

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

Current Library: FGR 12

Default Library: FGR 12

Menu	Parameter	Current Value	Default	Parameter Name
DCSF	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
DCSF	Ac-225 (Source: FGR 12)	6.371E-02	6.371E-02	DCFEXT( 1)
DCSF	Am-241 (Source: FGR 12)	4.372E-02	4.372E-02	DCFEXT( 2)
DCSF	At-217 (Source: FGR 12)	1.773E-03	1.773E-03	DCFEXT( 3)
DCSF	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCFEXT( 4)
DCSF	Bi-213 (Source: FGR 12)	7.660E-01	7.660E-01	DCFEXT( 5)
DCSF	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCFEXT( 6)
DCSF	Fr-221 (Source: FGR 12)	1.536E-01	1.536E-01	DCFEXT( 7)
DCSF	Np-237 (Source: FGR 12)	7.790E-02	7.790E-02	DCFEXT( 8)
DCSF	Pa-233 (Source: FGR 12)	1.020E+00	1.020E+00	DCFEXT( 9)
DCSF	Pb-209 (Source: FGR 12)	7.734E-04	7.734E-04	DCFEXT( 10)
DCSF	Po-213 (Source: FGR 12)	0.000E+00	0.000E+00	DCFEXT( 11)
DCSF	Ra-225 (Source: FGR 12)	1.102E-02	1.102E-02	DCFEXT( 12)
DCSF	Sr-90 (Source: FGR 12)	7.043E-04	7.043E-04	DCFEXT( 13)
DCSF	Th-229 (Source: FGR 12)	3.213E-01	3.213E-01	DCFEXT( 14)
DCSF	Tl-209 (Source: FGR 12)	1.293E+01	1.293E+01	DCFEXT( 15)
DCSF	U-233 (Source: FGR 12)	1.397E-03	1.397E-03	DCFEXT( 16)
DCSF	Y-90 (Source: FGR 12)	2.391E-02	2.391E-02	DCFEXT( 17)

Current Library: FGR 11

Default Library: FGR 11

Menu	Parameter	Current Value	Default	Parameter Name
DCSF	Dose conversion factors for inhalation, mrem/pCi:			
DCSF	Am-241	4.440E-01	4.440E-01	DCF2(1)
DCSF	Cs-137+D	3.190E-05	3.190E-05	DCF2(2)
DCSF	Np-237+D	5.400E-01	5.400E-01	DCF2(3)
DCSF	Sr-90+D	1.308E-03	1.308E-03	DCF2(4)
DCSF	Th-229+D	2.169E+00	2.169E+00	DCF2(5)
DCSF	U-233	1.350E-01	1.350E-01	DCF2(6)
DCSF	Dose conversion factors for ingestion, mrem/pCi:			
DCSF	Am-241	3.640E-03	3.640E-03	DCF3(1)
DCSF	Cs-137+D	5.000E-05	5.000E-05	DCF3(2)
DCSF	Np-237+D	4.444E-03	4.444E-03	DCF3(3)
DCSF	Sr-90+D	1.528E-04	1.528E-04	DCF3(4)
DCSF	Th-229+D	4.027E-03	4.027E-03	DCF3(5)
DCSF	U-233	2.890E-04	2.890E-04	DCF3(6)

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

Menu	Parameter	Current Value	Default	Parameter Name
TF	Soil to plant transfer factors:			
TF	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(1,1)
TF	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(1,2)
TF	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(1,3)
TF	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-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	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(3,1)
TF	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(3,2)
TF	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(3,3)
TF	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(3,4)
TF				
TF	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(4,1)
TF	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(4,2)
TF	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(4,3)
TF	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(4,4)
TF				
TF	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(5,1)
TF	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(5,2)
TF	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(5,3)
TF	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(5,4)
TF				
TF	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,1)
TF	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,2)
TF	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,3)
TF	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,4)
TF				
TF	intake to meat/milk transfer factors:			
TF	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	I_M(1,1)
TF	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	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	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	I_M(3,1)
TF	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	I_M(3,2)
TF				
TF	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	I_M(4,1)
TF	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	I_M(4,2)
TF				

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

Menu	Parameter	Current Value	Default	Parameter Name
TF	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	I_M(5,1)
TF	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	I_M(5,2)
TF				
TF	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	I_M(6,1)
TF	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	I_M(6,2)
TF				
TF	Bioaccumulation factors, fresh water, L/kg:			
TF	Am-241 , fish	3.000E+01	3.000E+01	BIOFA(1,1)
TF	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFA(1,2)
TF				
TF	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFA(2,1)
TF	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFA(2,2)
TF				
TF	Np-237+D , fish	3.000E+01	3.000E+01	BIOFA(3,1)
TF	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFA(3,2)
TF				
TF	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFA(4,1)
TF	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFA(4,2)
TF				
TF	Th-229+D , fish	1.000E+02	1.000E+02	BIOFA(5,1)
TF	Th-229+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFA(5,2)
TF				
TF	U-233 , fish	1.000E+01	1.000E+01	BIOFA(6,1)
TF	U-233 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFA(6,2)

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## Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
FSTI	Exposure duration	1.000E+00	3.000E+01	---	ED
FSTI	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
CONC	Initial principal radionuclide (pCi/g): Am-241	1.700E-01	0.000E+00	---	S1 (1)
CONC	Initial principal radionuclide (pCi/g): Cs-137	3.180E-01	0.000E+00	---	S1 (2)
CONC	Initial principal radionuclide (pCi/g): Sr-90	2.760E-01	0.000E+00	---	S1 (4)
VDEP	Deposition velocity for Am-241	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 Np-237	1.000E-03	1.000E-03	---	DEPVEL (3)
VDEP	Deposition velocity for Sr-90	1.000E-03	1.000E-03	---	DEPVEL (4)
VDEP	Deposition velocity for Th-229	1.000E-03	1.000E-03	---	DEPVEL (5)
VDEP	Deposition velocity for U-233	1.000E-03	1.000E-03	---	DEPVEL (6)
DCLR	Distribution coefficients for Am-241				
DCLR	Contaminated zone (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCC (1)
DCLR	Unsaturated zone 1 (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCU (1,1)
DCLR	Saturated zone (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCS (1)
DCLR	Sediment in surface water body (cm**3/g)	4.000E+03	2.000E+01	---	DCNUCSWB (1)
DCLR	Agricultural area 1 (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCOF (1,1)
DCLR	Agricultural area 2 (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCOF (1,2)
DCLR	Agricultural area 3 (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCOF (1,3)
DCLR	Agricultural area 4 (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCOF (1,4)
DCLR	Offsite Dwelling (cm**3/g)	1.900E+03	2.000E+01	---	DCNUCDWE (1)
DCLR	Initial Leach rate (/yr) Am-241	0.000E+00	0.000E+00	8.052E-05	ALEACH (1)
DCLR	Distribution coefficients for Cs-137				
DCLR	Contaminated zone (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCC (2)
DCLR	Unsaturated zone 1 (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCU (2,1)
DCLR	Saturated zone (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCS (2)
DCLR	Sediment in surface water body (cm**3/g)	4.800E+02	4.600E+03	---	DCNUCSWB (2)
DCLR	Agricultural area 1 (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCOF (2,1)
DCLR	Agricultural area 2 (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCOF (2,2)
DCLR	Agricultural area 3 (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCOF (2,3)
DCLR	Agricultural area 4 (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCOF (2,4)
DCLR	Offsite Dwelling (cm**3/g)	2.800E+02	4.600E+03	---	DCNUCDWE (2)
DCLR	Initial Leach rate (/yr) Cs-137	0.000E+00	0.000E+00	5.462E-04	ALEACH (2)

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## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
DCLR	Distribution coefficients for Sr-90				
DCLR	Contaminated zone (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCC (4)
DCLR	Unsaturated zone 1 (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCU (4,1)
DCLR	Saturated zone (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCS (4)
DCLR	Sediment in surface water body (cm**3/g)	1.500E+01	3.000E+01	---	DCNUCSWB (4)
DCLR	Agricultural area 1 (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCOF (4,1)
DCLR	Agricultural area 2 (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCOF (4,2)
DCLR	Agricultural area 3 (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCOF (4,3)
DCLR	Agricultural area 4 (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCOF (4,4)
DCLR	Offsite Dwelling (cm**3/g)	5.000E+00	3.000E+01	---	DCNUCDWE (4)
DCLR	Initial Leach rate (/yr) Sr-90	0.000E+00	0.000E+00	2.990E-02	ALEACH (4)
DCLR	Distribution coefficients for progeny Np-237				
DCLR	Contaminated zone (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCC (3)
DCLR	Unsaturated zone 1 (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCU (3,1)
DCLR	Saturated zone (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCS (3)
DCLR	Sediment in surface water body (cm**3/g)	3.000E+00	2.570E+02	---	DCNUCSWB (3)
DCLR	Agricultural area 1 (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCOF (3,1)
DCLR	Agricultural area 2 (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCOF (3,2)
DCLR	Agricultural area 3 (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCOF (3,3)
DCLR	Agricultural area 4 (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCOF (3,4)
DCLR	Offsite Dwelling (cm**3/g)	2.300E+00	2.570E+02	---	DCNUCDWE (3)
DCLR	Initial Leach rate (/yr) Np-237	0.000E+00	0.000E+00	6.329E-02	ALEACH (3)
DCLR	Distribution coefficients for progeny Th-229				
DCLR	Contaminated zone (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCC (5)
DCLR	Unsaturated zone 1 (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCU (5,1)
DCLR	Saturated zone (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCS (5)
DCLR	Sediment in surface water body (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCSWB (5)
DCLR	Agricultural area 1 (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCOF (5,1)
DCLR	Agricultural area 2 (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCOF (5,2)
DCLR	Agricultural area 3 (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCOF (5,3)
DCLR	Agricultural area 4 (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCOF (5,4)
DCLR	Offsite Dwelling (cm**3/g)	5.890E+03	6.000E+04	---	DCNUCDWE (5)
DCLR	Initial Leach rate (/yr) Th-229	0.000E+00	0.000E+00	2.598E-05	ALEACH (5)
DCLR	Distribution coefficients for progeny U-233				
DCLR	Contaminated zone (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCC (6)
DCLR	Unsaturated zone 1 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCU (6,1)
DCLR	Saturated zone (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCS (6)
DCLR	Sediment in surface water body (cm**3/g)	1.000E+01	5.000E+01	---	DCNUCSWB (6)
DCLR	Agricultural area 1 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF (6,1)
DCLR	Agricultural area 2 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF (6,2)
DCLR	Agricultural area 3 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF (6,3)
DCLR	Agricultural area 4 (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCOF (6,4)
DCLR	Offsite Dwelling (cm**3/g)	3.500E+01	5.000E+01	---	DCNUCDWE (6)
DCLR	Initial Leach rate (/yr) U-233	0.000E+00	0.000E+00	4.357E-03	ALEACH (6)

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## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
LYOT	Bearing of X axis (clockwise angle N-->X in degrees)	9.000E+01	9.000E+01	---	DNXBEARING
LYOT	Length of Primary contamination in X Direction	1.530E+02	1.000E+02	---	SOURCEXY (1)
LYOT	Length of Primary contamination in Y Direction	1.210E+02	1.000E+02	---	SOURCEXY (2)
LYOT	Smaller X coordinate of Agricultural Area 1	-1.100E+02	3.438E+01	---	AGRIXY (1,1)
LYOT	Larger X coordinate of Agricultural Area 1	7.900E+02	6.563E+01	---	AGRIXY (2,1)
LYOT	Smaller Y coordinate of Agricultural Area 1	-2.250E+02	2.340E+02	---	AGRIXY (3,1)
LYOT	Larger Y coordinate of Agricultural Area 1	2.750E+02	2.660E+02	---	AGRIXY (4,1)
LYOT	Smaller X coordinate of Agricultural Area 2	-1.100E+02	3.438E+01	---	AGRIXY (1,2)
LYOT	Larger X coordinate of Agricultural Area 2	7.900E+02	6.563E+01	---	AGRIXY (2,2)
LYOT	Smaller Y coordinate of Agricultural Area 2	-2.250E+02	2.680E+02	---	AGRIXY (3,2)
LYOT	Larger Y coordinate of Agricultural Area 2	2.750E+02	3.000E+02	---	AGRIXY (4,2)
LYOT	Smaller X coordinate of Agricultural Area 3	-1.100E+02	0.000E+00	---	AGRIXY (1,3)
LYOT	Larger X coordinate of Agricultural Area 3	7.900E+02	1.000E+02	---	AGRIXY (2,3)
LYOT	Smaller Y coordinate of Agricultural Area 3	-2.250E+02	4.500E+02	---	AGRIXY (3,3)
LYOT	Larger Y coordinate of Agricultural Area 3	2.750E+02	5.500E+02	---	AGRIXY (4,3)
LYOT	Smaller X coordinate of Agricultural Area 4	-1.100E+02	0.000E+00	---	AGRIXY (1,4)
LYOT	Larger X coordinate of Agricultural Area 4	7.900E+02	1.000E+02	---	AGRIXY (2,4)
LYOT	Smaller Y coordinate of Agricultural Area 4	-2.250E+02	3.000E+02	---	AGRIXY (3,4)
LYOT	Larger Y coordinate of Agricultural Area 4	2.750E+02	4.000E+02	---	AGRIXY (4,4)
LYOT	Smaller X coordinate of Dwelling Area	0.000E+00	3.438E+01	---	DWELLXY (1)
LYOT	Larger X coordinate of Dwelling Area	1.000E+00	6.563E+01	---	DWELLXY (2)
LYOT	Smaller Y coordinate of Dwelling Area	0.000E+00	1.340E+02	---	DWELLXY (3)
LYOT	Larger Y coordinate of Dwelling Area	1.000E+00	1.660E+02	---	DWELLXY (4)
LYOT	Smaller X coordinate of Surface water body	-1.100E+02	-1.000E+02	---	SWXY (1)
LYOT	Larger X coordinate of Surface water body	9.900E+02	2.000E+02	---	SWXY (2)
LYOT	Smaller Y coordinate of Surface water body	-3.250E+02	5.500E+02	---	SWXY (3)
LYOT	Larger Y coordinate of Surface water body	-2.250E+02	8.500E+02	---	SWXY (4)
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T (1)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T (2)
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T (3)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T (4)
STOR	Livestock feed - pasture or silage	1.000E+00	1.000E+00	---	STOR_T (5)
STOR	Livestock feed - grain	4.500E+01	4.500E+01	---	STOR_T (6)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T (7)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T (8)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T (9)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T (10)
TIME	Times at which dose/risk are to be reported (yr)	1.000E+00	1.000E+00	---	T (2)
TIME	Times at which dose/risk are to be reported (yr)	3.000E+00	3.000E+00	---	T (3)
TIME	Times at which dose/risk are to be reported (yr)	6.000E+00	6.000E+00	---	T (4)
TIME	Times at which dose/risk are to be reported (yr)	1.200E+01	1.200E+01	---	T (5)
TIME	Times at which dose/risk are to be reported (yr)	3.000E+01	3.000E+01	---	T (6)
TIME	Times at which dose/risk are to be reported (yr)	7.500E+01	7.500E+01	---	T (7)
TIME	Times at which dose/risk are to be reported (yr)	1.750E+02	1.750E+02	---	T (8)

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 8

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## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
TIME	Times at which dose/risk are to be reported (yr)	4.200E+02	4.200E+02	---	T(9)
TIME	Times at which dose/risk are to be reported (yr)	9.700E+02	9.700E+02	---	T(10)
SITE	Precipitation (m/yr)	1.160E+00	1.000E+00	---	PRECIP
SITE	Average annual wind speed (m/sec)	2.278E+00	2.000E+00	---	WIND
PRCZ	Area of primary contamination (m**2)	1.851E+04	1.000E+04	---	AREA
PRCZ	Length parallel to aquifer flow (m)	1.360E+02	1.000E+02	---	LCZPAQ
PRCZ	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
PRCZ	Deposition velocity of dust (m)	1.000E-03	1.000E-03	---	DEPVEL_DUST
PRCZ	Irrigation (m/yr)	5.875E-02	2.000E-01	---	RI
PRCZ	Evapotranspiration coefficient	6.500E-01	5.000E-01	---	EVAPTR
PRCZ	Runoff coefficient	4.100E-01	2.000E-01	---	RUNOFF
PRCZ	Rainfall Erosion Index	1.600E+02	1.600E+02	---	RAINEROS
PRCZ	Slope-length-steepness factor of prim. contamination	4.000E-01	4.000E-01	---	SLPLENSTPPC
PRCZ	Cropping-management factor of primary contamination	3.000E-03	3.000E-03	---	CRPMANGPC
PRCZ	Conservation practice factor of prim. contamination	1.000E+00	1.000E+00	---	CONVPRACPC
PRCZ	Thickness of contaminated zone (m)	1.000E+00	2.000E+00	---	THICKO
PRCZ	Contaminated zone total porosity	3.600E-01	4.000E-01	---	TPCZ
PRCZ	Computed erosion rate of contaminated zone (m/yr)	0.000E+00	1.147E-05	---	V CZ
PRCZ	Density of contaminated zone (g/cm**3)	1.700E+00	1.500E+00	---	DENSCZ
PRCZ	Soil erodibility factor of contaminated zone	0.000E+00	4.000E-01	---	ERODIBILITYCZ
PRCZ	Contaminated zone field capacity	2.000E-01	3.000E-01	---	FCCZ
PRCZ	Contaminated zone b parameter	1.400E+00	5.300E+00	---	BCZ
PRCZ	Contaminated zone hydraulic conductivity (m/yr)	1.400E+02	1.000E+01	---	HCCZ
PRCZ	Contaminated zone effective porosity	2.500E-01	4.000E-01	---	EPCZ
PRCZ	longitudinal dispersivity of prime contamination (m)	5.000E-02	5.000E-02	---	ALPHALCZ
PRCZ	Cover depth (m)	not used	0.000E+00	---	COVERO
PRCZ	Total porosity of the cover material	not used	4.000E-01	---	TPCV
PRCZ	Computed erosion rate of cover material (m/yr)	not used	1.147E-05	---	V CV
PRCZ	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
PRCZ	Soil erodibility factor of cover	4.000E-01	4.000E-01	---	ERODIBILITYCV
PRCZ	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
AGRI	Areal extent of Agricultural Area 1 (m**2)	4.500E+05	1.000E+03	---	AREAO(1)
AGRI	Fraction of Agri. Area 1 directly over the c.z.	4.114E-02	0.000E+00	---	FAREA_PLANT(1)
AGRI	Evapotranspiration coefficient in Agri. Area 1	6.500E-01	5.000E-01	---	EVAPTRN(1)
AGRI	Runoff coefficient in Agricultural Area 1	4.100E-01	2.000E-01	---	RUNOF(1)
AGRI	Mixing depth/plow layer of Agricultural Area 1	1.500E-01	1.500E-01	---	DPHMXG(1)
AGRI	Water filled porosity of soil in Agri. Area 1	3.000E-01	3.000E-01	---	TMOF(1)
AGRI	Computed erosion rate of soil in Agri. Area 1	0.000E+00	1.147E-05	---	EROSN(1)
AGRI	Dry Bulk Density of soil in Agricultural Area 1	1.700E+00	1.500E+00	---	RHOB(1)
AGRI	Soil erodibility factor of Agricultural Area 1	0.000E+00	4.000E-01	---	ERODIBILITY(1)
AGRI	Slope-length-steepness factor, Agricultural Area 1	4.000E-01	4.000E-01	---	SLPLENSTP(1)
AGRI	Cropping-management factor of Agricultural Area 1	3.000E-03	3.000E-03	---	CRPMANG(1)
AGRI	Conservation practice factor of Agricultural Area 1	1.000E+00	1.000E+00	---	CONVPRAC(1)
AGRI	Total porosity of soil in Agri. Area 1	not used	4.000E-01	---	TPOF(1)



# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
AGRI	Areal extent of Agricultural Area 2 (m**2)	4.500E+05	1.000E+03	---	AREAO (2)
AGRI	Fraction of Agri. Area 2 directly over the c.z.	4.114E-02	0.000E+00	---	FAREA_PLANT (2)
AGRI	Evapotranspiration coefficient in Agri. Area 2	6.500E-01	5.000E-01	---	EVAPTRN (2)
AGRI	Runoff coefficient in Agricultural Area 2	4.100E-01	2.000E-01	---	RUNOF (2)
AGRI	Mixing depth/plow layer of Agricultural Area 2	1.500E-01	1.500E-01	---	DPTHMIXG (2)
AGRI	Water filled porosity of soil in Agri. Area 2	3.000E-01	3.000E-01	---	TMOF (2)
AGRI	Computed erosion rate of soil in Agri. Are2	0.000E+00	1.147E-05	---	EROSN (2)
AGRI	Dry Bulk Density of soil in Agricultural Area 2	1.700E+00	1.500E+00	---	RHOB (2)
AGRI	Soil erodibility factor of Agricultural Area 2	0.000E+00	4.000E-01	---	ERODIBILITY (2)
AGRI	Slope-length-steepness factor, Agricultural Area 2	4.000E-01	4.000E-01	---	SLPLENSTP (2)
AGRI	Cropping-management factor of Agricultural Area 2	3.000E-03	3.000E-03	---	CRPMANG (2)
AGRI	Conservation practice factor of Agricultural Area 2	1.000E+00	1.000E+00	---	CONVPRAC (2)
AGRI	Total porosity of soil in Agri. Area 2	not used	4.000E-01	---	TPOF (2)
AGRI	Areal extent of Agricultural Area 3 (m**2)	4.500E+05	1.000E+04	---	AREAO (3)
AGRI	Fraction of Agri. Area 3 directly over the c.z.	4.114E-02	0.000E+00	---	FAREA_PLANT (3)
AGRI	Evapotranspiration coefficient in Agri. Area 3	6.200E-01	5.000E-01	---	EVAPTRN (3)
AGRI	Runoff coefficient in Agricultural Area 3	4.100E-01	2.000E-01	---	RUNOF (3)
AGRI	Mixing depth/plow layer of Agricultural Area 3	1.500E-01	1.500E-01	---	DPTHMIXG (3)
AGRI	Water filled porosity of soil in Agri. Area 3	3.000E-01	3.000E-01	---	TMOF (3)
AGRI	Computed erosion rate of soil in Agri. Are3	0.000E+00	1.147E-05	---	EROSN (3)
AGRI	Dry Bulk Density of soil in Agricultural Area 3	1.700E+00	1.500E+00	---	RHOB (3)
AGRI	Soil erodibility factor of Agricultural Area 3	0.000E+00	4.000E-01	---	ERODIBILITY (3)
AGRI	Slope-length-steepness factor, Agricultural Area 3	4.000E-01	4.000E-01	---	SLPLENSTP (3)
AGRI	Cropping-management factor of Agricultural Area 3	3.000E-03	3.000E-03	---	CRPMANG (3)
AGRI	Conservation practice factor of Agricultural Area 3	1.000E+00	1.000E+00	---	CONVPRAC (3)
AGRI	Total porosity of soil in Agri. Area 3	not used	4.000E-01	---	TPOF (3)
AGRI	Areal extent of Agricultural Area 4 (m**2)	4.500E+05	1.000E+04	---	AREAO (4)
AGRI	Fraction of Agri. Area 4 directly over the c.z.	4.114E-02	0.000E+00	---	FAREA_PLANT (4)
AGRI	Evapotranspiration coefficient in Agri. Area 4	6.200E-01	5.000E-01	---	EVAPTRN (4)
AGRI	Runoff coefficient in Agricultural Area 4	4.100E-01	2.000E-01	---	RUNOF (4)
AGRI	Mixing depth/plow layer of Agricultural Area 4	1.500E-01	1.500E-01	---	DPTHMIXG (4)
AGRI	Water filled porosity of soil in Agri. Area 4	3.000E-01	3.000E-01	---	TMOF (4)
AGRI	Computed erosion rate of soil in Agri. Are4	0.000E+00	1.147E-05	---	EROSN (4)
AGRI	Dry Bulk Density of soil in Agricultural Area 4	1.700E+00	1.500E+00	---	RHOB (4)
AGRI	Soil erodibility factor of Agricultural Area 4	0.000E+00	4.000E-01	---	ERODIBILITY (4)
AGRI	Slope-length-steepness factor, Agricultural Area 4	4.000E-01	4.000E-01	---	SLPLENSTP (4)
AGRI	Cropping-management factor of Agricultural Area 4	3.000E-03	3.000E-03	---	CRPMANG (4)
AGRI	Conservation practice factor of Agricultural Area 4	1.000E+00	1.000E+00	---	CONVPRAC (4)
AGRI	Total porosity of soil in Agri. Area 4	not used	4.000E-01	---	TPOF (4)
DWEL	Areal extent of Offsite dwelling site (m**2)	1.000E+00	1.000E+03	---	AREADWELL
DWEL	Evapotranspiration coefficient in dwelling (Off) site	6.200E-01	5.000E-01	---	EVAPTRNDWELL
DWEL	Runoff coefficient in Offsite dwelling site	4.100E-01	2.000E-01	---	RUNOFDWELL
DWEL	Mixing depth of Offsite dwelling site	1.500E-01	1.500E-01	---	DPTHMIXGDWELL
DWEL	Water filled porosity of soil in Offsite Dwelling	3.000E-01	3.000E-01	---	TMOFDWELL
DWEL	Computed erosion rate of soil in Offsite Dwelling	0.000E+00	0.000E+00	---	EROSNDWELL
DWEL	Dry Bulk Density of soil in Offsite dwelling site	1.700E+00	1.500E+00	---	RHOBDWELL

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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### Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 13

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 15

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 16

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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



# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 18

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 19

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 20

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 21  
 Parent Dose Report  
 Title : RESRAD-OFFSITE Default Parameters  
 File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 22

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

### Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 23

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 24

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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



# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 25

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 26

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 27

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

### Site-Specific Parameter Summary (continued)

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

### Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
WTRU	Fraction of dairy cow water from surface water	0.000E+00	0.000E+00	---	FSWLV(2)
WTRU	Fraction of dairy cow water from well water	0.000E+00	1.000E+00	---	FWWLV(2)
WTRU	Irrigation rate in Agricultural Area 1 (m/yr)	5.875E-02	2.000E-01	---	RIRRIG(1)
WTRU	Fraction of irrigation water 1 from surface water	5.000E-01	0.000E+00	---	FSWIR(1)
WTRU	Fraction of irrigation water 1 from well water	5.000E-01	1.000E+00	---	FWWIR(1)
WTRU	Irrigation rate in Agricultural Area 2 (m/yr)	5.875E-02	2.000E-01	---	RIRRIG(2)
WTRU	Fraction of irrigation water 2 from surface water	5.000E-01	0.000E+00	---	FSWIR(2)
WTRU	Fraction of irrigation water 2 from well water	5.000E-01	1.000E+00	---	FWWIR(2)
WTRU	Irrigation rate in Agricultural Area 3 (m/yr)	0.000E+00	2.000E-01	---	RIRRIG(3)
WTRU	Fraction of irrigation water 3 from surface water	0.000E+00	0.000E+00	---	FSWIR(3)
WTRU	Fraction of irrigation water 3 from well water	0.000E+00	1.000E+00	---	FWWIR(3)
WTRU	Irrigation rate in Agricultural Area 4 (m/yr)	0.000E+00	2.000E-01	---	RIRRIG(4)
WTRU	Fraction of irrigation water 4 from surface water	0.000E+00	0.000E+00	---	FSWIR(4)
WTRU	Fraction of irrigation water 4 from well water	0.000E+00	1.000E+00	---	FWWIR(4)
WTRU	Irrigation rate in Offsite dwelling site (m/yr)	0.000E+00	2.000E-01	---	RIRRIGDWELL
WTRU	Fraction of irrigation water from surface water	0.000E+00	0.000E+00	---	FSWIRDWELL
WTRU	Fraction of irrigation water from well water	0.000E+00	1.000E+00	---	FWWIRDWELL
WTRU	Well pumping rate (m**3/yr)	4.227E+04	5.100E+03	---	UW
SWBY	Sediment delivery ratio	1.000E+00	1.000E+00	---	SDR
SWBY	Volume of surface water body	1.100E+05	1.500E+05	---	VLAKE
SWBY	Mean residence time of water in surface water body	2.740E-03	1.000E+00	---	TLAKE
SWBY	Surface area of water in surface water body	1.100E+05	9.000E+04	---	ALAKE
INGE	Fish consumption (kg/yr)	1.630E+01	5.400E+00	---	DFI(1)
INGE	Fraction of Fish from affected area	1.000E+00	5.000E-01	---	FFISH(1)
INGE	Other Aquatic food consumption (kg/yr)	0.000E+00	9.000E-01	---	DFI(2)
INGE	Fraction of Aquatic food from affected area	1.000E+00	5.000E-01	---	FFISH(2)
INGE	Non-Leafy vegetables consumption (kg/yr)	8.260E+01	1.600E+02	---	DVI(1)
INGE	Fraction of vegetable 1 from affected area	1.000E+00	5.000E-01	---	FVEG(1)
INGE	Leafy vegetable consumption (kg/yr)	5.900E+01	1.400E+01	---	DVI(2)
INGE	Fraction of vegetable 2 from affected area	1.000E+00	5.000E-01	---	FVEG(2)
INGE	Meat 1 consumption (kg/yr)	5.220E+01	6.300E+01	---	DMI(1)
INGE	Fraction of meat 1 from affected area	1.000E+00	1.000E+00	---	FMEMI(1)
INGE	Milk consumption (L/yr)	0.000E+00	9.200E+01	---	DMI(2)
INGE	Fraction of milk from affected area	1.000E+00	1.000E+00	---	FMEMI(2)
INGE	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
VEGE	Wet weight crop yield for Non-Leafy (kg/m**2)	1.750E+00	7.000E-01	---	YIELD(1)
VEGE	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	GROWTIME(1)
VEGE	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	FOLI_F(1)
VEGE	Weathering Removal Constant for Non-Leafy	1.800E+01	2.000E+01	---	RWEATHER(1)
VEGE	Foliar Interception Fraction for dust Non-Leafy	2.500E-01	2.500E-01	---	FINTCEPT(1,1)
VEGE	Foliar Interception-n Fract-n for irrigation Non-Leafy	2.500E-01	2.500E-01	---	FINTCEPT(1,2)
VEGE	Depth of roots for Non-Leafy (m)	9.000E-01	1.200E+00	---	DROOT(1)
VEGE	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YIELD(2)
VEGE	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	GROWTIME(2)

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 29

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Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

### Site-Specific Parameter Summary (continued)

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 30

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
SEXT	Onsite shape factor array (used if non-circular):				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 1:	8.250E+00	6.000E+00	---	RAD_SHAPE ( 1)
SEXT	Outer annular radius (m), ring 2:	1.650E+01	1.200E+01	---	RAD_SHAPE ( 2)
SEXT	Outer annular radius (m), ring 3:	2.475E+01	1.800E+01	---	RAD_SHAPE ( 3)
SEXT	Outer annular radius (m), ring 4:	3.300E+01	2.400E+01	---	RAD_SHAPE ( 4)
SEXT	Outer annular radius (m), ring 5:	4.125E+01	3.000E+01	---	RAD_SHAPE ( 5)
SEXT	Outer annular radius (m), ring 6:	4.950E+01	3.600E+01	---	RAD_SHAPE ( 6)
SEXT	Outer annular radius (m), ring 7:	5.775E+01	4.200E+01	---	RAD_SHAPE ( 7)
SEXT	Outer annular radius (m), ring 8:	6.600E+01	4.800E+01	---	RAD_SHAPE ( 8)
SEXT	Outer annular radius (m), ring 9:	7.425E+01	5.400E+01	---	RAD_SHAPE ( 9)
SEXT	Outer annular radius (m), ring 10:	8.250E+01	6.000E+01	---	RAD_SHAPE (10)
SEXT	Outer annular radius (m), ring 11:	9.075E+01	6.600E+01	---	RAD_SHAPE (11)
SEXT	Outer annular radius (m), ring 12:	9.900E+01	7.200E+01	---	RAD_SHAPE (12)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 1	1.000E+00	1.000E+00	---	FRACA ( 1)
SEXT	Ring 2	1.000E+00	1.000E+00	---	FRACA ( 2)
SEXT	Ring 3	1.000E+00	1.000E+00	---	FRACA ( 3)
SEXT	Ring 4	1.000E+00	1.000E+00	---	FRACA ( 4)
SEXT	Ring 5	1.000E+00	1.000E+00	---	FRACA ( 5)
SEXT	Ring 6	1.000E+00	1.000E+00	---	FRACA ( 6)
SEXT	Ring 7	1.000E+00	1.000E+00	---	FRACA ( 7)
SEXT	Ring 8	8.800E-01	1.000E+00	---	FRACA ( 8)
SEXT	Ring 9	6.800E-01	7.700E-01	---	FRACA ( 9)
SEXT	Ring 10	4.300E-01	3.700E-01	---	FRACA (10)
SEXT	Ring 11	1.800E-01	1.700E-01	---	FRACA (11)
SEXT	Ring 12	3.800E-02	3.100E-02	---	FRACA (12)
SEXT	Shape factor array from offsite dwelling:				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 13:	1.625E+01	1.325E+01	---	RAD_SHAPE (13)
SEXT	Outer annular radius (m), ring 14:	3.250E+01	2.650E+01	---	RAD_SHAPE (14)
SEXT	Outer annular radius (m), ring 15:	4.875E+01	3.975E+01	---	RAD_SHAPE (15)
SEXT	Outer annular radius (m), ring 16:	6.500E+01	5.300E+01	---	RAD_SHAPE (16)
SEXT	Outer annular radius (m), ring 17:	8.125E+01	6.625E+01	---	RAD_SHAPE (17)
SEXT	Outer annular radius (m), ring 18:	9.750E+01	7.950E+01	---	RAD_SHAPE (18)
SEXT	Outer annular radius (m), ring 19:	1.138E+02	9.275E+01	---	RAD_SHAPE (19)
SEXT	Outer annular radius (m), ring 20:	1.300E+02	1.060E+02	---	RAD_SHAPE (20)
SEXT	Outer annular radius (m), ring 21:	1.463E+02	1.193E+02	---	RAD_SHAPE (21)
SEXT	Outer annular radius (m), ring 22:	1.625E+02	1.325E+02	---	RAD_SHAPE (22)
SEXT	Outer annular radius (m), ring 23:	1.788E+02	1.458E+02	---	RAD_SHAPE (23)
SEXT	Outer annular radius (m), ring 24:	1.950E+02	1.590E+02	---	RAD_SHAPE (24)

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

### Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 13	3.000E-01	0.000E+00	---	FRACA (13)
SEXT	Ring 14	3.000E-01	0.000E+00	---	FRACA (14)
SEXT	Ring 15	3.000E-01	0.000E+00	---	FRACA (15)
SEXT	Ring 16	2.500E-01	2.400E-02	---	FRACA (16)
SEXT	Ring 17	2.500E-01	1.900E-01	---	FRACA (17)
SEXT	Ring 18	2.500E-01	2.400E-01	---	FRACA (18)
SEXT	Ring 19	2.500E-01	2.000E-01	---	FRACA (19)
SEXT	Ring 20	2.300E-01	1.700E-01	---	FRACA (20)
SEXT	Ring 21	1.700E-01	1.500E-01	---	FRACA (21)
SEXT	Ring 22	1.200E-01	1.300E-01	---	FRACA (22)
SEXT	Ring 23	5.000E-02	1.200E-01	---	FRACA (23)
SEXT	Ring 24	1.300E-02	5.200E-02	---	FRACA (24)
SEXT	Shape factor array from offsite area 1:				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 25:	1.870E+02	1.870E+02	---	RAD_SHAPE (25)
SEXT	Outer annular radius (m), ring 26:	1.887E+02	1.887E+02	---	RAD_SHAPE (26)
SEXT	Outer annular radius (m), ring 27:	2.102E+02	2.102E+02	---	RAD_SHAPE (27)
SEXT	Outer annular radius (m), ring 28:	2.287E+02	2.287E+02	---	RAD_SHAPE (28)
SEXT	Outer annular radius (m), ring 29:	2.473E+02	2.473E+02	---	RAD_SHAPE (29)
SEXT	Outer annular radius (m), ring 30:	2.658E+02	2.658E+02	---	RAD_SHAPE (30)
SEXT	Outer annular radius (m), ring 31:	2.844E+02	2.844E+02	---	RAD_SHAPE (31)
SEXT	Outer annular radius (m), ring 32:	3.029E+02	3.029E+02	---	RAD_SHAPE (32)
SEXT	Outer annular radius (m), ring 33:	3.215E+02	3.215E+02	---	RAD_SHAPE (33)
SEXT	Outer annular radius (m), ring 34:	3.400E+02	3.400E+02	---	RAD_SHAPE (34)
SEXT	Outer annular radius (m), ring 35:	3.409E+02	3.409E+02	---	RAD_SHAPE (35)
SEXT	Outer annular radius (m), ring 36:	3.533E+02	3.533E+02	---	RAD_SHAPE (36)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 25	0.000E+00	0.000E+00	---	FRACA (25)
SEXT	Ring 26	2.125E-02	2.125E-02	---	FRACA (26)
SEXT	Ring 27	6.979E-02	6.979E-02	---	FRACA (27)
SEXT	Ring 28	9.024E-02	9.024E-02	---	FRACA (28)
SEXT	Ring 29	8.283E-02	8.283E-02	---	FRACA (29)
SEXT	Ring 30	7.658E-02	7.658E-02	---	FRACA (30)
SEXT	Ring 31	7.122E-02	7.122E-02	---	FRACA (31)
SEXT	Ring 32	6.658E-02	6.658E-02	---	FRACA (32)
SEXT	Ring 33	6.251E-02	6.251E-02	---	FRACA (33)
SEXT	Ring 34	5.892E-02	5.892E-02	---	FRACA (34)
SEXT	Ring 35	4.549E-02	4.549E-02	---	FRACA (35)
SEXT	Ring 36	1.657E-02	1.657E-02	---	FRACA (36)

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

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Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
SEXT	Shape factor array from offsite area 2:				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 37:	1.870E+02	1.870E+02	---	RAD_SHAPE (37)
SEXT	Outer annular radius (m), ring 38:	1.887E+02	1.887E+02	---	RAD_SHAPE (38)
SEXT	Outer annular radius (m), ring 39:	2.102E+02	2.102E+02	---	RAD_SHAPE (39)
SEXT	Outer annular radius (m), ring 40:	2.287E+02	2.287E+02	---	RAD_SHAPE (40)
SEXT	Outer annular radius (m), ring 41:	2.473E+02	2.473E+02	---	RAD_SHAPE (41)
SEXT	Outer annular radius (m), ring 42:	2.658E+02	2.658E+02	---	RAD_SHAPE (42)
SEXT	Outer annular radius (m), ring 43:	2.844E+02	2.844E+02	---	RAD_SHAPE (43)
SEXT	Outer annular radius (m), ring 44:	3.029E+02	3.029E+02	---	RAD_SHAPE (44)
SEXT	Outer annular radius (m), ring 45:	3.215E+02	3.215E+02	---	RAD_SHAPE (45)
SEXT	Outer annular radius (m), ring 46:	3.400E+02	3.400E+02	---	RAD_SHAPE (46)
SEXT	Outer annular radius (m), ring 47:	3.409E+02	3.409E+02	---	RAD_SHAPE (47)
SEXT	Outer annular radius (m), ring 48:	3.533E+02	3.533E+02	---	RAD_SHAPE (48)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 37	0.000E+00	0.000E+00	---	FRACA (37)
SEXT	Ring 38	2.125E-02	2.125E-02	---	FRACA (38)
SEXT	Ring 39	6.979E-02	6.979E-02	---	FRACA (39)
SEXT	Ring 40	9.024E-02	9.024E-02	---	FRACA (40)
SEXT	Ring 41	8.283E-02	8.283E-02	---	FRACA (41)
SEXT	Ring 42	7.658E-02	7.658E-02	---	FRACA (42)
SEXT	Ring 43	7.122E-02	7.122E-02	---	FRACA (43)
SEXT	Ring 44	6.658E-02	6.658E-02	---	FRACA (44)
SEXT	Ring 45	6.251E-02	6.251E-02	---	FRACA (45)
SEXT	Ring 46	5.892E-02	5.892E-02	---	FRACA (46)
SEXT	Ring 47	4.549E-02	4.549E-02	---	FRACA (47)
SEXT	Ring 48	1.657E-02	1.657E-02	---	FRACA (48)
SEXT	Shape factor array from offsite area 3:				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 49:	1.000E+01	1.000E+01	---	RAD_SHAPE (49)
SEXT	Outer annular radius (m), ring 50:	1.000E+01	1.000E+01	---	RAD_SHAPE (50)
SEXT	Outer annular radius (m), ring 51:	1.000E+01	1.000E+01	---	RAD_SHAPE (51)
SEXT	Outer annular radius (m), ring 52:	1.000E+01	1.000E+01	---	RAD_SHAPE (52)
SEXT	Outer annular radius (m), ring 53:	1.000E+01	1.000E+01	---	RAD_SHAPE (53)
SEXT	Outer annular radius (m), ring 54:	1.000E+01	1.000E+01	---	RAD_SHAPE (54)
SEXT	Outer annular radius (m), ring 55:	1.000E+01	1.000E+01	---	RAD_SHAPE (55)
SEXT	Outer annular radius (m), ring 56:	1.000E+01	1.000E+01	---	RAD_SHAPE (56)
SEXT	Outer annular radius (m), ring 57:	1.000E+01	1.000E+01	---	RAD_SHAPE (57)
SEXT	Outer annular radius (m), ring 58:	1.000E+01	1.000E+01	---	RAD_SHAPE (58)
SEXT	Outer annular radius (m), ring 59:	1.000E+01	1.000E+01	---	RAD_SHAPE (59)
SEXT	Outer annular radius (m), ring 60:	1.000E+01	1.000E+01	---	RAD_SHAPE (60)



# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 33

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	RESRAD computed	Parameter Name
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 49	0.000E+00	0.000E+00	---	FRACA (49)
SEXT	Ring 50	0.000E+00	0.000E+00	---	FRACA (50)
SEXT	Ring 51	0.000E+00	0.000E+00	---	FRACA (51)
SEXT	Ring 52	0.000E+00	0.000E+00	---	FRACA (52)
SEXT	Ring 53	0.000E+00	0.000E+00	---	FRACA (53)
SEXT	Ring 54	0.000E+00	0.000E+00	---	FRACA (54)
SEXT	Ring 55	0.000E+00	0.000E+00	---	FRACA (55)
SEXT	Ring 56	0.000E+00	0.000E+00	---	FRACA (56)
SEXT	Ring 57	0.000E+00	0.000E+00	---	FRACA (57)
SEXT	Ring 58	0.000E+00	0.000E+00	---	FRACA (58)
SEXT	Ring 59	0.000E+00	0.000E+00	---	FRACA (59)
SEXT	Ring 60	0.000E+00	0.000E+00	---	FRACA (60)
SEXT	Shape factor array from offsite area 4:				
SEXT	Radii of shape factor array (used if non-circular):				
SEXT	Outer annular radius (m), ring 61:	1.000E+01	1.000E+01	---	RAD_SHAPE (61)
SEXT	Outer annular radius (m), ring 62:	1.000E+01	1.000E+01	---	RAD_SHAPE (62)
SEXT	Outer annular radius (m), ring 63:	1.000E+01	1.000E+01	---	RAD_SHAPE (63)
SEXT	Outer annular radius (m), ring 64:	1.000E+01	1.000E+01	---	RAD_SHAPE (64)
SEXT	Outer annular radius (m), ring 65:	1.000E+01	1.000E+01	---	RAD_SHAPE (65)
SEXT	Outer annular radius (m), ring 66:	1.000E+01	1.000E+01	---	RAD_SHAPE (66)
SEXT	Outer annular radius (m), ring 67:	1.000E+01	1.000E+01	---	RAD_SHAPE (67)
SEXT	Outer annular radius (m), ring 68:	1.000E+01	1.000E+01	---	RAD_SHAPE (68)
SEXT	Outer annular radius (m), ring 69:	1.000E+01	1.000E+01	---	RAD_SHAPE (69)
SEXT	Outer annular radius (m), ring 70:	1.000E+01	1.000E+01	---	RAD_SHAPE (70)
SEXT	Outer annular radius (m), ring 71:	1.000E+01	1.000E+01	---	RAD_SHAPE (71)
SEXT	Outer annular radius (m), ring 72:	1.000E+01	1.000E+01	---	RAD_SHAPE (72)
SEXT	Fractions of annular areas within AREA:				
SEXT	Ring 61	0.000E+00	0.000E+00	---	FRACA (61)
SEXT	Ring 62	0.000E+00	0.000E+00	---	FRACA (62)
SEXT	Ring 63	0.000E+00	0.000E+00	---	FRACA (63)
SEXT	Ring 64	0.000E+00	0.000E+00	---	FRACA (64)
SEXT	Ring 65	0.000E+00	0.000E+00	---	FRACA (65)
SEXT	Ring 66	0.000E+00	0.000E+00	---	FRACA (66)
SEXT	Ring 67	0.000E+00	0.000E+00	---	FRACA (67)
SEXT	Ring 68	0.000E+00	0.000E+00	---	FRACA (68)
SEXT	Ring 69	0.000E+00	0.000E+00	---	FRACA (69)
SEXT	Ring 70	0.000E+00	0.000E+00	---	FRACA (70)
SEXT	Ring 71	0.000E+00	0.000E+00	---	FRACA (71)
SEXT	Ring 72	0.000E+00	0.000E+00	---	FRACA (72)
OCCU	Fraction of time spent indoors on contaminated site	0.000E+00	0.000E+00	---	FIND
OCCU	Fraction of time spent outdoors on contaminated site	1.358E-01	0.000E+00	---	FOTD
OCCU	Fraction of time spent indoors in Offsite Dwelling	0.000E+00	5.000E-01	---	FINDDWELL
OCCU	Fraction of time spent outdoors in Offsite Dwelling	0.000E+00	1.000E-01	---	FOTDDWELL
OCCU	Fraction of time spent outdoors in agri. area 1	1.045E-01	1.000E-01	---	OCCUPANCY (1)
OCCU	Fraction of time spent outdoors in agri. area 2	8.330E-02	1.000E-01	---	OCCUPANCY (2)

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 34

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

## Site-Specific Parameter Summary (continued)

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 35

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

### Site-Specific Parameter Summary (continued)

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

### Summary of Pathway Selections

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 36

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
Area: 18513.00 square meters	Am-241 1.700E-01
Thickness: 1.00 meters	Cs-137 3.180E-01
Cover Depth: 0.00 meters	Sr-90 2.760E-01

Total Dose TDOSE(t), mrem/yr

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

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

	0.000E+00	1.000E+00	3.000E+00	6.000E+00	1.200E+01	3.000E+01	7.500E+01	1.750E+02	4.200E+02	9.700E+02
t (years):	0.000E+00	1.000E+00	3.000E+00	6.000E+00	1.200E+01	3.000E+01	7.500E+01	1.750E+02	4.200E+02	9.700E+02
TDOSE(t):	2.217E-01	2.145E-01	2.010E-01	1.826E-01	1.516E-01	9.089E-02	4.649E-02	7.131E-03	3.171E-03	1.253E-03
M(t):	8.868E-03	8.581E-03	8.041E-03	7.305E-03	6.064E-03	3.635E-03	1.860E-03	2.852E-04	1.268E-04	5.013E-05

Maximum TDOSE(t): 2.217E-01 mrem/yr at t = 0 years

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 37

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	8.49E-18	0	4.24E-11	0	0.00E+00	0	1.58E-11	0	1.10E-14	0	0.00E+00	0	1.29E-17	0	0.00E+00	0
Cs-137	1.11E-15	0	7.17E-11	0	0.00E+00	0	4.01E-13	0	1.67E-13	0	0.00E+00	0	3.26E-19	0	0.00E+00	0
Sr-90	6.74E-18	0	5.59E-12	0	0.00E+00	0	1.05E-12	0	1.16E-13	0	0.00E+00	0	8.03E-19	0	0.00E+00	0
<b>Total</b>	<b>1.13E-15</b>	<b>0</b>	<b>1.20E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.73E-11</b>	<b>0</b>	<b>2.94E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.41E-17</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 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	%
Am-241	9.83E-04	0	2.28E-04	0	0.00E+00	0	3.60E-03	2	3.33E-05	0	0.00E+00	0	1.54E-03	1	6.38E-03	3
Cs-137	1.37E-01	62	3.03E-08	0	0.00E+00	0	3.66E-03	2	5.97E-04	0	0.00E+00	0	3.91E-05	0	1.42E-01	64
Sr-90	8.50E-04	0	1.06E-06	0	0.00E+00	0	7.18E-02	32	8.30E-04	0	0.00E+00	0	1.02E-04	0	7.36E-02	33
<b>Total</b>	<b>1.39E-01</b>	<b>63</b>	<b>2.29E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.91E-02</b>	<b>36</b>	<b>1.46E-03</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.68E-03</b>	<b>1</b>	<b>2.22E-01</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 38

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	3.36E-17	0	5.63E-11	0	0.00E+00	0	2.08E-11	0	1.50E-14	0	0.00E+00	0	5.12E-17	0	0.00E+00	0
Cs-137	4.32E-15	0	9.33E-11	0	0.00E+00	0	5.20E-13	0	2.24E-13	0	0.00E+00	0	1.27E-18	0	0.00E+00	0
Sr-90	2.40E-17	0	7.10E-12	0	0.00E+00	0	1.35E-12	0	1.52E-13	0	0.00E+00	0	2.87E-18	0	0.00E+00	0
<b>Total</b>	<b>4.38E-15</b>	<b>0</b>	<b>1.57E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.27E-11</b>	<b>0</b>	<b>3.91E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>5.54E-17</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	9.82E-04	0	2.28E-04	0	0.00E+00	0	3.60E-03	2	3.33E-05	0	0.00E+00	0	1.53E-03	1	6.37E-03	3
Cs-137	1.34E-01	63	2.96E-08	0	0.00E+00	0	3.58E-03	2	5.83E-04	0	0.00E+00	0	3.81E-05	0	1.38E-01	65
Sr-90	8.06E-04	0	1.01E-06	0	0.00E+00	0	6.81E-02	32	7.87E-04	0	0.00E+00	0	9.67E-05	0	6.98E-02	33
<b>Total</b>	<b>1.36E-01</b>	<b>63</b>	<b>2.29E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.52E-02</b>	<b>35</b>	<b>1.40E-03</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.67E-03</b>	<b>1</b>	<b>2.15E-01</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 39

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	8.65E-17	0	5.61E-11	0	0.00E+00	0	2.08E-11	0	1.50E-14	0	0.00E+00	0	1.32E-16	0	0.00E+00	0
Cs-137	1.06E-14	0	8.90E-11	0	0.00E+00	0	4.99E-13	0	2.14E-13	0	0.00E+00	0	3.12E-18	0	0.00E+00	0
Sr-90	4.82E-17	0	6.38E-12	0	0.00E+00	0	1.25E-12	0	1.36E-13	0	0.00E+00	0	5.75E-18	0	0.00E+00	0
<b>Total</b>	<b>1.08E-14</b>	<b>0</b>	<b>1.51E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.25E-11</b>	<b>0</b>	<b>3.65E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.41E-16</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)  
in mrem/yr and as a Percentage of Total Dose at t = 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	%
Am-241	9.78E-04	0	2.27E-04	0	0.00E+00	0	3.58E-03	2	3.32E-05	0	0.00E+00	0	1.53E-03	1	6.35E-03	3
Cs-137	1.28E-01	64	2.82E-08	0	0.00E+00	0	3.41E-03	2	5.56E-04	0	0.00E+00	0	3.64E-05	0	1.32E-01	66
Sr-90	7.24E-04	0	9.05E-07	0	0.00E+00	0	6.11E-02	30	7.07E-04	0	0.00E+00	0	8.69E-05	0	6.27E-02	31
<b>Total</b>	<b>1.30E-01</b>	<b>65</b>	<b>2.28E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>6.81E-02</b>	<b>34</b>	<b>1.30E-03</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.65E-03</b>	<b>1</b>	<b>2.01E-01</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 40

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	1.65E-16	0	5.58E-11	0	0.00E+00	0	2.07E-11	0	1.49E-14	0	0.00E+00	0	2.52E-16	0	0.00E+00	0
Cs-137	1.90E-14	0	8.29E-11	0	0.00E+00	0	4.69E-13	0	1.99E-13	0	0.00E+00	0	5.56E-18	0	0.00E+00	0
Sr-90	6.36E-17	0	5.43E-12	0	0.00E+00	0	1.10E-12	0	1.16E-13	0	0.00E+00	0	7.59E-18	0	0.00E+00	0
<b>Total</b>	<b>1.92E-14</b>	<b>0</b>	<b>1.44E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.22E-11</b>	<b>0</b>	<b>3.30E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.65E-16</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	9.73E-04	1	2.26E-04	0	0.00E+00	0	3.57E-03	2	3.30E-05	0	0.00E+00	0	1.52E-03	1	6.32E-03	3
Cs-137	1.19E-01	65	2.63E-08	0	0.00E+00	0	3.18E-03	2	5.18E-04	0	0.00E+00	0	3.39E-05	0	1.23E-01	67
Sr-90	6.16E-04	0	7.71E-07	0	0.00E+00	0	5.20E-02	28	6.02E-04	0	0.00E+00	0	7.39E-05	0	5.33E-02	29
<b>Total</b>	<b>1.21E-01</b>	<b>66</b>	<b>2.27E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>5.88E-02</b>	<b>32</b>	<b>1.15E-03</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.63E-03</b>	<b>1</b>	<b>1.83E-01</b>	<b>100</b>

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



## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 41

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.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	%
Am-241	1.18E-14	0	5.53E-11	0	0.00E+00	0	8.90E-10	0	1.47E-14	0	0.00E+00	0	1.38E-15	0	0.00E+00	0
Cs-137	3.19E-14	0	7.19E-11	0	0.00E+00	0	4.15E-13	0	1.73E-13	0	0.00E+00	0	9.37E-18	0	0.00E+00	0
Sr-90	6.20E-17	0	3.93E-12	0	0.00E+00	0	8.19E-13	0	8.41E-14	0	0.00E+00	0	7.39E-18	0	0.00E+00	0
<b>Total</b>	<b>4.38E-14</b>	<b>0</b>	<b>1.31E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>8.91E-10</b>	<b>0</b>	<b>2.72E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.40E-15</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	9.64E-04	1	2.24E-04	0	0.00E+00	0	3.53E-03	2	3.27E-05	0	0.00E+00	0	1.51E-03	1	6.26E-03	4
Cs-137	1.03E-01	68	2.28E-08	0	0.00E+00	0	2.76E-03	2	4.50E-04	0	0.00E+00	0	2.94E-05	0	1.07E-01	70
Sr-90	4.46E-04	0	5.58E-07	0	0.00E+00	0	3.77E-02	25	4.36E-04	0	0.00E+00	0	5.36E-05	0	3.86E-02	25
<b>Total</b>	<b>1.05E-01</b>	<b>69</b>	<b>2.24E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.40E-02</b>	<b>29</b>	<b>9.18E-04</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.59E-03</b>	<b>1</b>	<b>1.52E-01</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 42

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	3.35E-10	0	6.50E-11	0	0.00E+00	0	7.75E-06	0	7.34E-14	0	0.00E+00	0	2.60E-11	0	0.00E+00	0
Cs-137	5.01E-14	0	4.70E-11	0	0.00E+00	0	2.85E-13	0	1.13E-13	0	0.00E+00	0	1.47E-17	0	0.00E+00	0
Sr-90	9.41E-09	0	1.50E-12	0	0.00E+00	0	3.99E-04	0	3.20E-14	0	0.00E+00	0	1.12E-09	0	0.00E+00	0
<b>Total</b>	<b>9.74E-09</b>	<b>0</b>	<b>1.13E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>4.07E-04</b>	<b>0</b>	<b>2.18E-13</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.15E-09</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	9.35E-04	1	2.17E-04	0	0.00E+00	0	3.42E-03	4	3.17E-05	0	0.00E+00	0	1.46E-03	2	6.08E-03	7
Cs-137	6.76E-02	74	1.49E-08	0	0.00E+00	0	1.80E-03	2	2.94E-04	0	0.00E+00	0	1.92E-05	0	6.97E-02	77
Sr-90	1.70E-04	0	2.12E-07	0	0.00E+00	0	1.43E-02	16	1.66E-04	0	0.00E+00	0	2.04E-05	0	1.51E-02	17
<b>Total</b>	<b>6.87E-02</b>	<b>76</b>	<b>2.17E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.96E-02</b>	<b>22</b>	<b>4.91E-04</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.50E-03</b>	<b>2</b>	<b>9.09E-02</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 43

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	1.76E-09	0	4.39E-08	0	0.00E+00	0	2.91E-05	0	2.34E-10	0	0.00E+00	0	1.37E-10	0	0.00E+00	0
Cs-137	4.02E-14	0	1.62E-11	0	0.00E+00	0	1.09E-13	0	3.89E-14	0	0.00E+00	0	1.18E-17	0	0.00E+00	0
Sr-90	1.17E-06	0	1.96E-06	0	0.00E+00	0	1.55E-02	33	4.16E-08	0	0.00E+00	0	1.39E-07	0	0.00E+00	0
<b>Total</b>	<b>1.17E-06</b>	<b>0</b>	<b>2.01E-06</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.55E-02</b>	<b>33</b>	<b>4.19E-08</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.39E-07</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	8.67E-04	2	2.01E-04	0	0.00E+00	0	3.17E-03	7	2.94E-05	0	0.00E+00	0	1.35E-03	3	5.66E-03	12
Cs-137	2.33E-02	50	5.15E-09	0	0.00E+00	0	6.21E-04	1	1.01E-04	0	0.00E+00	0	6.63E-06	0	2.40E-02	52
Sr-90	1.52E-05	0	1.90E-08	0	0.00E+00	0	1.28E-03	3	1.48E-05	0	0.00E+00	0	1.82E-06	0	1.68E-02	36
<b>Total</b>	<b>2.42E-02</b>	<b>52</b>	<b>2.01E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>5.08E-03</b>	<b>11</b>	<b>1.46E-04</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.36E-03</b>	<b>3</b>	<b>4.65E-02</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 44

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	1.60E-09	0	5.11E-08	0	0.00E+00	0	2.62E-05	0	2.73E-10	0	0.00E+00	0	1.24E-10	0	0.00E+00	0
Cs-137	7.60E-15	0	1.52E-12	0	0.00E+00	0	1.21E-14	0	3.66E-15	0	0.00E+00	0	2.23E-18	0	0.00E+00	0
Sr-90	7.24E-09	0	1.14E-06	0	0.00E+00	0	8.46E-05	1	2.43E-08	0	0.00E+00	0	8.62E-10	0	0.00E+00	0
<b>Total</b>	<b>8.83E-09</b>	<b>0</b>	<b>1.19E-06</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.11E-04</b>	<b>2</b>	<b>2.46E-08</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>9.86E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	7.32E-04	10	1.70E-04	2	0.00E+00	0	2.68E-03	38	2.48E-05	0	0.00E+00	0	1.14E-03	16	4.78E-03	67
Cs-137	2.19E-03	31	4.83E-10	0	0.00E+00	0	5.84E-05	1	9.52E-06	0	0.00E+00	0	6.22E-07	0	2.26E-03	32
Sr-90	7.05E-08	0	8.82E-11	0	0.00E+00	0	5.96E-06	0	6.89E-08	0	0.00E+00	0	8.46E-09	0	9.19E-05	1
<b>Total</b>	<b>2.92E-03</b>	<b>41</b>	<b>1.70E-04</b>	<b>2</b>	<b>0.00E+00</b>	<b>0</b>	<b>2.75E-03</b>	<b>39</b>	<b>3.44E-05</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.14E-03</b>	<b>16</b>	<b>7.13E-03</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 45

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	1.08E-09	0	3.45E-08	0	0.00E+00	0	1.77E-05	1	1.84E-10	0	0.00E+00	0	8.37E-11	0	0.00E+00	0
Cs-137	4.02E-17	0	4.64E-15	0	0.00E+00	0	4.52E-17	0	1.11E-17	0	0.00E+00	0	1.18E-20	0	0.00E+00	0
Sr-90	1.40E-14	0	2.23E-12	0	0.00E+00	0	1.64E-10	0	4.76E-14	0	0.00E+00	0	1.67E-15	0	0.00E+00	0
<b>Total</b>	<b>1.08E-09</b>	<b>0</b>	<b>3.45E-08</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.77E-05</b>	<b>1</b>	<b>1.84E-10</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>8.37E-11</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	4.85E-04	15	1.12E-04	4	0.00E+00	0	1.78E-03	56	1.64E-05	1	0.00E+00	0	7.57E-04	24	3.16E-03	100
Cs-137	6.67E-06	0	1.47E-12	0	0.00E+00	0	1.78E-07	0	2.90E-08	0	0.00E+00	0	1.89E-09	0	6.88E-06	0
Sr-90	1.36E-13	0	1.70E-16	0	0.00E+00	0	1.15E-11	0	1.33E-13	0	0.00E+00	0	1.64E-14	0	1.78E-10	0
<b>Total</b>	<b>4.91E-04</b>	<b>15</b>	<b>1.12E-04</b>	<b>4</b>	<b>0.00E+00</b>	<b>0</b>	<b>1.78E-03</b>	<b>56</b>	<b>1.65E-05</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.57E-04</b>	<b>24</b>	<b>3.17E-03</b>	<b>100</b>

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

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 46

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

From releases to ground water and to surface water

Radio- Nuclide	Ground		Fish		Radon		Plant		Meat		Milk		Soil		Water	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	4.46E-10	0	1.43E-08	0	0.00E+00	0	7.30E-06	1	7.61E-11	0	0.00E+00	0	3.46E-11	0	0.00E+00	0
Cs-137	2.23E-21	0	1.04E-20	0	0.00E+00	0	1.48E-20	0	2.50E-23	0	0.00E+00	0	6.54E-25	0	0.00E+00	0
Sr-90	2.08E-27	0	3.32E-25	0	0.00E+00	0	2.44E-23	0	7.09E-27	0	0.00E+00	0	2.48E-28	0	0.00E+00	0
<b>Total</b>	<b>4.46E-10</b>	<b>0</b>	<b>1.43E-08</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.30E-06</b>	<b>1</b>	<b>7.61E-11</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.46E-11</b>	<b>0</b>	<b>0.00E+00</b>	<b>0</b>

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

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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		All Pathways*	
	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%	Dose	%
Am-241	1.92E-04	15	4.45E-05	4	0.00E+00	0	7.03E-04	56	6.51E-06	1	0.00E+00	0	3.00E-04	24	1.25E-03	100
Cs-137	1.50E-11	0	3.30E-18	0	0.00E+00	0	3.98E-13	0	6.50E-14	0	0.00E+00	0	4.25E-15	0	1.54E-11	0
Sr-90	2.03E-26	0	2.54E-29	0	0.00E+00	0	1.72E-24	0	1.98E-26	0	0.00E+00	0	2.44E-27	0	2.65E-23	0
<b>Total</b>	<b>1.92E-04</b>	<b>15</b>	<b>4.45E-05</b>	<b>4</b>	<b>0.00E+00</b>	<b>0</b>	<b>7.03E-04</b>	<b>56</b>	<b>6.51E-06</b>	<b>1</b>	<b>0.00E+00</b>	<b>0</b>	<b>3.00E-04</b>	<b>24</b>	<b>1.25E-03</b>	<b>100</b>

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

# Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 47

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) (mrem/yr)/(pCi/g)									
			0.000E+00	1.000E+00	3.000E+00	6.000E+00	1.200E+01	3.000E+01	7.500E+01	1.750E+02	4.200E+02	9.700E+02
Am-241	Am-241	1.000E+00	3.755E-02	3.748E-02	3.736E-02	3.717E-02	3.680E-02	3.570E-02	3.309E-02	2.796E-02	1.851E-02	7.329E-03
Am-241	Np-237+D	1.000E+00	1.044E-07	3.094E-07	6.833E-07	1.160E-06	1.877E-06	4.845E-05	1.747E-04	1.570E-04	1.059E-04	4.375E-05
Am-241	U-233	1.000E+00	1.904E-15	1.055E-14	4.868E-14	1.511E-13	4.822E-13	6.734E-12	1.454E-10	5.170E-10	1.144E-09	8.538E-10
Am-241	Th-229+D	1.000E+00	1.671E-18	2.164E-17	2.320E-16	1.373E-15	8.786E-15	9.795E-14	9.084E-13	5.334E-12	2.301E-11	5.687E-11
Am-241	ΣDSR(j)		3.755E-02	3.748E-02	3.736E-02	3.717E-02	3.680E-02	3.575E-02	3.327E-02	2.812E-02	1.861E-02	7.373E-03
Cs-137+D	Cs-137+D	1.000E+00	4.457E-01	4.353E-01	4.152E-01	3.867E-01	3.356E-01	2.192E-01	7.562E-02	7.104E-03	2.163E-05	4.849E-11
Sr-90+D	Sr-90+D	1.000E+00	2.666E-01	2.527E-01	2.270E-01	1.932E-01	1.400E-01	5.470E-02	6.083E-02	3.329E-04	6.436E-10	9.589E-23

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

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

Nuclide (i)	t =	0.000E+00	1.000E+00	3.000E+00	6.000E+00	1.200E+01	3.000E+01	7.500E+01	1.750E+02	4.200E+02	9.700E+02
Am-241	6.658E+02	6.669E+02	6.692E+02	6.726E+02	6.794E+02	6.994E+02	7.515E+02	8.891E+02	1.343E+03	3.391E+03	
Cs-137	5.609E+01	5.744E+01	6.022E+01	6.465E+01	7.450E+01	1.140E+02	3.306E+02	3.519E+03	1.156E+06	5.156E+11	
Sr-90	9.377E+01	9.892E+01	1.101E+02	1.294E+02	1.786E+02	4.571E+02	4.110E+02	7.510E+04	3.884E+10	*1.365E+14	

\*At specific activity limit

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

Nuclide (i)	Initial (pCi/g)	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Am-241	1.700E-01	0	3.755E-02	6.658E+02	3.755E-02	6.658E+02
Cs-137	3.180E-01	0	4.457E-01	5.609E+01	4.457E-01	5.609E+01
Sr-90	2.760E-01	0	2.666E-01	9.377E+01	2.666E-01	9.377E+01

## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 48

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

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

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr									
			t= 0.000E+00	1.000E+00	3.000E+00	6.000E+00	1.200E+01	3.000E+01	7.500E+01	1.750E+02	4.200E+02	9.700E+02
Am-241	Am-241	1.000E+00	6.383E-03	6.372E-03	6.351E-03	6.319E-03	6.255E-03	6.069E-03	5.626E-03	4.754E-03	3.146E-03	1.246E-03
Np-237	Am-241	1.000E+00	1.775E-08	5.260E-08	1.162E-07	1.972E-07	3.191E-07	8.236E-06	2.970E-05	2.668E-05	1.800E-05	7.437E-06
U-233	Am-241	1.000E+00	3.237E-16	1.794E-15	8.276E-15	2.569E-14	8.198E-14	1.145E-12	2.473E-11	8.790E-11	1.945E-10	1.451E-10
Th-229	Am-241	1.000E+00	2.841E-19	3.679E-18	3.944E-17	2.334E-16	1.494E-15	1.665E-14	1.544E-13	9.068E-13	3.912E-12	9.668E-12
Cs-137	Cs-137	1.000E+00	1.417E-01	1.384E-01	1.320E-01	1.230E-01	1.067E-01	6.971E-02	2.405E-02	2.259E-03	6.877E-06	1.542E-11
Sr-90	Sr-90	1.000E+00	7.358E-02	6.975E-02	6.265E-02	5.333E-02	3.864E-02	1.510E-02	1.679E-02	9.188E-05	1.776E-10	2.646E-23

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

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

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g									
			t= 0.000E+00	1.000E+00	3.000E+00	6.000E+00	1.200E+01	3.000E+01	7.500E+01	1.750E+02	4.200E+02	9.700E+02
Am-241	Am-241	1.000E+00	1.700E-01	1.697E-01	1.691E-01	1.683E-01	1.666E-01	1.616E-01	1.498E-01	1.266E-01	8.380E-02	3.318E-02
Np-237	Am-241	1.000E+00	0.000E+00	5.328E-08	1.500E-07	2.734E-07	4.577E-07	7.159E-07	7.800E-07	6.657E-07	4.406E-07	1.745E-07
U-233	Am-241	1.000E+00	0.000E+00	1.201E-13	1.017E-12	3.791E-12	1.333E-11	5.887E-11	1.868E-10	3.758E-10	4.753E-10	2.628E-10
Th-229	Am-241	1.000E+00	0.000E+00	3.994E-18	9.874E-17	7.423E-16	5.374E-15	6.437E-14	5.904E-13	3.330E-12	1.358E-11	3.158E-11
Cs-137	Cs-137	1.000E+00	3.180E-01	3.106E-01	2.962E-01	2.759E-01	2.394E-01	1.564E-01	5.396E-02	5.069E-03	1.543E-05	3.460E-11
Sr-90	Sr-90	1.000E+00	2.760E-01	2.616E-01	2.349E-01	2.000E-01	1.449E-01	5.512E-02	4.918E-03	2.289E-05	4.424E-11	6.591E-24

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



## Appendix H16 – RESRAD-Offsite 3.1 Output for AREA 4.1 COLLECTOR AM

RESRAD-OFFSITE, Version 3.1      T½ Limit = 30 days      10/26/2016 14:25 Page 49

Parent Dose Report

Title : RESRAD-OFFSITE Default Parameters

File : AREA 4.1 COLLECTOR AM.ROF

Run Time Information

ResOCalc.EXE execution began at 14:25 on 10/26/2016

ResOCalc.EXE execution ended at 14:25 on 10/26/2016

ResOCalc.EXE execution time 3.511 seconds

1 Ground water transport numerical integrations did not converge to specified criteria.  
Check file QRFAIL.LOG for details.