E+00	0
<b>Total</b>	<b>6.41E-07</b>	<b>0</b>	<b>5.90E-06</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.55E-02</b>	<b>18</b>	<b>4.16E-08</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.64E-08</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	5.90E-02	70	1.30E-08	0	0.00E+00	0	6.21E-04	1	1.01E-04	0	0.00E+00	0	1.68E-05	0	5.97E-02	71
Pu-239	1.64E-05	0	5.54E-04	1	0.00E+00	0	3.48E-03	4	6.45E-05	0	0.00E+00	0	3.76E-03	4	7.88E-03	9
Sr-90	3.83E-05	0	4.80E-08	0	0.00E+00	0	1.28E-03	2	1.48E-05	0	0.00E+00	0	4.60E-06	0	1.68E-02	20
<b>Total</b>	<b>5.90E-02</b>	<b>70</b>	<b>5.55E-04</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>5.38E-03</b>	<b>6</b>	<b>1.81E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.78E-03</b>	<b>4</b>	<b>8.44E-02</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 44  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	4.18E-15	0	4.58E-12	0	0.00E+00	0	1.21E-14	0	3.66E-15	0	0.00E+00	0	1.23E-18	0	0.00E+00	0
Pu-239	1.13E-16	0	1.62E-10	0	0.00E+00	0	2.04E-11	0	2.88E-14	0	0.00E+00	0	3.65E-15	0	0.00E+00	0
Sr-90	3.98E-09	0	3.42E-06	0	0.00E+00	0	8.46E-05	1	2.43E-08	0	0.00E+00	0	4.74E-10	0	0.00E+00	0
<b>Total</b>	<b>3.98E-09</b>	<b>0</b>	<b>3.42E-06</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>8.46E-05</b>	<b>1</b>	<b>2.43E-08</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.74E-10</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	5.54E-03	41	1.22E-09	0	0.00E+00	0	5.84E-05	0	9.52E-06	0	0.00E+00	0	1.57E-06	0	5.61E-03	42
Pu-239	1.63E-05	0	5.50E-04	4	0.00E+00	0	3.45E-03	26	6.39E-05	0	0.00E+00	0	3.73E-03	28	7.81E-03	58
Sr-90	1.78E-07	0	2.23E-10	0	0.00E+00	0	5.96E-06	0	6.89E-08	0	0.00E+00	0	2.14E-08	0	9.43E-05	1
<b>Total</b>	<b>5.56E-03</b>	<b>41</b>	<b>5.50E-04</b>	<b>4</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.52E-03</b>	<b>26</b>	<b>7.35E-05</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.73E-03</b>	<b>28</b>	<b>1.35E-02</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 45  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	2.21E-17	0	1.39E-14	0	0.00E+00	0	4.52E-17	0	1.11E-17	0	0.00E+00	0	6.49E-21	0	0.00E+00	0
Pu-239	4.49E-12	0	1.59E-10	0	0.00E+00	0	1.21E-09	0	2.82E-14	0	0.00E+00	0	4.04E-14	0	0.00E+00	0
Sr-90	7.69E-15	0	6.69E-12	0	0.00E+00	0	1.64E-10	0	4.76E-14	0	0.00E+00	0	9.16E-16	0	0.00E+00	0
<b>Total</b>	<b>4.49E-12</b>	<b>0</b>	<b>1.66E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.37E-09</b>	<b>0</b>	<b>7.58E-14</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.14E-14</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	1.69E-05	0	3.72E-12	0	0.00E+00	0	1.78E-07	0	2.90E-08	0	0.00E+00	0	4.79E-09	0	1.71E-05	0
Pu-239	1.60E-05	0	5.38E-04	7	0.00E+00	0	3.38E-03	44	6.26E-05	1	0.00E+00	0	3.65E-03	48	7.64E-03	100
Sr-90	3.45E-13	0	4.31E-16	0	0.00E+00	0	1.15E-11	0	1.33E-13	0	0.00E+00	0	4.14E-14	0	1.82E-10	0
<b>Total</b>	<b>3.28E-05</b>	<b>0</b>	<b>5.38E-04</b>	<b>7</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.38E-03</b>	<b>44</b>	<b>6.26E-05</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.65E-03</b>	<b>48</b>	<b>7.66E-03</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 46  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 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- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	1.23E-21	0	3.12E-20	0	0.00E+00	0	1.48E-20	0	2.50E-23	0	0.00E+00	0	3.60E-25	0	0.00E+00	0
Pu-239	2.95E-11	0	1.57E-10	0	0.00E+00	0	5.47E-09	0	3.66E-14	0	0.00E+00	0	3.54E-13	0	0.00E+00	0
Sr-90	1.15E-27	0	9.97E-25	0	0.00E+00	0	2.44E-23	0	7.09E-27	0	0.00E+00	0	1.37E-28	0	0.00E+00	0
<b>Total</b>	<b>2.95E-11</b>	<b>0</b>	<b>1.57E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>5.47E-09</b>	<b>0</b>	<b>3.66E-14</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.54E-13</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- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Cs-137	3.78E-11	0	8.35E-18	0	0.00E+00	0	3.98E-13	0	6.50E-14	0	0.00E+00	0	1.07E-14	0	3.83E-11	0
Pu-239	1.52E-05	0	5.13E-04	7	0.00E+00	0	3.22E-03	44	5.96E-05	1	0.00E+00	0	3.48E-03	48	7.28E-03	100
Sr-90	5.14E-26	0	6.43E-29	0	0.00E+00	0	1.72E-24	0	1.98E-26	0	0.00E+00	0	6.17E-27	0	2.72E-23	0
<b>Total</b>	<b>1.52E-05</b>	<b>0</b>	<b>5.13E-04</b>	<b>7</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.22E-03</b>	<b>44</b>	<b>5.96E-05</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.48E-03</b>	<b>48</b>	<b>7.28E-03</b>	<b>100</b>

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

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 47

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 HUNTER PU.ROF

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

Parent (i)	Product (j)	Thread 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	1.106E+00	1.081E+00	1.031E+00	9.600E-01	8.330E-01	5.442E-01	1.877E-01	1.764E-02	5.369E-05	1.204E-10
Pu-239	Pu-239	1.000E+00	4.664E-02	4.664E-02	4.663E-02	4.662E-02	4.659E-02	4.652E-02	4.634E-02	4.593E-02	4.496E-02	4.284E-02
Pu-239	U-235+D	1.000E+00	1.259E-10	3.769E-10	8.758E-10	1.616E-09	3.067E-09	7.194E-09	1.617E-08	3.068E-08	5.446E-08	8.480E-08
Pu-239	Pa-231	1.000E+00	2.995E-15	1.984E-14	1.040E-13	3.552E-13	1.301E-12	7.547E-12	4.332E-11	2.037E-10	8.750E-10	3.170E-09
Pu-239	Ac-227+D	1.000E+00	3.590E-17	4.605E-16	4.950E-15	2.981E-14	1.986E-13	2.467E-12	2.668E-11	1.849E-10	9.654E-10	3.619E-09
Pu-239	ΣDSR(j)		4.664E-02	4.664E-02	4.663E-02	4.662E-02	4.659E-02	4.652E-02	4.634E-02	4.593E-02	4.496E-02	4.284E-02
Sr-90+D	Sr-90+D	1.000E+00	2.719E-01	2.577E-01	2.315E-01	1.970E-01	1.428E-01	5.575E-02	6.093E-02	3.416E-04	6.606E-10	9.842E-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 (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	2.260E+01	2.314E+01	2.426E+01	2.604E+01	3.001E+01	4.594E+01	1.332E+02	1.418E+03	4.657E+05	2.077E+11
Pu-239	5.360E+02	5.360E+02	5.361E+02	5.363E+02	5.366E+02	5.374E+02	5.395E+02	5.443E+02	5.561E+02	5.836E+02
Sr-90	9.195E+01	9.700E+01	1.080E+02	1.269E+02	1.751E+02	4.484E+02	4.103E+02	7.319E+04	3.785E+10	*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 (i)	Initial (pCi/g)	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Cs-137	3.180E-01	0	1.106E+00	2.260E+01	1.106E+00	2.260E+01
Pu-239	1.700E-01	0	4.664E-02	5.360E+02	4.664E-02	5.360E+02
Sr-90	2.760E-01	0	2.719E-01	9.195E+01	2.719E-01	9.195E+01

## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 48  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 HUNTER PU.ROF

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

Nuclide (j)	Parent (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	3.518E-01	3.436E-01	3.277E-01	3.053E-01	2.649E-01	1.731E-01	5.970E-02	5.608E-03	1.707E-05	3.828E-11
Pu-239	Pu-239	1.000E+00	7.929E-03	7.928E-03	7.927E-03	7.925E-03	7.921E-03	7.908E-03	7.877E-03	7.808E-03	7.642E-03	7.283E-03
U-235	Pu-239	1.000E+00	2.140E-11	6.408E-11	1.489E-10	2.747E-10	5.213E-10	1.223E-09	2.749E-09	5.215E-09	9.259E-09	1.442E-08
Pa-231	Pu-239	1.000E+00	5.092E-16	3.374E-15	1.768E-14	6.038E-14	2.212E-13	1.283E-12	7.365E-12	3.463E-11	1.487E-10	5.389E-10
Ac-227	Pu-239	1.000E+00	6.103E-18	7.828E-17	8.416E-16	5.067E-15	3.376E-14	4.195E-13	4.535E-12	3.144E-11	1.641E-10	6.152E-10
Sr-90	Sr-90	1.000E+00	7.504E-02	7.113E-02	6.389E-02	5.438E-02	3.940E-02	1.539E-02	1.682E-02	9.428E-05	1.823E-10	2.716E-23

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

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

Nuclide (j)	Parent (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	3.180E-01	3.106E-01	2.962E-01	2.759E-01	2.394E-01	1.564E-01	5.396E-02	5.069E-03	1.543E-05	3.460E-11
Pu-239	Pu-239	1.000E+00	1.700E-01	1.700E-01	1.700E-01	1.699E-01	1.698E-01	1.696E-01	1.689E-01	1.674E-01	1.639E-01	1.561E-01
U-235	Pu-239	1.000E+00	0.000E+00	1.670E-10	4.989E-10	9.913E-10	1.956E-09	4.702E-09	1.067E-08	2.032E-08	3.151E-08	3.545E-08
Pa-231	Pu-239	1.000E+00	0.000E+00	1.807E-15	1.596E-14	6.328E-14	2.506E-13	1.524E-12	8.919E-12	4.225E-11	1.795E-10	5.617E-10
Ac-227	Pu-239	1.000E+00	0.000E+00	1.998E-17	5.019E-16	3.862E-15	2.921E-14	3.920E-13	4.369E-12	3.062E-11	1.593E-10	5.383E-10
Sr-90	Sr-90	1.000E+00	2.760E-01	2.616E-01	2.349E-01	2.000E-01	1.449E-01	5.512E-02	4.918E-03	2.289E-05	4.424E-11	6.591E-24

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



## Appendix H19 – RESRAD-Offsite 3.1 Output for AREA 4.1 HUNTER PU

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 16:16 Page 49

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 HUNTER PU.ROF

### Run Time Information

ResOCalc.EXE execution began at 16:16 on 10/26/2016

ResOCalc.EXE execution ended at 16:16 on 10/26/2016

ResOCalc.EXE execution time 3.303 seconds