

**Appendix H15 –
RESRAD-Offsite 3.1 Output for Area 3.2 Pu**

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_{1/2} Limit = 30 days 05/04/2016 13:18 Page 1
Parent Dose Report
Title : RESRAD-OFFSITE Default Parameters
File : AREA 3.2 FARMER 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	34
Contaminated Zone and Total Dose Summary	35
Total Dose Components	
Time = 0.000E+00	36
Time = 1.000E+00	37
Time = 3.000E+00	38
Time = 6.000E+00	39
Time = 1.200E+01	40
Time = 3.000E+01	41
Time = 7.500E+01	42
Time = 1.750E+02	43
Time = 4.200E+02	44
Time = 9.700E+02	45
Dose/Source Ratios Summed Over All Pathways	46
Single Radionuclide Soil Guidelines	46
Dose Per Nuclide Summed Over All Pathways	47
Soil Concentration Per Nuclide	47
Run Time Information	48

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days, 05/04/2016 13:18 Page 2
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Dose Conversion Factor (and Related) Parameter Summary

Current Library: FGR 12

Default Library: FGR 12

Menu	Parameter	Current		Parameter
		Value	Default	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	Th-227 (Source: FGR 12)	5.212E-01	5.212E-01	DCFEXT(13)
DCSF	Th-231 (Source: FGR 12)	3.643E-02	3.643E-02	DCFEXT(14)
DCSF	Tl-207 (Source: FGR 12)	1.980E-02	1.980E-02	DCFEXT(15)
DCSF	U-235 (Source: FGR 12)	7.211E-01	7.211E-01	DCFEXT(16)

Current Library: FGR 11

Default Library: FGR 11

Menu	Parameter	Current		Parameter
		Value	Default	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	U-235+D	1.230E-01	1.230E-01	DCF2(5)
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	U-235+D	2.673E-04	2.673E-04	DCF3(5)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 3

PARENT Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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		Parameter
		Value	Default	
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 U-235+D , plant/soil concentration ratio, dimensionless		2.500E-03	2.500E-03	RTF(5,1)
TF U-235+D , plant/soil concentration ratio, dimensionless		2.500E-03	2.500E-03	RTF(5,2)
TF U-235+D , plant/soil concentration ratio, dimensionless		2.500E-03	2.500E-03	RTF(5,3)
TF U-235+D , plant/soil concentration ratio, dimensionless		2.500E-03	2.500E-03	RTF(5,4)
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				
TF U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)		3.400E-04	3.400E-04	I_M(5,1)
TF U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)		6.000E-04	6.000E-04	I_M(5,2)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T₉₀ Limit = 30 days

05/04/2016 13:18 Page 4

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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		Parameter Name
		Value	Default	
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	U-235+D , fish	1.000E+01	1.000E+01	BIOFA(5,1)
TF	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFA(5,2)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

TM Limit = 30 days

05/04/2016 13:18 Page 5

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
FSTI Exposure duration		1.000E+00	3.000E+01	---	ED
FSTI Basic radiation dose limit (mrem/yr)		2.500E+01	2.500E+01	---	BRDL
CONC Initial principal radionuclide (pCi/g): Cs-137		1.110E-01	0.000E+00	---	S1(2)
CONC Initial principal radionuclide (pCi/g): Pu-239		1.890E-01	0.000E+00	---	S1(4)
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 U-235		1.000E-03	1.000E-03	---	DEPVEL(5)
DCLR Distribution coefficients for Cs-137				---	
DCLR Contaminated zone (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCC(2)
DCLR Unsaturated zone 1 (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCU(2,1)
DCLR Saturated zone (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCS(2)
DCLR Sediment in surface water body (cm**3/g)		4.800E+02	4.600E+03	---	DCNUCSWB(2)
DCLR Agricultural area 1 (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCOF(2,1)
DCLR Agricultural area 2 (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCOF(2,2)
DCLR Agricultural area 3 (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCOF(2,3)
DCLR Agricultural area 4 (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCOF(2,4)
DCLR Offsite Dwelling (cm**3/g)		2.800E+02	4.600E+03	---	DCNUCDWE(2)
DCLR Initial Leach rate (/yr) Cs-137		0.000E+00	0.000E+00	5.461E-04	ALEACH(2)
DCLR Distribution coefficients for Pu-239				---	
DCLR Contaminated zone (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCC(4)
DCLR Unsaturated zone 1 (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCU(4,1)
DCLR Saturated zone (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCS(4)
DCLR Sediment in surface water body (cm**3/g)		3.000E+03	2.000E+03	---	DCNUCSWB(4)
DCLR Agricultural area 1 (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCOF(4,1)
DCLR Agricultural area 2 (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCOF(4,2)
DCLR Agricultural area 3 (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCOF(4,3)
DCLR Agricultural area 4 (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCOF(4,4)
DCLR Offsite Dwelling (cm**3/g)		2.600E+03	2.000E+03	---	DCNUCDWE(4)
DCLR Initial Leach rate (/yr) Pu-239		0.000E+00	0.000E+00	5.884E-05	ALEACH(4)
DCLR Distribution coefficients for progeny Ac-227				---	
DCLR Contaminated zone (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCC(1)
DCLR Unsaturated zone 1 (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCU(1,1)
DCLR Saturated zone (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCS(1)
DCLR Sediment in surface water body (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCSWB(1)
DCLR Agricultural area 1 (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCOF(1,1)
DCLR Agricultural area 2 (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCOF(1,2)
DCLR Agricultural area 3 (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCOF(1,3)
DCLR Agricultural area 4 (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCOF(1,4)
DCLR Offsite Dwelling (cm**3/g)		1.740E+03	2.000E+01	---	DCNUCDWE(1)
DCLR Initial Leach rate (/yr) Ac-227		0.000E+00	0.000E+00	8.792E-05	ALEACH(1)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_{1/2} Limit = 30 days 05/04/2016 13:18 Page 6
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU,ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
DCLR	Distribution coefficients for progeny Pa-231				
DCLR	Contaminated zone (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCC(3)
DCLR	Unsaturated zone 1 (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCU(3,1)
DCLR	Saturated zone (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCS(3)
DCLR	Sediment in surface water body (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCSWB(3)
DCLR	Agricultural area 1 (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCOF(3,1)
DCLR	Agricultural area 2 (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCOF(3,2)
DCLR	Agricultural area 3 (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCOF(3,3)
DCLR	Agricultural area 4 (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCOF(3,4)
DCLR	Offsite Dwelling (cm**3/g)	2.040E+03	5.000E+01	---	DCNUCDWE(3)
DCLR	Initial Leach rate (/yr) Pa-231	0.000E+00	0.000E+00	7.499E-05	ALEACH(3)
DCLR	Distribution coefficients for progeny U-235				
DCLR	Contaminated zone (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCC(5)
DCLR	Unsaturated zone 1 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCU(5,1)
DCLR	Saturated zone (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCS(5)
DCLR	Sediment in surface water body (cm**3/g)	1.000E+01	5.000E+01	---	DCNUCSWB(5)
DCLR	Agricultural area 1 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF(5,1)
DCLR	Agricultural area 2 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF(5,2)
DCLR	Agricultural area 3 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF(5,3)
DCLR	Agricultural area 4 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF(5,4)
DCLR	Offsite Dwelling (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCDWE(5)
DCLR	Initial Leach rate (/yr) U-235	0.000E+00	0.000E+00	4.356E-03	ALEACH(5)
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	3.200E+01	1.000E+02	---	SOURCEXY(1)
LYOT	Length of Primary contamination in Y Direction	3.200E+01	1.000E+02	---	SOURCEXY(2)
LYOT	Smaller X coordinate of Agricultural Area 1	-5.020E+02	3.438E+01	---	AGRIXY(1,1)
LYOT	Larger X coordinate of Agricultural Area 1	-5.010E+02	6.563E+01	---	AGRIXY(2,1)
LYOT	Smaller Y coordinate of Agricultural Area 1	1.750E+01	2.340E+02	---	AGRIXY(3,1)
LYOT	Larger Y coordinate of Agricultural Area 1	1.850E+01	2.660E+02	---	AGRIXY(4,1)
LYOT	Smaller X coordinate of Agricultural Area 2	-5.020E+02	3.438E+01	---	AGRIXY(1,2)
LYOT	Larger X coordinate of Agricultural Area 2	-5.010E+02	6.563E+01	---	AGRIXY(2,2)
LYOT	Smaller Y coordinate of Agricultural Area 2	1.750E+01	2.680E+02	---	AGRIXY(3,2)
LYOT	Larger Y coordinate of Agricultural Area 2	1.850E+01	3.000E+02	---	AGRIXY(4,2)
LYOT	Smaller X coordinate of Agricultural Area 3	-1.800E+01	0.000E+00	---	AGRIXY(1,3)
LYOT	Larger X coordinate of Agricultural Area 3	9.700E+01	1.000E+02	---	AGRIXY(2,3)
LYOT	Smaller Y coordinate of Agricultural Area 3	9.850E+01	4.500E+02	---	AGRIXY(3,3)
LYOT	Larger Y coordinate of Agricultural Area 3	1.665E+02	5.500E+02	---	AGRIXY(4,3)
LYOT	Smaller X coordinate of Agricultural Area 4	-5.020E+02	0.000E+00	---	AGRIXY(1,4)
LYOT	Larger X coordinate of Agricultural Area 4	-2.480E+02	1.000E+02	---	AGRIXY(2,4)
LYOT	Smaller Y coordinate of Agricultural Area 4	1.750E+01	3.000E+02	---	AGRIXY(3,4)
LYOT	Larger Y coordinate of Agricultural Area 4	2.715E+02	4.000E+02	---	AGRIXY(4,4)
LYOT	Smaller X coordinate of Dwelling Area	4.600E+01	3.438E+01	---	DWELLXY(1)
LYOT	Larger X coordinate of Dwelling Area	9.300E+01	6.563E+01	---	DWELLXY(2)
LYOT	Smaller Y coordinate of Dwelling Area	-2.850E+01	1.340E+02	---	DWELLXY(3)
LYOT	Larger Y coordinate of Dwelling Area	6.450E+01	1.660E+02	---	DWELLXY(4)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

TW Limit = 30 days

05/04/2016 13:18 Page 7

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
LYOT	Smaller X coordinate of Surface water body	-1.920E+02	-1.000E+02	---	SWXY(1)
LYOT	Larger X coordinate of Surface water body	-1.420E+02	2.000E+02	---	SWXY(2)
LYOT	Smaller Y coordinate of Surface water body	1.750E+01	5.500E+02	---	SWXY(3)
LYOT	Larger Y coordinate of Surface water body	2.715E+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)
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)	1.024E+03	1.000E+04	---	AREA
PRCZ	Length parallel to aquifer flow (m)	1.650E+02	1.000E+02	---	LCZPAQ
PRCZ	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
PRCZ	Deposition velocity of dust (m)	1.000E-03	1.000E-03	---	DEPVEL_DUST
PRCZ	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI
PRCZ	Evapotranspiration coefficient	6.200E-01	5.000E-01	---	EVAPTR
PRCZ	Runoff coefficient	4.100E-01	2.000E-01	---	RUNOFF
PRCZ	Rainfall Erosion Index	1.600E+02	1.600E+02	---	RAINEROS
PRCZ	Slope-length-steepness factor of prim. contamination	4.000E-01	4.000E-01	---	SLPLENSTPPC
PRCZ	Cropping-management factor of primary contamination	3.000E-03	3.000E-03	---	CRPMANGPC
PRCZ	Conservation practice factor of prim. contamination	1.000E+00	1.000E+00	---	CONVPRACPC
PRCZ	Thickness of contaminated zone (m)	1.000E+00	2.000E+00	---	THICKO
PRCZ	Contaminated zone total porosity	3.600E-01	4.000E-01	---	TPCZ
PRCZ	Computed erosion rate of contaminated zone (m/yr)	0.000E+00	1.147E-05	---	VCZ
PRCZ	Density of contaminated zone (g/cm**3)	1.700E+00	1.500E+00	---	DENSCZ
PRCZ	Soil erodibility factor of contaminated zone	0.000E+00	4.000E-01	---	ERODIBILITYCZ
PRCZ	Contaminated zone field capacity	2.000E-01	3.000E-01	---	FCCZ

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T₄ Limit = 30 days

05/04/2016 13:18 Page 8

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2.FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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	---	COVER0
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)		1.000E+00	1.000E+03	---	AREA0(1)
AGRI Fraction of Agri. Area 1 directly over the c.z.		not used	0.000E+00	---	FAREA_PLANT(1)
AGRI Evapotranspiration coefficient in Agri. Area 1		6.200E-01	5.000E-01	---	EVAPTRN(1)
AGRI Runoff coefficient in Agricultural Area 1		4.100E-01	2.000E-01	---	RUNOF(1)
AGRI Mixing depth/plow layer of Agricultural Area 1		1.500E-01	1.500E-01	---	DPTHMIXG(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. Are1		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		0.006E+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)
AGRI Areal extent of Agricultural Area 2 (m**2)		1.000E+00	1.000E+03	---	AREA0(2)
AGRI Fraction of Agri. Area 2 directly over the c.z.		not used	0.000E+00	---	FAREA_PLANT(2)
AGRI Evapotranspiration coefficient in Agri. Area 2		6.200E-01	5.000E-01	---	EVAPTRN(2)
AGRI Runoff coefficient in Agricultural Area 2		4.100E-01	2.000E-01	---	RUNOF(2)
AGRI Mixing depth/plow layer of Agricultural Area 2		1.500E-01	1.500E-01	---	DPTHMIXG(2)
AGRI Water filled porosity of soil in Agri. Area 2		3.000E-01	3.000E-01	---	TMOF(2)
AGRI Computed erosion rate of soil in Agri. 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)		7.820E+03	1.000E+04	---	AREA0(3)
AGRI Fraction of Agri. Area 3 directly over the c.z.		0.000E+00	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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_b Limit = 30 days

05/04/2016 13:18 Page 9

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
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)	6.452E+04	1.000E+04	---	AREA0(4)
AGRI	Fraction of Agri. Area 4 directly over the c.z.	0.000E+00	0.000E+00	---	FAREA_PLANT(4)
AGRI	Evapotranspiration coefficient in Agri. Area 4	7.800E-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	---	DPTHMIX(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)	4.371E+03	1.000E+03	---	AREAODWELL
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	---	DPTHMIXDWELL
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	---	RHORDWELL
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	---	AGRILEV(1)
AIRT	Elevation of Agricultural Area 2 above primary cont.	0.000E+00	0.000E+00	---	AGRILEV(2)
AIRT	Elevation of Agricultural Area 3 above primary cont.	0.000E+00	0.000E+00	---	AGRILEV(3)
AIRT	Elevation of Agricultural Area 4 above primary cont.	0.000E+00	0.000E+00	---	AGRILEV(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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_W Limit = 30 days 05/04/2016 13:18 Page 10
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T₁₂ Limit = 30 days 05/04/2016 13:18 Page 11
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T₄ Limit = 30 days 05/04/2016 13:18 Page 12
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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 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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{Max} Limit = 30 days

05/04/2016 13:18 Page 13

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_m Limit = 30 days

05/04/2016 13:18 Page 14

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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 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 S 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)
AIRT	Joint Frequency in W 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 N 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 NE 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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_W Limit = 30 days

05/04/2016 13:18 Page 15

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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 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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TH Limit = 30 days 05/04/2016 13:18 Page 16
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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 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)
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	6.350E-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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T₁₂ Limit = 30 days

05/04/2016 13:18 Page 17

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days 05/04/2016 13:18 Page 18
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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 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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_W Limit = 30 days

05/04/2016 13:18 Page 19

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 PÜ-239

RESRAD-OFFSITE, Version 3.1 T₁₀ Limit = 30 days 05/04/2016 13:18 Page 20
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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 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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T₁₂ Limit = 30 days

05/04/2016 13:18 Page 21

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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 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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TH Limit = 30 days 05/04/2016 13:18 Page 22
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TH Limit = 30 days 05/04/2016 13:18 Page 23
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T₄ Limit = 30 days 05/04/2016 13:18 Page 24
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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 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)
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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T₄ Limit = 30 days

05/04/2016 13:18 Page 25

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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 NNE 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)
AIRT	Joint Frequency in NNE 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	0.0005E+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)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

TM Limit = 30 days

05/04/2016 13:18 Page 26

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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 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)	4.100E+01	1.000E+02	---	OFFLPAQW
GWTR	Contamination to Well c/c distance normal to flow, m	-2.798E-01	0.000E+00	---	OFFLNAQW
GWTR	Distance from d/g edge of cz to surface water, (m)	-2.166E+02	4.500E+02	---	OFFLPAQS
GWTR	Contamination to near edge of swb,c/c normal to flow	-2.917E+02	-1.500E+02	---	OFFLNAQSN
GWTR	Contamination to far edge of swb, c/c normal to flow	-2.412E+02	1.500E+02	---	OFFLNAQSF
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	---	NPCZP
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.				
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	---	DPTHAQSW
SZNE	Thickness of saturated zone (m)	1.000E+02	1.000E+02	---	DPTHAQ
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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T4 Limit = 30 days

05/04/2016 13:18 Page 27

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
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	---	---	K1Col
SZNE Water - Mobile Colloids Distribution coefficient	0.000E+00	0.000E+00	---	---	K3Col
WTRU Drinking water intake (L/yr)	7.300E+02	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	1.000E+00	1.000E+00	---	---	FWRD
WTRU Fraction of household water from surface water	0.000E+00	0.000E+00	---	---	FSWHH
WTRU Fraction of household water from well water	1.000E+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	0.000E+00	0.000E+00	---	---	FSWLV(1)
WTRU Fraction of livestock water 1 from well water	1.000E+00	1.000E+00	---	---	FWNLV(1)
WTRU Livestock water intake for milk (L/day)	not used	1.600E+02	---	---	LWI(2)
WTRU Fraction of dairy cow water from surface water	not used	0.000E+00	---	---	FSWLV(2)
WTRU Fraction of dairy cow water from well water	not used	1.000E+00	---	---	FWWLV(2)
WTRU Irrigation rate in Agricultural Area 1 (m/yr)	0.000E+00	2.000E-01	---	---	RIRRIG(1)
WTRU Fraction of irrigation water 1 from surface water	0.000E+00	0.000E+00	---	---	FSWIR(1)
WTRU Fraction of irrigation water 1 from well water	1.000E+00	1.000E+00	---	---	FWWIR(1)
WTRU Irrigation rate in Agricultural Area 2 (m/yr)	0.000E+00	2.000E-01	---	---	RIRRIG(2)
WTRU Fraction of irrigation water 2 from surface water	0.000E+00	0.000E+00	---	---	FSWIR(2)
WTRU Fraction of irrigation water 2 from well water	1.000E+00	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	1.000E+00	1.000E+00	---	---	FWWIR(3)
WTRU Irrigation rate in Agricultural Area 4 (m/yr)	4.700E-01	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	1.000E+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	1.000E+00	1.000E+00	---	---	FWWIRDWELL
WTRU Well pumping rate (m**3/yr)	3.190E+04	5.100E+03	---	---	UW
SWBY Sediment delivery ratio	1.000E+00	1.000E+00	---	---	SDR
SWBY Volume of surface water body	1.500E+04	1.500E+05	---	---	VLAKE
SWBY Mean residence time of water in surface water body	1.000E+00	1.000E+00	---	---	TLAKE
SWBY Surface area of water in surface water body	1.270E+04	9.000E+04	---	---	ALAKE

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 28

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
INGE	Fish consumption (kg/yr)	not used	5.400E+00	---	DFI(1)
INGE	Fraction of Fish from affected area	not used	5.000E-01	---	FFISH(1)
INGE	Other Aquatic food consumption (kg/yr)	not used	9.000E-01	---	DFI(2)
INGE	Fraction of Aquatic food from affected area	not used	5.000E-01	---	FFISH(2)
INGE	Non-Leafy vegetables consumption (kg/yr)	not used	1.600E+02	---	DVI(1)
INGE	Fraction of vegetable 1 from affected area	not used	5.000E-01	---	FVEG(1)
INGE	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DVI(2)
INGE	Fraction of vegetable 2 from affected area	not used	5.000E-01	---	FVEG(2)
INGE	Meat 1 consumption (kg/yr)	6.500E+01	6.300E+01	---	DMI(1)
INGE	Fraction of meat 1from affected area	1.000E+00	1.000E+00	---	FMEMI(1)
INGE	Milk consumption (L/yr)	not used	9.200E+01	---	DMI(2)
INGE	Fraction of milk from affected area	not used	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)	not used	7.000E-01	---	YIELD(1)
VEGE	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	GROWTIME(1)
VEGE	Translocation Factor for Non-Leafy	not used	1.000E-01	---	FOLI_F(1)
VEGE	Weathering Removal Constant for Non-Leafy	not used	2.000E+01	---	RWEATHER(1)
VEGE	Foliar Interception Fraction for dust Non-Leafy	not used	2.500E-01	---	FINTCEPT(1,1)
VEGE	Foliar Intercept-n Fract-n for irrigation Non-Leafy	not used	2.500E-01	---	FINTCEPT(1,2)
VEGE	Depth of roots for Non-Leafy (m)	not used	1.200E+00	---	DROOT(1)
VEGE	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YIELD(2)
VEGE	Growing Season for Leafy (years)	not used	2.500E-01	---	GROWTIME(2)
VEGE	Translocation Factor for Leafy	not used	1.000E+00	---	FOLI_F(2)
VEGE	Weathering Removal Constant for Leafy	not used	2.000E+01	---	RWEATHER(2)
VEGE	Foliar Interception Fraction for dust Leafy	not used	2.500E-01	---	FINTCEPT(2,1)
VEGE	Foliar Intercept-n Fract-n for irrigation Leafy	not used	2.500E-01	---	FINTCEPT(2,2)
VEGE	Depth of roots for Leafy (m)	not used	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 Intercept-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 Intercept-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)	5.600E+00	1.400E+01	---	LFI(1,1)
LINT	Soil intake with feed 1 by livestock 1 (kg/day)	1.000E-01	1.000E-01	---	LSI(1,1)
LINT	Feed 1 intake by dairy cow (kg/day)	not used	4.400E+01	---	LFI(2,1)
LINT	Soil intake with feed 1 by dairy cow (kg/day)	not used	4.000E-01	---	LSI(2,1)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T% Limit = 30 days

05/04/2016 13:18 Page 29

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
LINT Feed 2 intake by livestock 1 (kg/day)		2.170E+01	5.400E+01	---	LFI(1,2)
LINT Soil intake with feed 2 by livestock 1 (kg/day)		4.000E-01	4.000E-01	---	LSI(1,2)
LINT Feed 2 intake by dairy cow (kg/day)		not used	1.100E+01	---	LFI(2,2)
LINT Soil intake with feed 2 by dairy cow (kg/day)		not used	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
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:		2.000E+00	6.000E+00	---	RAD_SHAPE(1)
SEXT Outer annular radius (m), ring 2:		4.000E+00	1.200E+01	---	RAD_SHAPE(2)
SEXT Outer annular radius (m), ring 3:		6.000E+00	1.800E+01	---	RAD_SHAPE(3)
SEXT Outer annular radius (m), ring 4:		8.000E+00	2.400E+01	---	RAD_SHAPE(4)
SEXT Outer annular radius (m), ring 5:		1.000E+01	3.000E+01	---	RAD_SHAPE(5)
SEXT Outer annular radius (m), ring 6:		1.200E+01	3.600E+01	---	RAD_SHAPE(6)
SEXT Outer annular radius (m), ring 7:		1.400E+01	4.200E+01	---	RAD_SHAPE(7)
SEXT Outer annular radius (m), ring 8:		1.600E+01	4.800E+01	---	RAD_SHAPE(8)
SEXT Outer annular radius (m), ring 9:		1.800E+01	5.400E+01	---	RAD_SHAPE(9)
SEXT Outer annular radius (m), ring 10:		2.000E+01	6.000E+01	---	RAD_SHAPE(10)
SEXT Outer annular radius (m), ring 11:		2.200E+01	6.600E+01	---	RAD_SHAPE(11)
SEXT Outer annular radius (m), ring 12:		2.400E+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		9.000E-01	1.000E+00	---	FRACA(3)
SEXT Ring 4		1.000E+00	1.000E+00	---	FRACA(4)
SEXT Ring 5		8.800E-01	1.000E+00	---	FRACA(5)
SEXT Ring 6		1.000E+00	1.000E+00	---	FRACA(6)
SEXT Ring 7		8.700E-01	1.000E+00	---	FRACA(7)
SEXT Ring 8		8.400E-01	1.000E+00	---	FRACA(8)
SEXT Ring 9		6.000E-01	7.700E-01	---	FRACA(9)
SEXT Ring 10		2.600E-01	3.700E-01	---	FRACA(10)
SEXT Ring 11		7.600E-02	1.700E-01	---	FRACA(11)
SEXT Ring 12		1.600E-02	3.100E-02	---	FRACA(12)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days 05/04/2016 13:18 Page 30
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
SEXT	Shape factor array from offsite dwelling:				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 13:	5.917E+00	1.325E+01	---	RAD_SHAPE(13)
SEXT	Outer annular radius (m), ring 14:	1.183E+01	2.650E+01	---	RAD_SHAPE(14)
SEXT	Outer annular radius (m), ring 15:	1.775E+01	3.975E+01	---	RAD_SHAPE(15)
SEXT	Outer annular radius (m), ring 16:	2.367E+01	5.300E+01	---	RAD_SHAPE(16)
SEXT	Outer annular radius (m), ring 17:	2.958E+01	6.625E+01	---	RAD_SHAPE(17)
SEXT	Outer annular radius (m), ring 18:	3.550E+01	7.950E+01	---	RAD_SHAPE(18)
SEXT	Outer annular radius (m), ring 19:	4.142E+01	9.275E+01	---	RAD_SHAPE(19)
SEXT	Outer annular radius (m), ring 20:	4.733E+01	1.060E+02	---	RAD_SHAPE(20)
SEXT	Outer annular radius (m), ring 21:	5.325E+01	1.193E+02	---	RAD_SHAPE(21)
SEXT	Outer annular radius (m), ring 22:	5.917E+01	1.325E+02	---	RAD_SHAPE(22)
SEXT	Outer annular radius (m), ring 23:	6.508E+01	1.458E+02	---	RAD_SHAPE(23)
SEXT	Outer annular radius (m), ring 24:	7.100E+01	1.590E+02	---	RAD_SHAPE(24)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 13	0.000E+00	0.000E+00	---	FRACA(13)
SEXT	Ring 14	0.000E+00	0.000E+00	---	FRACA(14)
SEXT	Ring 15	0.000E+00	0.000E+00	---	FRACA(15)
SEXT	Ring 16	0.000E+00	2.400E-02	---	FRACA(16)
SEXT	Ring 17	0.000E+00	1.900E-01	---	FRACA(17)
SEXT	Ring 18	0.000E+00	2.400E-01	---	FRACA(18)
SEXT	Ring 19	5.600E-02	2.000E-01	---	FRACA(19)
SEXT	Ring 20	1.100E-01	1.700E-01	---	FRACA(20)
SEXT	Ring 21	1.000E-01	1.500E-01	---	FRACA(21)
SEXT	Ring 22	9.100E-02	1.300E-01	---	FRACA(22)
SEXT	Ring 23	8.300E-02	1.200E-01	---	FRACA(23)
SEXT	Ring 24	5.600E-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:	1.000E+01	1.000E+01	---	RAD_SHAPE(25)
SEXT	Outer annular radius (m), ring 26:	1.000E+01	1.000E+01	---	RAD_SHAPE(26)
SEXT	Outer annular radius (m), ring 27:	1.000E+01	1.000E+01	---	RAD_SHAPE(27)
SEXT	Outer annular radius (m), ring 28:	1.000E+01	1.000E+01	---	RAD_SHAPE(28)
SEXT	Outer annular radius (m), ring 29:	1.000E+01	1.000E+01	---	RAD_SHAPE(29)
SEXT	Outer annular radius (m), ring 30:	1.000E+01	1.000E+01	---	RAD_SHAPE(30)
SEXT	Outer annular radius (m), ring 31:	1.000E+01	1.000E+01	---	RAD_SHAPE(31)
SEXT	Outer annular radius (m), ring 32:	1.000E+01	1.000E+01	---	RAD_SHAPE(32)
SEXT	Outer annular radius (m), ring 33:	1.000E+01	1.000E+01	---	RAD_SHAPE(33)
SEXT	Outer annular radius (m), ring 34:	1.000E+01	1.000E+01	---	RAD_SHAPE(34)
SEXT	Outer annular radius (m), ring 35:	1.000E+01	1.000E+01	---	RAD_SHAPE(35)
SEXT	Outer annular radius (m), ring 36:	1.000E+01	1.000E+01	---	RAD_SHAPE(36)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 31

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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 25	0.000E+00	0.000E+00	---	FRACA(25)
SEXT	Ring 26	0.000E+00	0.000E+00	---	FRACA(26)
SEXT	Ring 27	0.000E+00	0.000E+00	---	FRACA(27)
SEXT	Ring 28	0.000E+00	0.000E+00	---	FRACA(28)
SEXT	Ring 29	0.000E+00	0.000E+00	---	FRACA(29)
SEXT	Ring 30	0.000E+00	0.000E+00	---	FRACA(30)
SEXT	Ring 31	0.000E+00	0.000E+00	---	FRACA(31)
SEXT	Ring 32	0.000E+00	0.000E+00	---	FRACA(32)
SEXT	Ring 33	0.000E+00	0.000E+00	---	FRACA(33)
SEXT	Ring 34	0.000E+00	0.000E+00	---	FRACA(34)
SEXT	Ring 35	0.000E+00	0.000E+00	---	FRACA(35)
SEXT	Ring 36	0.000E+00	0.000E+00	---	FRACA(36)
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:	1.000E+01	1.000E+01	---	RAD_SHAPE(37)
SEXT	Outer annular radius (m), ring 38:	1.000E+01	1.000E+01	---	RAD_SHAPE(38)
SEXT	Outer annular radius (m), ring 39:	1.000E+01	1.000E+01	---	RAD_SHAPE(39)
SEXT	Outer annular radius (m), ring 40:	1.000E+01	1.000E+01	---	RAD_SHAPE(40)
SEXT	Outer annular radius (m), ring 41:	1.000E+01	1.000E+01	---	RAD_SHAPE(41)
SEXT	Outer annular radius (m), ring 42:	1.000E+01	1.000E+01	---	RAD_SHAPE(42)
SEXT	Outer annular radius (m), ring 43:	1.000E+01	1.000E+01	---	RAD_SHAPE(43)
SEXT	Outer annular radius (m), ring 44:	1.000E+01	1.000E+01	---	RAD_SHAPE(44)
SEXT	Outer annular radius (m), ring 45:	1.000E+01	1.000E+01	---	RAD_SHAPE(45)
SEXT	Outer annular radius (m), ring 46:	1.000E+01	1.000E+01	---	RAD_SHAPE(46)
SEXT	Outer annular radius (m), ring 47:	1.000E+01	1.000E+01	---	RAD_SHAPE(47)
SEXT	Outer annular radius (m), ring 48:	1.000E+01	1.000E+01	---	RAD_SHAPE(48)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 37	0.000E+00	0.000E+00	---	FRACA(37)
SEXT	Ring 38	0.000E+00	0.000E+00	---	FRACA(38)
SEXT	Ring 39	0.000E+00	0.000E+00	---	FRACA(39)
SEXT	Ring 40	0.000E+00	0.000E+00	---	FRACA(40)
SEXT	Ring 41	0.000E+00	0.000E+00	---	FRACA(41)
SEXT	Ring 42	0.000E+00	0.000E+00	---	FRACA(42)
SEXT	Ring 43	0.000E+00	0.000E+00	---	FRACA(43)
SEXT	Ring 44	0.000E+00	0.000E+00	---	FRACA(44)
SEXT	Ring 45	0.000E+00	0.000E+00	---	FRACA(45)
SEXT	Ring 46	0.000E+00	0.000E+00	---	FRACA(46)
SEXT	Ring 47	0.000E+00	0.000E+00	---	FRACA(47)
SEXT	Ring 48	0.000E+00	0.000E+00	---	FRACA(48)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days 05/04/2016 13:18 Page 32
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User		RESRAD	Parameter
		Input	Default	computed	Name
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:	1.008E+02	1.008E+02	---	RAD_SHAPE(49)
SEXT	Outer annular radius (m), ring 50:	1.044E+02	1.044E+02	---	RAD_SHAPE(50)
SEXT	Outer annular radius (m), ring 51:	1.080E+02	1.080E+02	---	RAD_SHAPE(51)
SEXT	Outer annular radius (m), ring 52:	1.115E+02	1.115E+02	---	RAD_SHAPE(52)
SEXT	Outer annular radius (m), ring 53:	1.150E+02	1.150E+02	---	RAD_SHAPE(53)
SEXT	Outer annular radius (m), ring 54:	1.186E+02	1.186E+02	---	RAD_SHAPE(54)
SEXT	Outer annular radius (m), ring 55:	1.221E+02	1.221E+02	---	RAD_SHAPE(55)
SEXT	Outer annular radius (m), ring 56:	1.256E+02	1.256E+02	---	RAD_SHAPE(56)
SEXT	Outer annular radius (m), ring 57:	1.292E+02	1.292E+02	---	RAD_SHAPE(57)
SEXT	Outer annular radius (m), ring 58:	1.327E+02	1.327E+02	---	RAD_SHAPE(58)
SEXT	Outer annular radius (m), ring 59:	1.355E+02	1.355E+02	---	RAD_SHAPE(59)
SEXT	Outer annular radius (m), ring 60:	1.383E+02	1.383E+02	---	RAD_SHAPE(60)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 49	0.000E+00	0.000E+00	---	FRACA(49)
SEXT	Ring 50	1.633E-02	1.633E-02	---	FRACA(50)
SEXT	Ring 51	4.046E-02	4.046E-02	---	FRACA(51)
SEXT	Ring 52	4.771E-02	4.771E-02	---	FRACA(52)
SEXT	Ring 53	4.614E-02	4.614E-02	---	FRACA(53)
SEXT	Ring 54	4.467E-02	4.467E-02	---	FRACA(54)
SEXT	Ring 55	4.330E-02	4.330E-02	---	FRACA(55)
SEXT	Ring 56	4.201E-02	4.201E-02	---	FRACA(56)
SEXT	Ring 57	4.079E-02	4.079E-02	---	FRACA(57)
SEXT	Ring 58	3.965E-02	3.965E-02	---	FRACA(58)
SEXT	Ring 59	2.622E-02	2.622E-02	---	FRACA(59)
SEXT	Ring 60	6.731E-03	6.731E-03	---	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:	3.915E+02	3.915E+02	---	RAD_SHAPE(61)
SEXT	Outer annular radius (m), ring 62:	3.950E+02	3.950E+02	---	RAD_SHAPE(62)
SEXT	Outer annular radius (m), ring 63:	3.994E+02	3.984E+02	---	RAD_SHAPE(63)
SEXT	Outer annular radius (m), ring 64:	4.019E+02	4.019E+02	---	RAD_SHAPE(64)
SEXT	Outer annular radius (m), ring 65:	4.060E+02	4.060E+02	---	RAD_SHAPE(65)
SEXT	Outer annular radius (m), ring 66:	4.100E+02	4.100E+02	---	RAD_SHAPE(66)
SEXT	Outer annular radius (m), ring 67:	4.141E+02	4.141E+02	---	RAD_SHAPE(67)
SEXT	Outer annular radius (m), ring 68:	4.182E+02	4.182E+02	---	RAD_SHAPE(68)
SEXT	Outer annular radius (m), ring 69:	4.223E+02	4.223E+02	---	RAD_SHAPE(69)
SEXT	Outer annular radius (m), ring 70:	4.255E+02	4.255E+02	---	RAD_SHAPE(70)
SEXT	Outer annular radius (m), ring 71:	4.287E+02	4.287E+02	---	RAD_SHAPE(71)
SEXT	Outer annular radius (m), ring 72:	4.319E+02	4.319E+02	---	RAD_SHAPE(72)

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T₄ Limit = 30 days

05/04/2016 13:18 Page 33

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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 61	0.000E+00	0.000E+00	---	FRACA(61)
SEXT	Ring 62	2.437E-03	2.437E-03	---	FRACA(62)
SEXT	Ring 63	7.078E-03	7.078E-03	---	FRACA(63)
SEXT	Ring 64	1.134E-02	1.134E-02	---	FRACA(64)
SEXT	Ring 65	1.331E-02	1.331E-02	---	FRACA(65)
SEXT	Ring 66	1.316E-02	1.316E-02	---	FRACA(66)
SEXT	Ring 67	1.301E-02	1.301E-02	---	FRACA(67)
SEXT	Ring 68	1.287E-02	1.287E-02	---	FRACA(68)
SEXT	Ring 69	1.273E-02	1.273E-02	---	FRACA(69)
SEXT	Ring 70	1.036E-02	1.036E-02	---	FRACA(70)
SEXT	Ring 71	5.975E-03	5.975E-03	---	FRACA(71)
SEXT	Ring 72	1.936E-03	1.936E-03	---	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	1.140E-02	0.000E+00	---	FOTD
OCCU	Fraction of time spent indoors in Offsite Dwelling	6.600E-01	5.000E-01	---	FINDDWELL
OCCU	Fraction of time spent outdoors in Offsite Dwelling	1.002E-01	1.000E-01	---	FOTDDWELL
OCCU	Fraction of time spent outdoors in agri. area 1	0.000E+00	1.000E-01	---	OCCUPANCY(1)
OCCU	Fraction of time spent outdoors in agri. area 2	0.000E+00	1.000E-01	---	OCCUPANCY(2)
OCCU	Fraction of time spent outdoors in agri. area 3	1.142E-01	1.000E-01	---	OCCUPANCY(3)
OCCU	Fraction of time spent outdoors in agri. area 4	1.142E-01	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 pasture	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	---	HMX
RADN	Height of the building (room) (m)	not used	2.500E+00	---	HRM
RADN	Average building air exchange rate (l/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	---	HMXV
C14	C-14 evasion flux rate from soil (l/sec)	not used	7.000E-07	---	C14EVSN

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_{1/2} Limit = 30 days 05/04/2016 13:18 Page 34
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
C14	C-12 evasion flux rate from soil (l/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)
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	suppressed
4 -- meat ingestion	active
5 -- milk ingestion	suppressed
6 -- aquatic foods	suppressed
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 35

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	1024.00 square meters	Cs-137	1.110E-01
Thickness:	1.00 meters	Pu-239	1.890E-01
Cover Depth:	0.00 meters		
<hr/>			
Total Dose TDOSE(t), mrem/yr			
Basic Radiation Dose Limit = 2.500E+01 mrem/yr			
Total Mixture Som M(t) = Fraction of Basic Dose Limit Received at Time (t)			
t (years):	0.000E+00 1.000E+00 3.000E+00 6.000E+00 1.200E+01 3.000E+01 7.500E+01 1.750E+02 4.200E+02 9.700E+02		
TDOSE(t):	4.148E-03 4.055E-03 3.875E-03 3.620E-03 3.162E-03 .2.121E-03 8.358E-04 2.213E-04 1.546E-04 1.471E-04		
M(t):	1.659E-04 1.622E-04 1.550E-04 1.448E-04 1.265E-04 8.485E-05 3.343E-05 8.852E-06 6.193E-06 5.885E-06		
Maximum TDOSE(t): 4.148E-03 mrem/yr at t = 0 years			

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 36

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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	%														
Cs-137	0.00E+00	0														
Pu-239	0.00E+00	0														
Total	0.00E+00	0														

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	3.99E-03	96	8.63E-10	0	0.00E+00	0	0.00E+00	0	7.63E-11	0	0.00E+00	0	1.14E-06	0	3.99E-03	96
Pu-239	6.05E-07	0	2.00E-05	0	0.00E+00	0	0.00E+00	0	3.08E-11	0	0.00E+00	0	1.40E-04	3	1.60E-04	4
Total	3.99E-03	96	2.00E-05	0	0.00E+00	0	0.00E+00	0	1.07E-10	0	0.00E+00	0	1.41E-04	3	4.15E-03	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 37

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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	%														
Cs-137	0.00E+00	0														
Pu-239	0.00E+00	0														
Total	0.00E+00	0														

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	3.89E-03	96	8.43E-10	0	0.00E+00	0	0.00E+00	0	7.63E-11	0	0.00E+00	0	1.12E-06	0	3.89E-03	96
Pu-239	6.05E-07	0	2.00E-05	0	0.00E+00	0	0.00E+00	0	3.10E-11	0	0.00E+00	0	1.40E-04	3	1.60E-04	4
Total	3.89E-03	96	2.00E-05	0	0.00E+00	0	0.00E+00	0	1.07E-10	0	0.00E+00	0	1.41E-04	3	4.05E-03	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days 05/04/2016 13:18 Page 38
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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	%														
Cs-137	0.00E+00	0														
Pu-239	0.00E+00	0														
Total	0.00E+00	0														

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	3.71E-03	96	8.04E-10	0	0.00E+00	0	0.00E+00	0	7.63E-11	0	0.00E+00	0	1.07E-06	0	3.71E-03	96
Pu-239	6.05E-07	0	2.00E-05	1	0.00E+00	0	0.00E+00	0	3.15E-11	0	0.00E+00	0	1.40E-04	4	1.60E-04	4
Total	3.71E-03	96	2.00E-05	1	0.00E+00	0	0.00E+00	0	1.08E-10	0	0.00E+00	0	1.41E-04	4	3.87E-03	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_{1/2} Limit = 30 days 05/04/2016 13:18 Page 39
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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	%														
Cs-137	0.00E+00	0														
Pu-239	0.00E+00	0														
Total	0.00E+00	0														

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	3.46E-03	.96	7.49E-10	0	0.00E+00	0	0.00E+00	0	7.59E-11	0	0.00E+00	0	9.93E-07	0.	3.46E-03	.96
Pu-239	6.05E-07	0	2.00E-05	1	0.00E+00	0	0.00E+00	0	3.23E-11	0	0.00E+00	0	1.39E-04	4	1.60E-04	4
Total	3.46E-03	.96	2.00E-05	1	0.00E+00	0	0.00E+00	0	1.08E-10	0	0.00E+00	0	1.40E-04	4	3.62E-03	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_{Max} Limit = 30 days 05/04/2016 13:18 Page 40
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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	0.000E+00	0	0.00E+00	0	0.000E+00	0	0.00E+00	0								
Pu-239	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0
Total	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0

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	3.00E-03	95	6.50E-10	0	0.00E+00	0	0.00E+00	0	7.42E-11	0	0.00E+00	0	8.62E-07	0	3.00E-03	95
Pu-239	6.04E-07	0	2.00E-05	1	0.00E+00	0	0.00E+00	0	3.38E-11	0	0.00E+00	0	1.39E-04	4	1.60E-04	5
Total	3.00E-03	95	2.00E-05	1	0.00E+00	0	0.00E+00	0	1.08E-10	0	0.00E+00	0	1.40E-04	4	3.16E-03	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_½ Limit = 30 days

05/04/2016 13:18 Page 41

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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	%														
Cs-137	0.000E+00	0														
Pu-239	0.000E+00	0														
Total	0.000E+00	0														

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	1.96E-03	92	4.25E-10	0	0.00E+00	0	0.00E+00	0	6.42E-11	0	0.00E+00	0	5.63E-07	0	1.96E-03	92
Pu-239	6.04E-07	0	1.99E-05	1	0.00E+00	0	0.00E+00	0	3.82E-11	0	0.00E+00	0	1.39E-04	7	1.60E-04	8
Total	1.96E-03	92	1.99E-05	1	0.00E+00	0	0.00E+00	0	1.02E-10	0	0.00E+00	0	1.40E-04	7	2.12E-03	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 T_{1/2} Limit = 30 days 05/04/2016 13:18 Page 42
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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	%														
Cs-137	0.00E+00	0														
Pu-239	1.84E-25	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	1.61E-24	0	0.00E+00	0	1.24E-27	0	3.98E-22	0
Total	1.84E-25	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	1.61E-24	0	0.00E+00	0	1.24E-27	0	3.98E-22	0

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	6.76E-04	81	1.46E-10	0	0.00E+00	0	0.00E+00	0	3.45E-11	0	0.00E+00	0	1.94E-07	0	6.77E-04	81
Pu-239	6.01E-07	0	1.99E-05	2	0.00E+00	0	0.00E+00	0	4.91E-11	0	0.00E+00	0	1.39E-04	17	1.59E-04	19
Total	6.77E-04	81	1.99E-05	2	0.00E+00	0	0.00E+00	0	8.35E-11	0	0.00E+00	0	1.39E-04	17	8.36E-04	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_½ Limit = 30 days

05/04/2016 13:18 Page 43

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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	%														
Cs-137	0.00E+00	0														
Pu-239	1.17E-14	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	8.44E-15	0	0.00E+00	0	7.96E-17	0	1.63E-12	0
Total	1.17E-14	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	8.44E-15	0	0.00E+00	0	7.96E-17	0	1.63E-12	0

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	6.35E-05	29	1.38E-11	0	0.00E+00	0	0.00E+00	0	5.30E-12	0	0.00E+00	0	1.82E-08	0	6.36E-05	29
Pu-239	5.96E-07	0	1.97E-05	9	0.00E+00	0	0.00E+00	0	7.24E-11	0	0.00E+00	0	1.37E-04	62	1.58E-04	71
Total	6.41E-05	29	1.97E-05	9	0.00E+00	0	0.00E+00	0	7.77E-11	0	0.00E+00	0	1.37E-04	62	2.21E-04	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days 05/04/2016 13:18 Page 44
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER 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	%														
Cs-137	0.000E+00	0														
Pu-239	1.15E-11	0	0.000E+00	0	0.000E+00	0	0.000E+00	0	3.82E-12	0	0.000E+00	0	8.59E-14	0	6.01E-10	0
Total	1.15E-11	0	0.000E+00	0	0.000E+00	0	0.000E+00	0	3.82E-12	0	0.000E+00	0	8.59E-14	0	6.01E-10	0

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	1.93E-07	0	4.19E-14	0	0.000E+00	0	0.000E+00	0	2.53E-14	0	0.000E+00	0	5.55E-11	0	1.94E-07	0
Pu-239	5.84E-07	0	1.93E-05	12	0.000E+00	0	0.000E+00	0	1.25E-10	0	0.000E+00	0	1.35E-04	87	1.54E-04	100
Total	7.77E-07	1	1.93E-05	12	0.000E+00	0	0.000E+00	0	1.25E-10	0	0.000E+00	0	1.35E-04	87	1.55E-04	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_k Limit = 30 days

05/04/2016 13:18 Page 45

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER 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	%														
Cs-137	2.77E-18	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	2.53E-18	0	0.00E+00	0	8.21E-22	0	3.59E-18	0
Pu-239	4.68E-11	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	2.20E-11	0	0.00E+00	0	5.61E-13	0	1.84E-09	0
Total	4.68E-11	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	2.20E-11	0	0.00E+00	0	5.61E-13	0	1.84E-09	0

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	4.34E-13	0	9.39E-20	0	0.00E+00	0	0.00E+00	0	7.17E-20	0	0.00E+00	0	1.25E-16	0	4.34E-13	0
Pu-239	5.56E-07	0	1.84E-05	12	0.00E+00	0	0.00E+00	0	2.20E-10	0	0.00E+00	0	1.28E-04	87	1.47E-04	100
Total	5.56E-07	0	1.84E-05	12	0.00E+00	0	0.00E+00	0	2.20E-10	0	0.00E+00	0	1.28E-04	87	1.47E-04	100

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1

T_{1/2} Limit = 30 days

05/04/2016 13:18 Page 46

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 3.2 FARMER PU.ROF

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

Parent	Product	Thread	DSR(j,t) (mrem/yr)/(pCi/g)									
(i)	(j)	Fraction	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	3.592E-02	3.509E-02	3.346E-02	3.117E-02	2.765E-02	1.767E-02	6.096E-03	5.726E-04	1.743E-06	3.909E-12
Pu-239	Pu-239	1.000E+00	8.475E-04	8.474E-04	8.473E-04	8.470E-04	8.466E-04	8.453E-04	8.419E-04	8.346E-04	8.169E-04	7.785E-04
Pu-239	U-235+D	1.000E+00	4.084E-12	1.223E-11	2.841E-11	5.242E-11	9.949E-11	2.334E-10	5.246E-10	1.004E-09	4.790E-09	1.158E-08
Pu-239	Pa-231	1.000E+00	1.760E-17	1.137E-16	5.890E-16	2.003E-15	7.320E-15	4.239E-14	2.432E-13	1.145E-12	1.125E-11	1.418E-10
Pu-239	Ac-227+D	1.000E+00	8.768E-19	1.155E-17	1.262E-16	7.654E-16	5.121E-15	6.379E-14	6.904E-13	4.789E-12	2.926E-11	1.887E-10
Pu-239	Σ DSR(j)		8.475E-04	8.474E-04	8.473E-04	8.470E-04	8.466E-04	8.453E-04	8.419E-04	8.346E-04	8.169E-04	7.785E-04

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	6.959E+02	7.126E+02	7.471E+02	8.020E+02	9.243E+02	1.415E+03	4.101E+03	4.366E+04	1.434E+07	6.396E+12	
Pu-239	2.950E+04	2.950E+04	2.951E+04	2.951E+04	2.953E+04	2.958E+04	2.969E+04	2.995E+04	3.060E+04	3.211E+04	

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)

and Single Radionuclide Soil Guidelines G(i,t) in pCi/g

at t_{min} = time of minimum single radionuclide soil guideline

and at t_{max} = time of maximum total dose = 0 years

Nuclide	Initial	t _{min}	DSR(i,t _{min})	G(i,t _{min})	DSR(i,t _{max})	G(i,t _{max})
(i)	(pCi/g)	(years)	(pCi/g)	(pCi/g)	(pCi/g)	(pCi/g)
Cs-137	1.110E-01	0	3.592E-02	6.959E+02	3.592E-02	6.959E+02
Pu-239	1.890E-01	0	8.475E-04	2.950E+04	8.475E-04	2.950E+04

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TH₉₀ Limit = 30 days 05/04/2016 13:18 Page 47
 Parent Dose Report
 Title : RESRAD-OFFSITE Default Parameters
 File : AREA 3.2 FARMER PU.ROF

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

Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(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	Cs-137	1.000E+00	3.988E-03	3.894E-03	3.715E-03	3.460E-03	3.002E-03	1.961E-03	6.766E-04	6.356E-05	1.935E-07	4.339E-13
Pu-239	Pu-239	1.000E+00	1.602E-04	1.602E-04	1.601E-04	1.601E-04	1.600E-04	1.599E-04	1.591E-04	1.577E-04	1.544E-04	1.471E-04
U-235	Pu-239	1.000E+00	7.720E-13	2.312E-12	5.370E-12	9.908E-12	1.880E-11	4.411E-11	9.915E-11	1.897E-10	9.052E-10	2.189E-09
Pa-231	Pu-239	1.000E+00	3.326E-18	2.150E-17	1.113E-16	3.786E-16	1.383E-15	8.011E-15	4.596E-14	2.164E-13	2.126E-12	2.679E-11
Ac-227	Pu-239	1.000E+00	1.657E-19	2.183E-18	2.386E-17	1.447E-16	9.678E-16	1.206E-14	1.305E-13	9.050E-13	5.531E-12	3.567E-11

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

Individual Nuclide Soil Concentration
 Parent Nuclide and Thread Fraction Indicated

Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(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	Cs-137	1.000E+00	1.110E-01	1.084E-01	1.034E-01	9.632E-02	8.357E-02	5.460E-02	1.883E-02	1.769E-03	5.386E-06	1.208E-11
Pu-239	Pu-239	1.000E+00	1.890E-01	1.890E-01	1.890E-01	1.889E-01	1.888E-01	1.885E-01	1.878E-01	1.861E-01	1.822E-01	1.736E-01
U-235	Pu-239	1.000E+00	0.000E+00	1.857E-10	5.547E-10	1.102E-09	2.175E-09	5.228E-09	1.187E-08	2.260E-08	3.503E-08	3.941E-08
Pa-231	Pu-239	1.000E+00	0.000E+00	2.009E-15	1.774E-14	7.035E-14	2.786E-13	1.694E-12	9.916E-12	4.697E-11	1.996E-10	6.245E-10
Ac-227	Pu-239	1.000E+00	0.000E+00	2.222E-17	5.580E-16	4.293E-15	3.248E-14	4.358E-13	4.857E-12	3.404E-11	1.771E-10	5.985E-10

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

Appendix H15: RESRAD-Offsite 3.1 Output for Area 3.2 Pu-239

RESRAD-OFFSITE, Version 3.1 TM Limit = 30 days 05/04/2016 13:18 Page 48
Parent Dose Report
Title : RESRAD-OFFSITE Default Parameters
File : AREA 3.2 FARMER PU.ROF

Run Time Information

ResOCalc.EXE execution began at 13:18 on 05/04/2016

ResOCalc.EXE execution ended at 13:19 on 05/04/2016

ResOCalc.EXE execution time 4.723 seconds